

Section 2 Europe

1. Macroeconomic trends

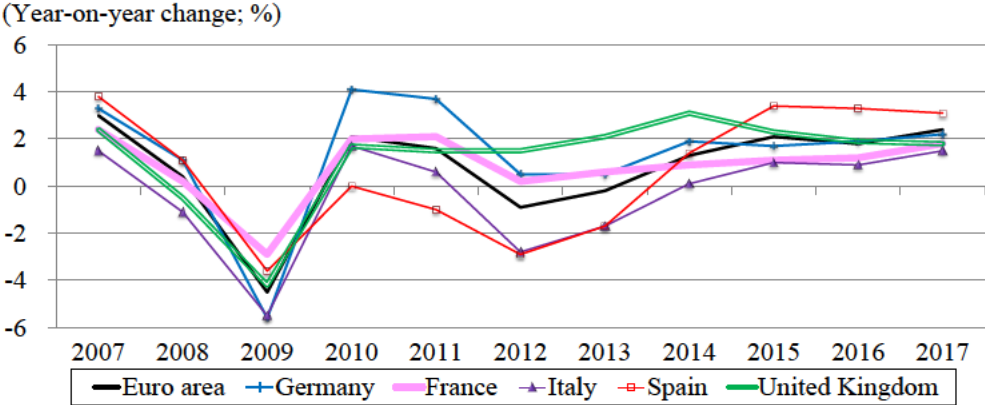
(1) Euro-area economy

(A) Overview of the macroeconomic trends

In the euro area, while the economic recovery progressed in Germany and France after the European debt crisis, the recovery was lagging in southern Europe. However, supported by monetary easing by the European Central Bank (ECB) and foreign demand, the recovery continued as a trend in Italy and Spain as well since 2014. In 2017, the European economy continued to steadily grow against the backdrop of the robustness of domestic demand and the global economy, and all major countries, including Italy, recorded real GDP growth rates higher than 1% (Figure I-2-2-1). The annual growth rate of the euro area as a whole in 2017 was 2.4%, higher than in the previous year.

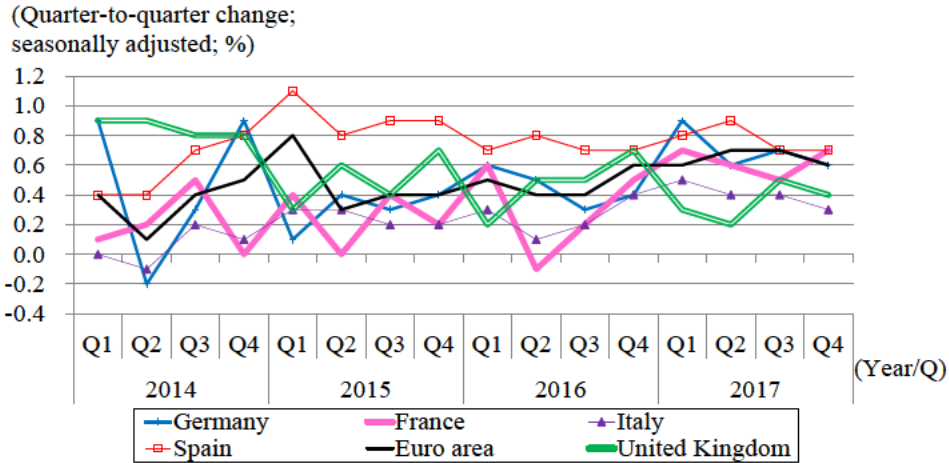
Although the real GDP growth rate was high, 0.7%, on a quarter-to-quarter basis in 2017 except in the first quarter, the growth slowed down to 0.4% on a quarter-to-quarter basis in the first quarter of 2018 (Figure I-2-2-3). It has been pointed out since the beginning of 2018 that factors such as the euro’s appreciation, concerns over the trade dispute, and the rising geopolitical risk are putting downward pressure on business confidence, mainly in the manufacturing industry. However, the level of business confidence is much higher than the long-term average, and employment and consumption are robust. Therefore, the prevailing view is that the euro-area economy will continue to grow moderately.

Figure I-2-2-1 Changes in real GDP growth rates in the euro-area economies and the United Kingdom (annual rates)



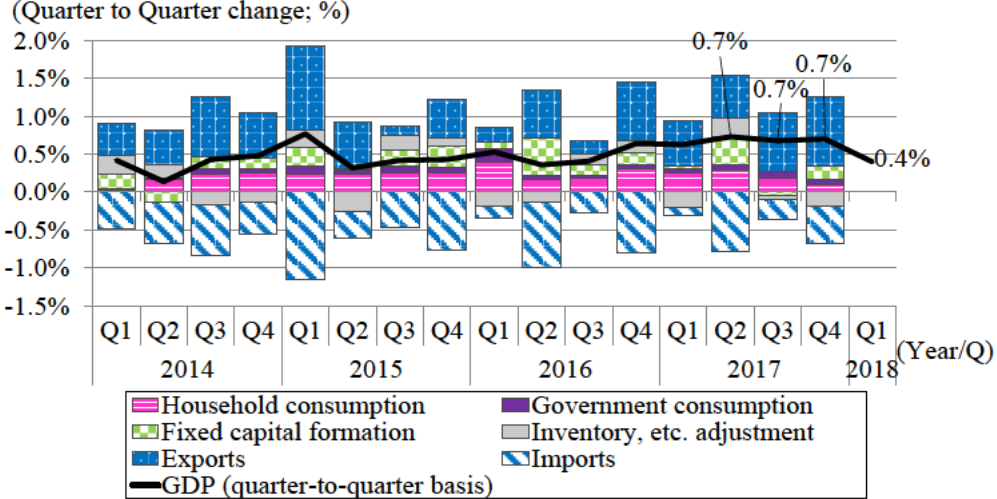
Source: Eurostat.

Figure I-2-2-2 Changes in real GDP growth rates in the euro-area economies and the United Kingdom (quarter-to-quarter basis)



Source: Eurostat.

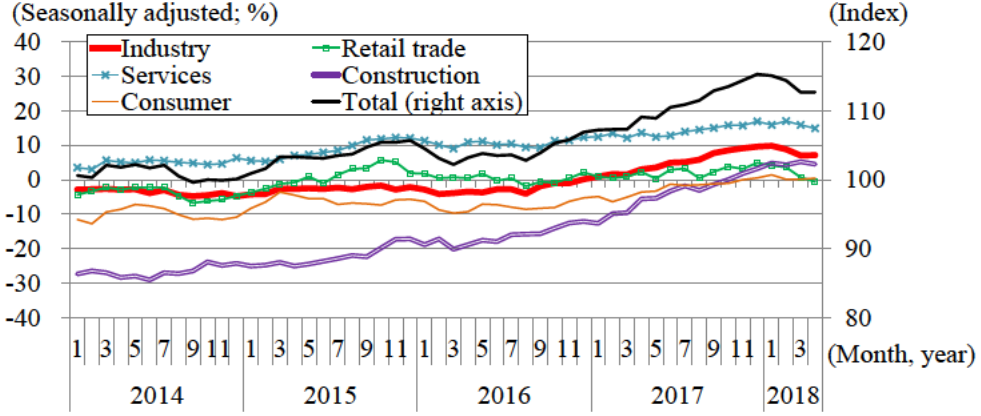
Figure I-2-2-3 Changes in real GDP growth rates in the euro area (contributions by expenditure)



Notes: The data on the first quarter in 2018 are the preliminary values. The data are seasonally adjusted.

Source: Eurostat.

Figure I-2-2-4 Economic sentiment in the euro area (by sector)

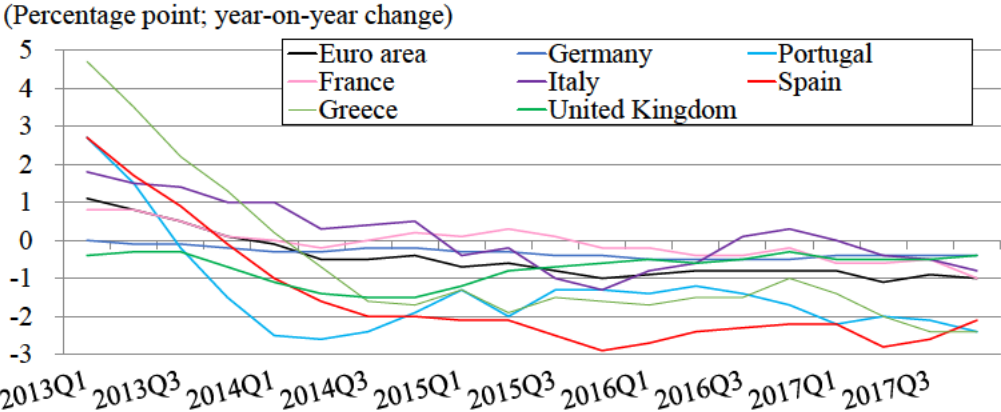


Notes: This figure shows the difference in ratios of responses of “better/worse” in the questionnaire survey (changes in the past three months and expected changes in the coming three months, in principle; as for the category “consumers,” changes in in the past 12 months and expected changes in the coming 12 months). The total represents economic confidence indices (long-term averages of data after 1990 =100). The data is seasonally adjusted.

Source: *Economic Sentiment Indicator* (European Committee), CEIC Database.

The unemployment rate declined from the previous year across euro-area countries, including Spain and Greece (Figures I-2-2-5 and I-2-2-6), and against the backdrop of the improved employment, the situation in the consumer sector is also improving.

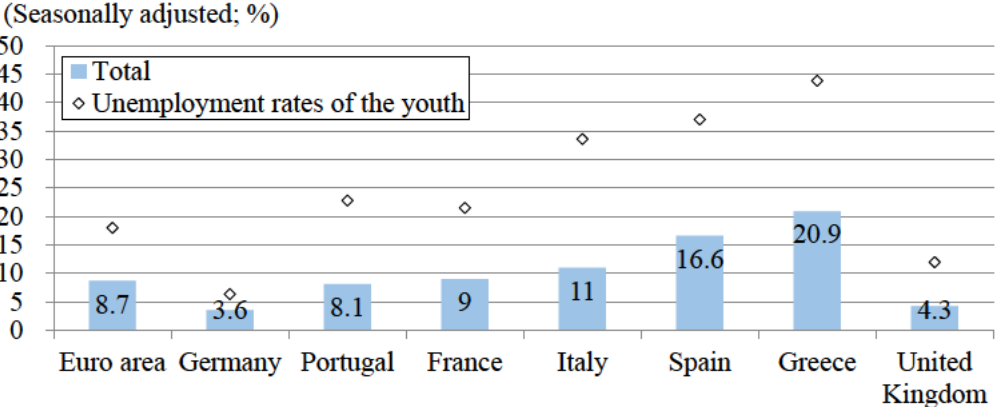
Figure I-2-2-5 Improvement of unemployment rates in the euro-area economies and the United Kingdom (year-on-year changes)



Notes: The data are seasonally adjusted and show those in and before the fourth quarter in 2017.

Source: Eurostat, CEIC Database.

Figure I-2-2-6 Changes in unemployment rates in the euro-area economies and the United Kingdom

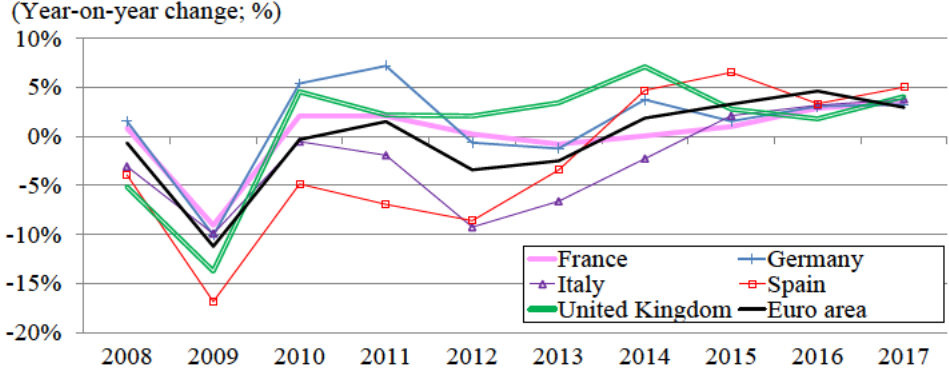


Notes: The fourth quarter in 2017.

Source: Eurostat, CEIC Database.

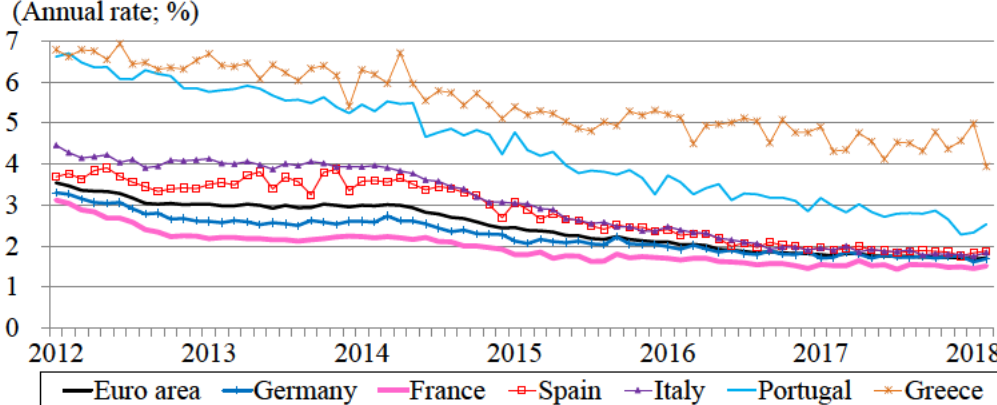
Investments continued to expand during 2017, supported by an accommodative monetary easing policy as well as robust foreign and domestic demand (Figure I-2-2-7), and bank loans to corporations also remained steady (Figure I-2-2-9). However, uncertainty over the future course of the trade dispute and the Brexit negotiations could become an investment-restraining factor.

Figure I-2-2-7 Growth rates of gross fixed capital formation in the euro-area economies and the United Kingdom



Source: Eurostat.

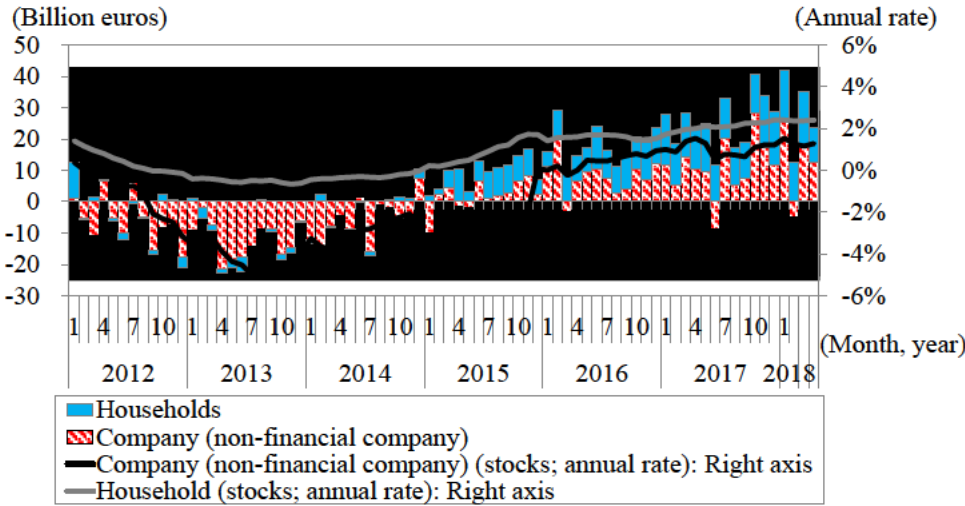
Figure I-2-2-8 Loan interest rates of the euro-area companies



Notes: This figure shows the new loan interest rates of monetary financial institutions in the euro-area economies to non-financial companies (composite indicators).

Source: ECB.

Figure I-2-2-9 Changes in Bank loans to the private sector in euro-area



Notes: Seasonally-adjusted values; Adjusted values of loans sold or securitized.
 Source: ECB Statistics.

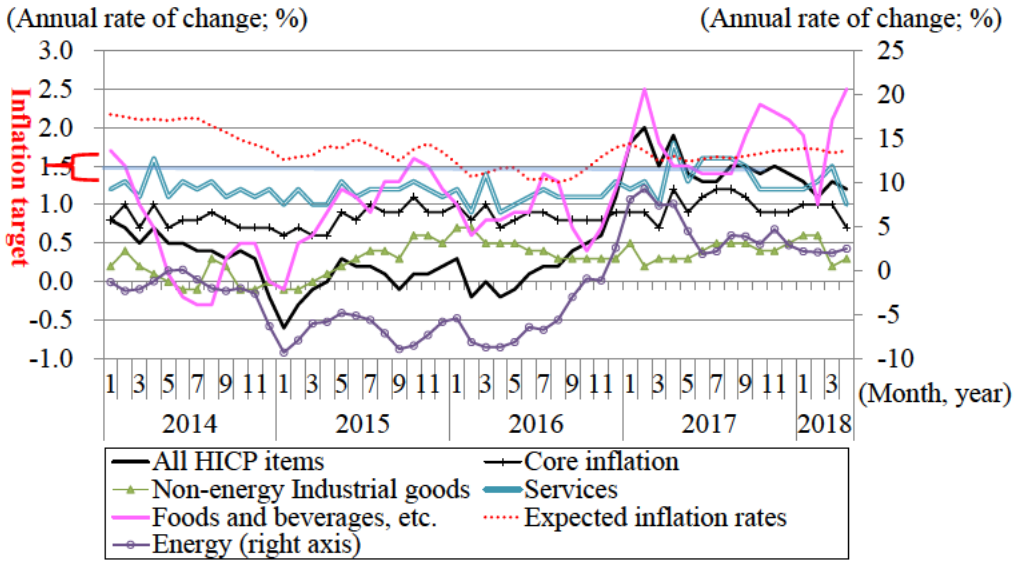
(B) Monetary policy

At a time when calls for scaling back monetary easing are growing against the backdrop of the firmness of the euro-area economy and employment, the underlying inflation rate is low, with no sign of a sustainable rise (Figure I-2-2-10). Therefore, the ECB has maintained a cautious stance on making a decision on the monetary policy normalization.

However, in October 2017, the ECB decided to reduce the monthly asset purchase value from 60 billion euros to 30 billion euros,⁸⁷ and in March 2018, it removed wording indicating an easing bias from its forward guidance, which can be considered to be the first step toward the monetary policy normalization (Table I-2-2-11). The asset purchase program may be terminated by the end of 2018 at the earliest, but the ECB is expected to make the decision after carefully examining the price trend. Policy interest rate hikes are expected to start in 2019 or later.

⁸⁷ The reduction took effect in January 2018.

Figure I-2-2-10 Changes in growth rates of the consumer price index in the euro area



Notes: The data on core inflation are the consumer indices of product items except energy, foods, beverages and tobacco. The data on expected inflation rates are based on those on BEI’s 5-year/5-year forward inflation expectation rates. This figure shows the preliminary values as of April 2018. Source: Eurostat, Eikon (Thomson Reuters).

Table I-2-2-11 ECB’s accommodative monetary policy

ECB’s Forward Guidance (Key Points)	
Policy interest rate	The Governing Council expects the key ECB interest rates to remain at their present levels for an extended period of time, and well past the horizon of the net asset purchases.. (Marginal lending facility interest rates: 0.25%; main-refinancing-operation interest rates: 0.0%; deposit facility interest rates: -0.4%)
Asset purchase	30 billion euros per month; are intended to run until the end of September 2018, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim. <In March 2018, the ECB deleted the following part.> If the outlook becomes less favourable, or if financial conditions become inconsistent with further progress towards a sustained adjustment in the path of inflation, the Governing Council stands ready to increase the asset purchase programme (APP) in terms of size and/or duration.

Notes: As of April 2018.

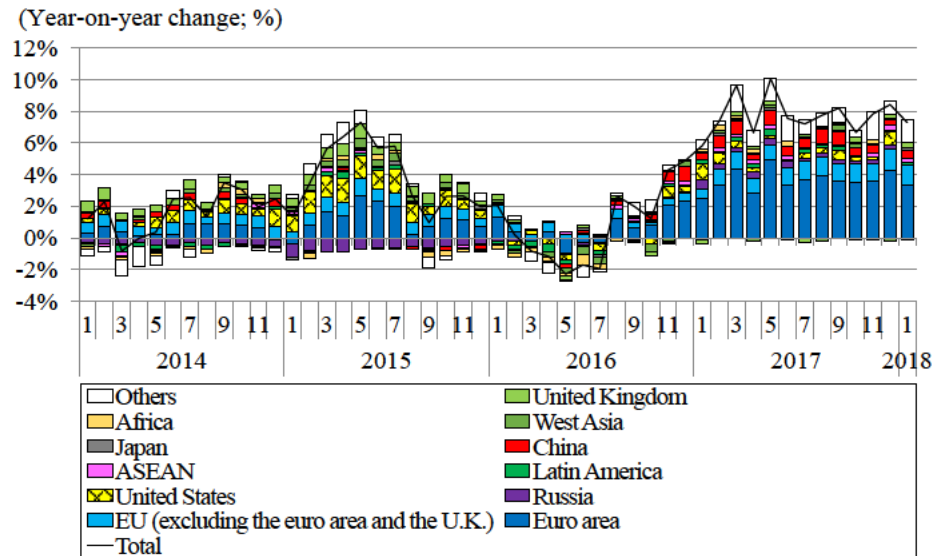
(C) Trade

In 2017, euro-area trade in goods expanded in terms of both imports and exports, supported by the robust global economy (Figure I-2-2-12). Among countries outside the euro area, the United States, the United Kingdom and China had large shares as export destinations. In 2017, exports to China grew significantly, by more than 15%, compared with the previous year, while exports to the United Kingdom, where consumption became sluggish, increased only 1%. Exports within the euro area recorded growth

of 8% (Figure I-2-2-13).

Regarding imports from major import source countries, imports from China grew 9% compared with the previous year, but imports from the United States increased only 2% (Figure I-2-2-16).

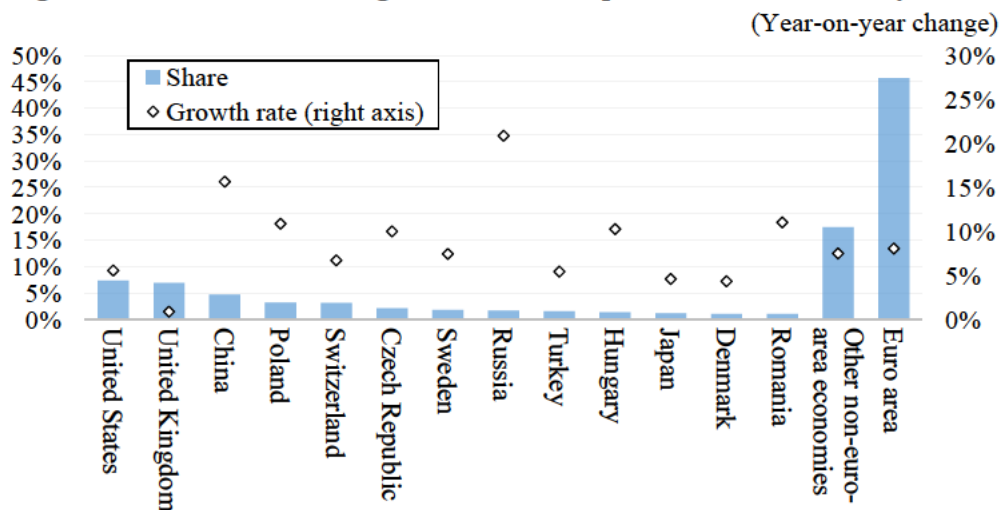
Figure I-2-2-12 Growth rates of export values of the euro area (contributions by destination)



Notes: This figure shows the data in and before January 2018, which are based on euros and seasonally adjusted.

Source: Eurostat.

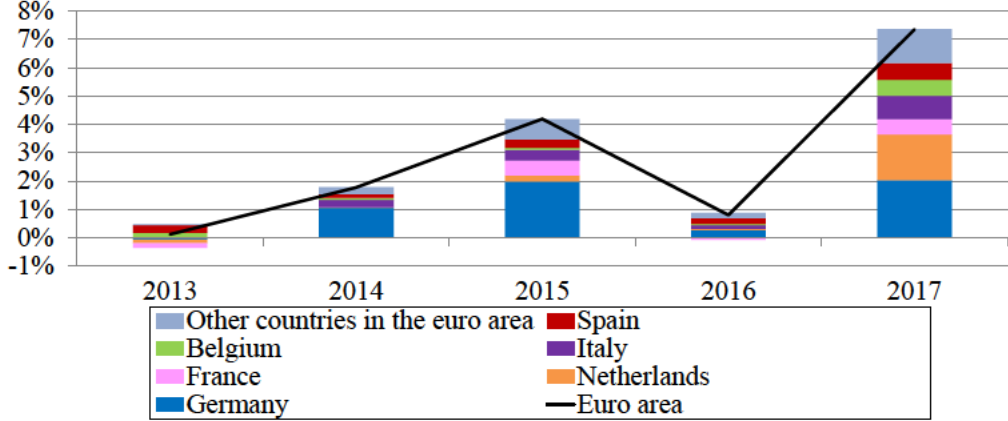
Figure I-2-2-13 Shares and growth rates of exports of the euro area by destination



Notes: This figure shows the data on exports of goods (2017), which are based on euros. The category “China” includes Hong Kong.

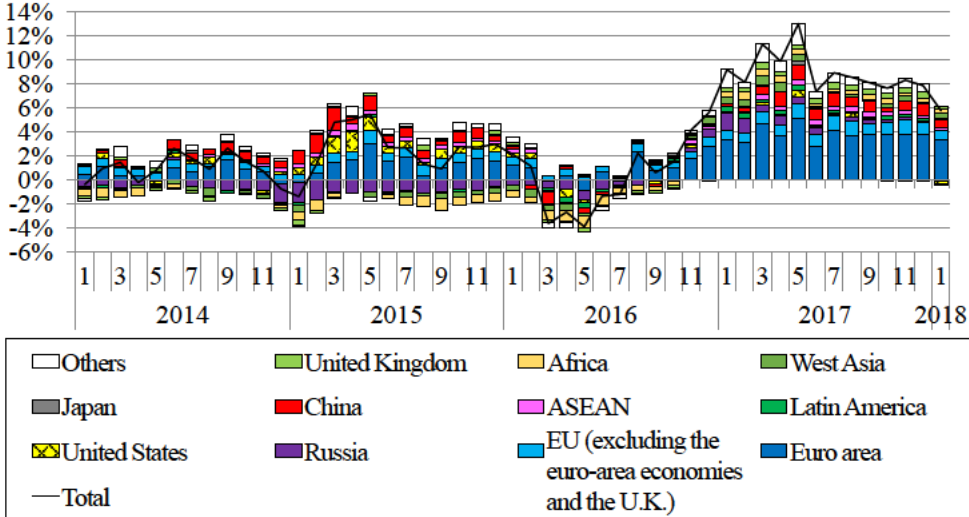
Source: Eurostat.

Figure I-2-2-14 Growth rates of export values of the euro area and contributions by country
(Year-on-year change; %)



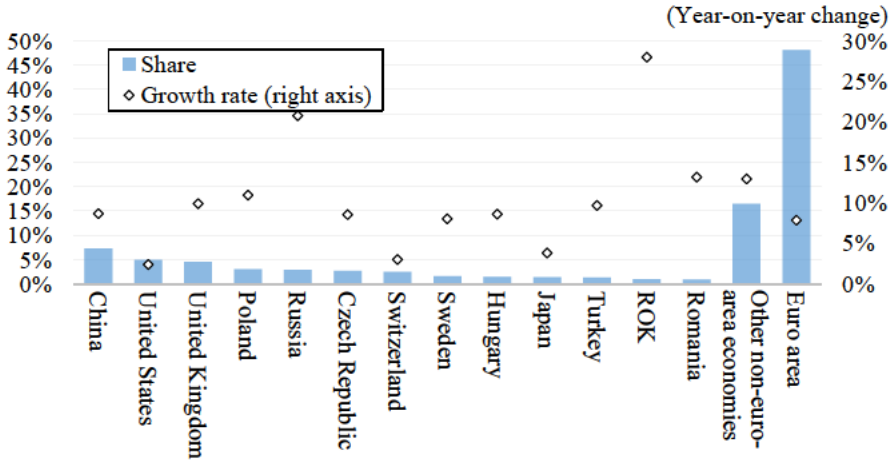
Notes: This figure shows total export values of countries to the rest of the world (euro basis).
Source: Eurostat.

Figure I-2-2-15 Growth rates of import values in the euro area (contributions by import source)
(Year-on-year change)



Notes: This figure shows data in and before January 2018, which are based on euros and seasonally adjusted.
Source: Eurostat.

Figure I-2-2-16 Shares and growth rates of imports in the euro area by import source



Notes: This figure shows the data on imports of goods (2017), which are based on euros. The category “China” includes Hong Kong.

Source: Eurostat.

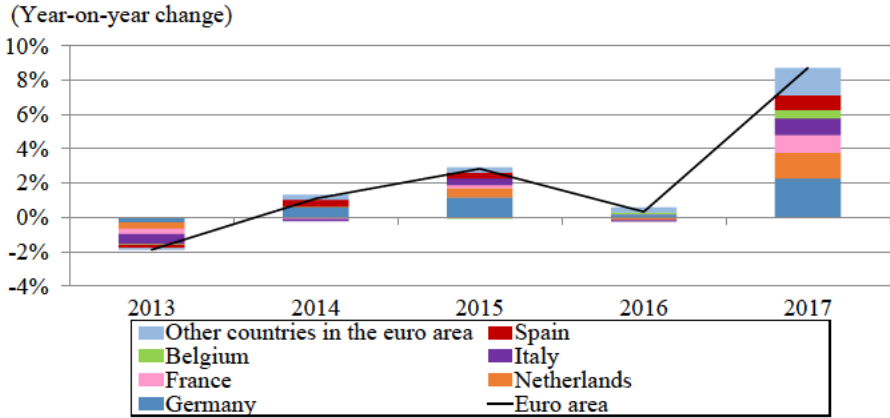
(2) U.K. economy

(A) Overview of macroeconomic trends

The U.K. economy recovered early after the global economic crisis compared with other major European economies and recorded a high economic growth until 2014. However, since 2015, when the possibility of a referendum on the withdrawal from the EU grew, the growth has slowed down, and the annual growth rate in 2017 was only 1.8% (Figure I-2-2-1).

Data on the contribution to the real GDP growth rate by expenditure show that in 2017, the positive contribution by household consumption decreased because of the effects of the pound’s depreciation, which continued until 2016, but exports acted as the main driver of the economy in the second and third quarters against the backdrop of the robust global economy (Figure I-2-2-18).

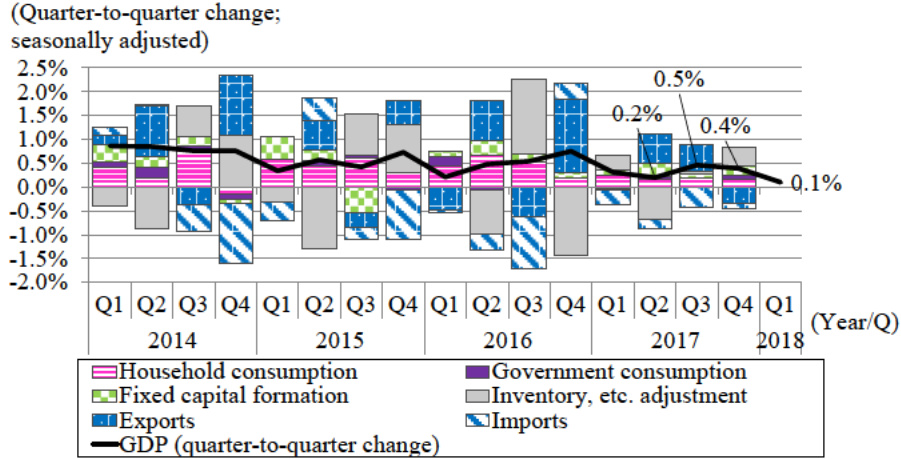
Figure I-2-2-17 Growth rates of import values in the euro area and contributions by importing country



Notes: This figure shows total import values of importing countries from the rest of the world (euro basis).

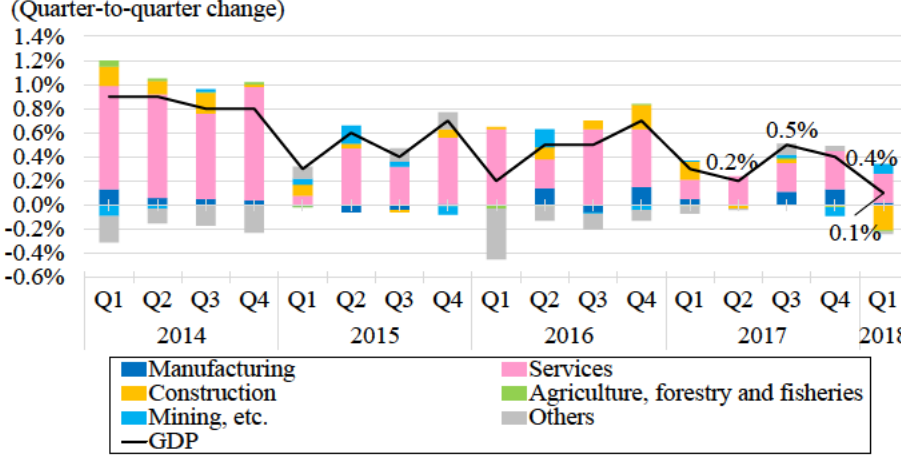
Source: Eurostat.

Figure I-2-2-18 Changes in real GDP growth rates in the United Kingdom (contributions by expenditure)



Notes: The data on the first quarter in 2018 are preliminary values.
 Source: Eurostat, U.K. Office for National Statistics (ONS).

Figure I-2-2-19 Real GDP growth rates in the United Kingdom (contributions by sector)



Notes: The data are seasonally adjusted. The data on the first quarter in 2018 are preliminary values.
 Source: ONS.

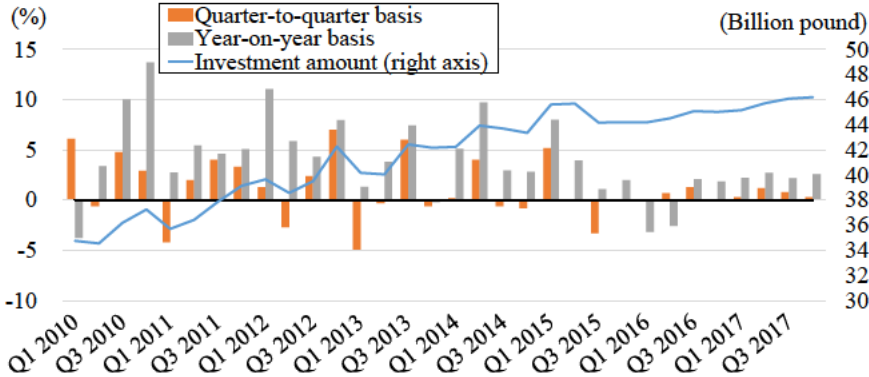
In the first quarter of 2018, the economic growth rate slowed down significantly, to 0.1% on a quarter-on-quarter basis, according to a preliminary estimate. By sector, the growth slowed down significantly in the manufacturing industry, while negative growth was recorded in the construction industry (Figures I-2-2-18 and I-2-2-19). In addition to weather factors and the pound’s appreciation (which has the effect of reducing the export volume while lowering the input cost of intermediate goods), concerns over the negotiations with the EU about post-Brexit trade arrangements have been pointed out as factors behind the slowdown. According to the European Commission, the GDP growth rate (annualized rate) is projected to slow down markedly, from 1.8% in 2017 to 1.5% in 2018 and 1.2% in 2019.⁸⁸

88 European Commission (2018).

As employment has continued to improve, the unemployment rate fell to 4.2%⁸⁹ in the most recent month (Figures I-2-2-5 and I-2-2-6).

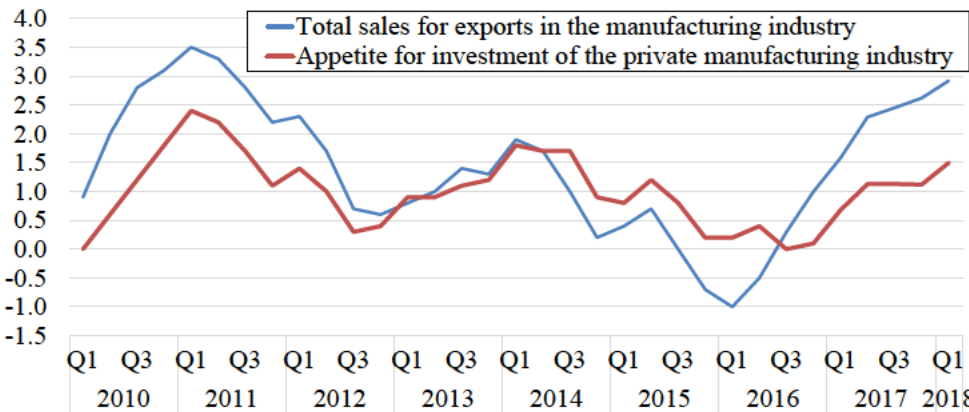
Although fixed asset formation continued to grow in 2017, the growth in private investment, one of its components, has remained weak since 2016 (Figure I-2-2-20). The tendency to postpone investment due to uncertainty over the Brexit negotiations with the EU and the presence of forecasts of a future sales decline have been pointed out as background factors. Against the backdrop of robust global demand, the pound’s depreciation, and the low fund-raising cost, exports and corporate investment are expected to increase (Figure I-2-2-21). However, unless the uncertainty over the future course of the negotiations about post-Brexit trade arrangements is resolved, the growth in investment is expected to remain weak.

Figure I-2-2-20 Changes in private investments in the United Kingdom



Notes: This figure shows the data in and before the fourth quarter in 2017 (quarter-to-quarter basis).
Source: ONS.

Figure I-2-2-21 Appetite for investment of U.K. manufacturers



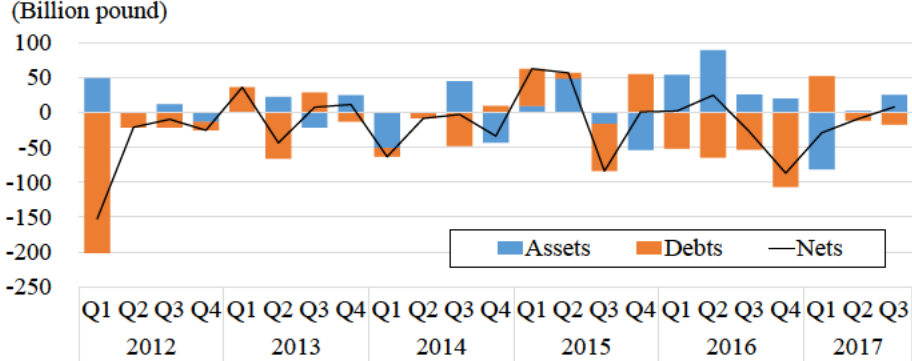
Notes: This figure shows the questionnaire-survey results and the data in and before the first quarter in 2018. The data on sales for exports are the results of comparison between the data on the recent three months and those on the same months in the previous year. The survey targets appetite for investment for the coming 12 months.

Source: *Agents’ Scores* (Bank of England).

⁸⁹ The unemployment rate was 4.2% in December 2017 (Eurostat).

Foreign direct investments in the United Kingdom have not slowed down significantly, as the pound's depreciation has offset the uncertainty over the future due to Brexit. However, recently, investments, mainly those by manufacturing companies, have been slowing down as a trend (Figures I-2-2-22 and I-2-2-23).

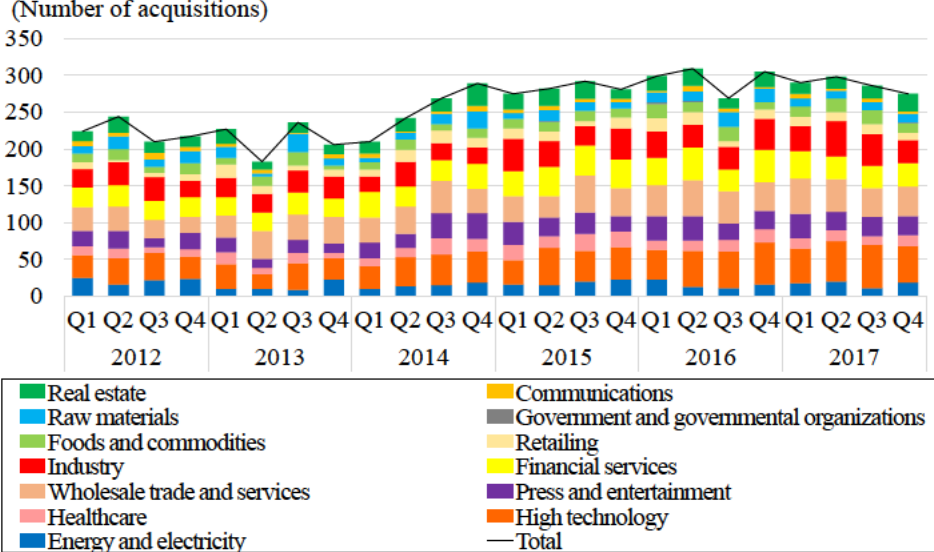
Figure I-2-2-22 Foreign direct investments by the United Kingdom (flows)



Notes: The positive values represent excess outflow. This figure shows the data in and before the third quarter in 2017.

Source: ONS.

Figure I-2-2-23 Acquisition of U.K. companies by foreign companies



Notes: This figure shows all M&A cases released as acquisition of U.K. companies by companies whose ultimate owners are foreign companies.

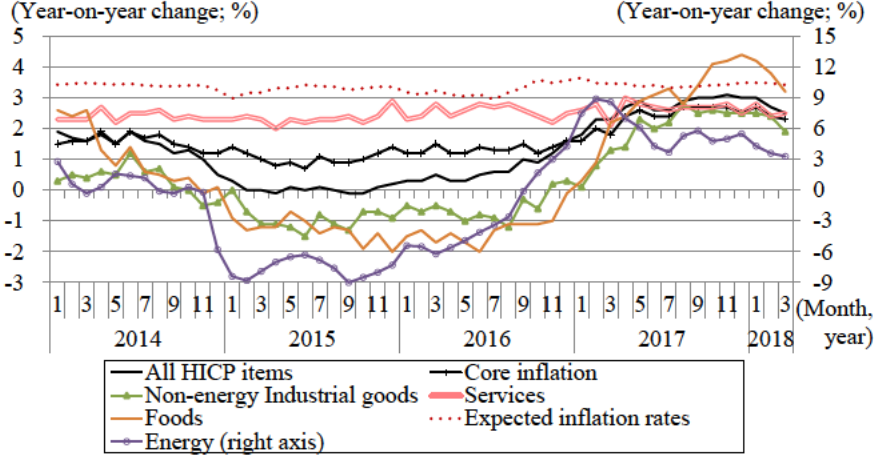
Source: Thomson One.

(B) Consumer prices

The growth rate of consumer prices accelerated considerably from the second half of 2016 to the first half of 2017 against the backdrop of the pound's depreciation and stayed high, at 3-4%, in September 2017 to January 2018 (Figure I-2-2-24). As a result, real wages declined (Figure I-2-2-25) and the growth rate of retail sales started to slow down markedly at the end of 2016.

On the other hand, as the pound recovered after hitting bottom at the end of 2016, the inflation-boosting effect of the pound's depreciation faded away in 2018, and as a result, the growth rate of consumer prices slowed down while the growth rate of real wages turned positive for the first time in about one year.

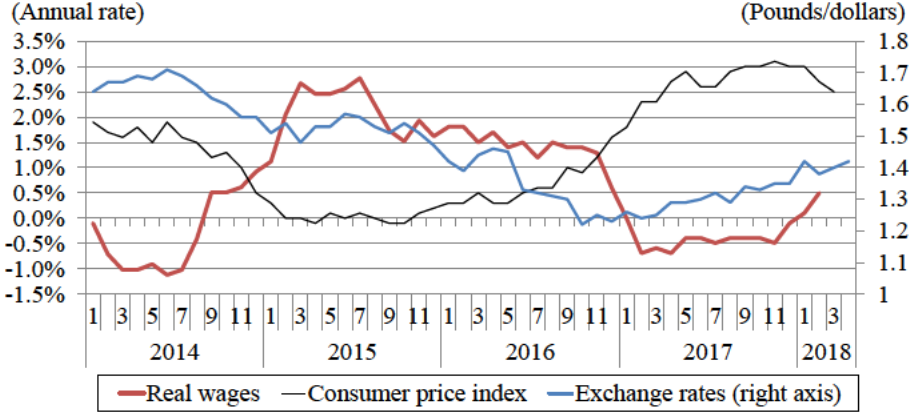
Figure I-2-2-24 Growth rates of the consumer price index in the United Kingdom



Notes: The core inflation target all product items but energy, foods, beverages and tobacco. The inflation expectation rates are forward break even inflation (BEI) rates (5-year/5-year forward inflation expectation rates). This figure shows the data in and before March 2018.

Source: Eurostat, ONS, Eikon (Thomson Reuters).

Figure I-2-2-25 Changes in prices and exchange rates in the United Kingdom



Notes: The data are seasonally adjusted. The data on exchange rates are those in and before April 2018, the data on consumer price index are those in and before March 2018 and the data on wages are those in and before February 2018.

Source: ONS, Eikon (Thomson Reuters).

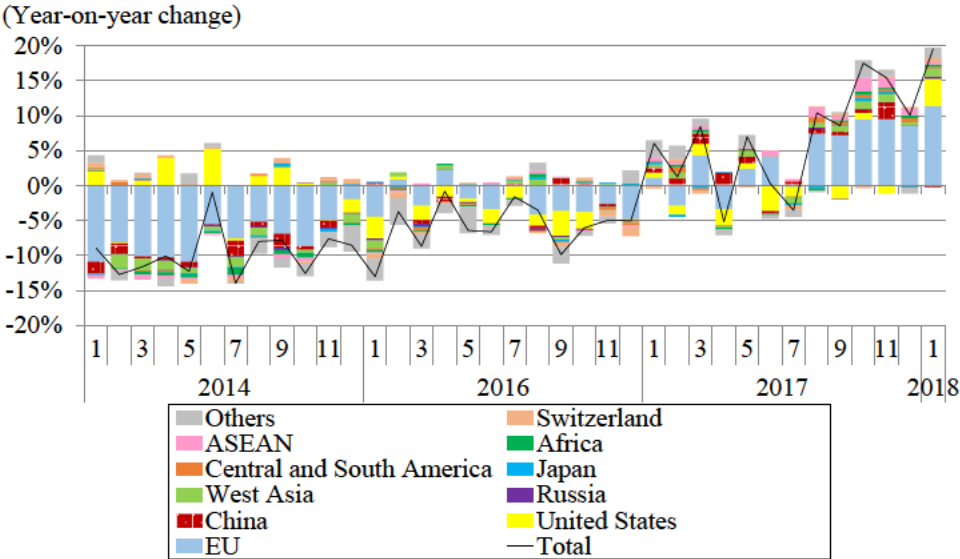
(C) Trade

Exports of goods from the United Kingdom were sluggish in 2016 due to a slump in resource prices and the slowdown of advanced economies and the Chinese economy, but exports increased in 2017, supported by the recovery of the global economy and the pound's depreciation (Figure I-2-2-26).

Imports of goods by the United Kingdom remained sluggish until the first half of 2017 due to weak domestic consumption but have recovered since the autumn of 2017 (Figure I-2-2-27).

In 2016, imports of gold for non-currency purposes increased steeply because of moves to purchase gold in exchange for pound holdings due to uncertainty over the future around the time of the Brexit referendum and the pound’s depreciation after the referendum. As a result, the share of gold for non-currency purposes in the total value of imports of goods surged to 9% in 2016 from 3% in the previous year, but this trend tapered off in 2017 and the share fell to 6% (Figure I-2-2-28).

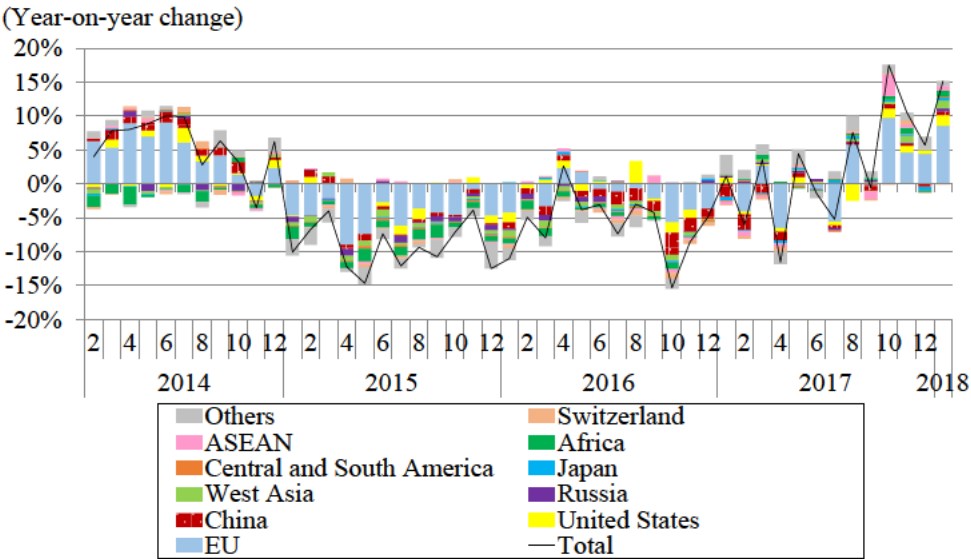
Figure I-2-2-26 Growth rates of exports from the United Kingdom (contributions by destination)



Notes: This figure shows the data excluding non-monetary gold, which are based on dollars and seasonally adjusted. The data are those in and before January 2018.

Source: Global Trade Atlas.

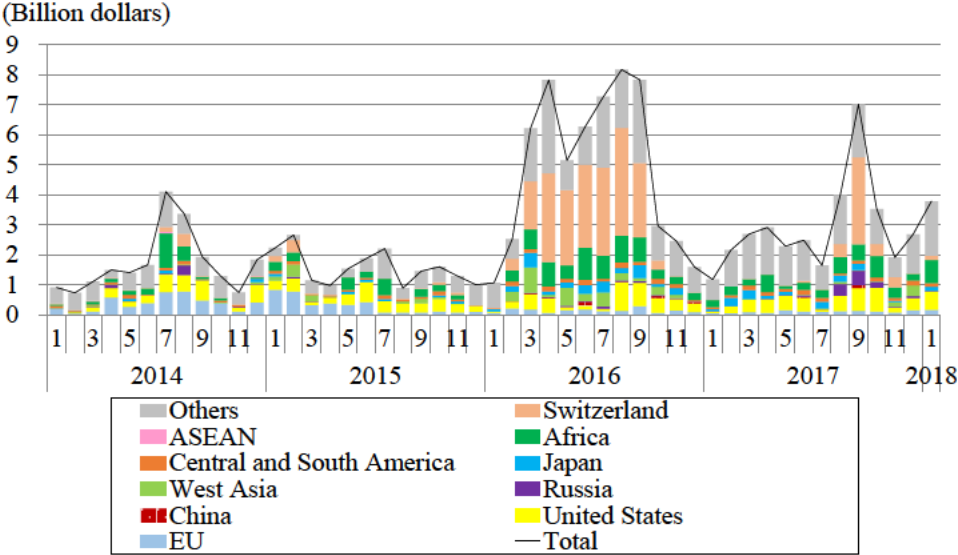
Figure I-2-2-27 Growth rates of imports to the United Kingdom (contributions by import source)



Notes: This figure shows the data excluding non-monetary gold, which are based on dollars and seasonally adjusted. The data are those in and before January 2018.

Source: Global Trade Atlas.

Figure I-2-2-28 Changes in import values of gold to the United Kingdom (contributions by import source)



Notes: This figure shows the data on non-monetary gold, which are seasonally adjusted. The data are those in and before January 2018.

Source: Global Trade Atlas.

2. Trends related to Brexit

(1) Overview of Brexit

In light of the results of the referendum (June 23, 2016), on March 29, 2017, the United Kingdom notified the European Commission of its intention to withdraw from the EU, and it has been decided that the country will withdraw from the EU as of 12:00 a.m. March 30, 2019 (European time).

As described above, since the decision to withdraw from the EU, consumption has slowed down against the backdrop of the pound’s depreciation. In addition, due to uncertainty over the future, fixed asset formation by domestic companies and inward direct investments by foreign companies have slowed down.

In March 2018, a provisional agreement was reached at the European Council on the specifics concerning the transition period after the United Kingdom’s withdrawal from the EU, and at long last, the Brexit process has moved on to the stage of negotiation concerning a future framework to be put in place after the end of the transitional period. This negotiation, which is seen likely to last for an extended period of time, could have a very great economic impact, depending on its results.

The United Kingdom aims to conclude a new type of free trade agreement that covers a broader range of services sectors. If an agreement similar to the free trade agreement between Canada and the EU is concluded, customs clearance procedures are expected to become complex—for example, a certificate of origin may be required for trade in goods—and the coverage of the agreement may be

limited, so U.K. trade may be affected to a certain degree.⁹⁰

If the United Kingdom joins the European Free Trade Association (EFTA) and also participates in the European Economic Area (EEA⁹¹), as in the case of Norway, goods, services and capital will be able to move freely between the United Kingdom and the EU, as they can within the EU area, and the single passport system concerning the financial industry will be maintained, so the impact will be small. On the other hand, in that case, it will be necessary for the United Kingdom to accept some EU laws, including the freedom of the movement of people, and agree to make some payments to the EU, so the U.K. government has expressed an intention not to accept this arrangement.

Naturally, the impact will be the greatest if the U.K. withdrawal is implemented without an agreement concerning trade arrangements between the United Kingdom and the EU. If the United Kingdom withdraws from the EU without a trade agreement or any other framework, both sides will apply trade arrangements to each other to which they have committed under the WTO Agreement, resulting in a much heavier burden on companies than now with respect to trade in goods and services in general.

Table I-2-2-29 Expected impacts of Brexit (HM Treasury)

Relationships with EU	Median value	(Range)
European Economic Area (EEA)	-3.8	(-4.3~-3.4)
FTA	-6.2	(-7.8~-4.6)
WTO	-7.5	(-9.5~-5.4)

Notes: This table shows expected impacts of Brexit to GDP over 15 years after Brexit (results of comparing cases where the U.K. withdraws from the EU and those where it does not).

Source: *The immediate economic impact of leaving the EU* (HM Treasury, May 2016).

On the other hand, according to an estimate⁹² by the Confederation of British Industry (CBI), the sectors that are expected to be affected most by the emergence of non-tariff barriers are beverages and food, chemicals and transportation machinery, among other industries (Table I-2-2-30).

90 European Council President Donald Tusk indicated the view that the only option left for the United Kingdom is an FTA similar to the trade agreement that the EU has concluded with Canada. On the other hand, U.K. Prime Minister Theresa May’s view is that the kind of trade relationship to be established under an FTA similar to the trade agreement with Canada would be insufficient (Mitsubishi UFJ Research and Consulting, 2018).

91 A framework under which EFTA member countries can participate in the single EU market without joining the EU. This was established based on an agreement between the EFTA and the EU that was put into force on January 1, 1994.

92 CBI (2017).

Table I-2-2-30 Non-tariff barriers if the U.K. withdrawal is implemented without a deal

	Indicative estimates of non-tariff barriers for exporters to EU
Foods, drinks and tobacco	30.1
Chemicals (excluding pharma)	15.1
Motor vehicles	11.7
Non-motor vehicles transport	11.7
Aerospace and defense	11.1
Textiles, clothing and footwear	9.6
Post and telecom	8.2
Metals and metal products	7.4
Pharmaceuticals	6.4
Insurance	5.6
Financial services	5.5
Electrical machinery	2.7

Notes: The unit of the data is percentage (%). The data are the estimates released by the CBI.

Source: *Brexit Briefing* (CBI).

Mutual certification is guaranteed for products manufactured and sold legitimately in EU countries with respect to many regulations and systems under the EU law, so until now, it has been unnecessary for U.K. companies to take any additional step when doing business within the EU area. However, after the United Kingdom loses EU membership, U.K. companies will do business in the EU as non-EU companies, which means that it may become necessary for them to take additional steps to comply with regulations of the EU or of individual EU countries in addition to the U.K. domestic regulations,⁹³ depending on the specifics of trade arrangements. Moreover, the burden on companies may increase significantly, leading to a decline in their competitiveness, particularly in sectors in which many regulations and procedures have been established for the purpose of ensuring safety or promoting productivity improvement and with respect to industrial products involving a supply chain in a complex way, with intermediate goods imported and processed into products for export.

Regarding the freedom of movement of people permitted within the EU, if the United Kingdom agrees to be treated as a non-EU member country after Brexit, U.K. companies' competitiveness is likely to fall due to a lack of human resources and a decline in labor mobility.

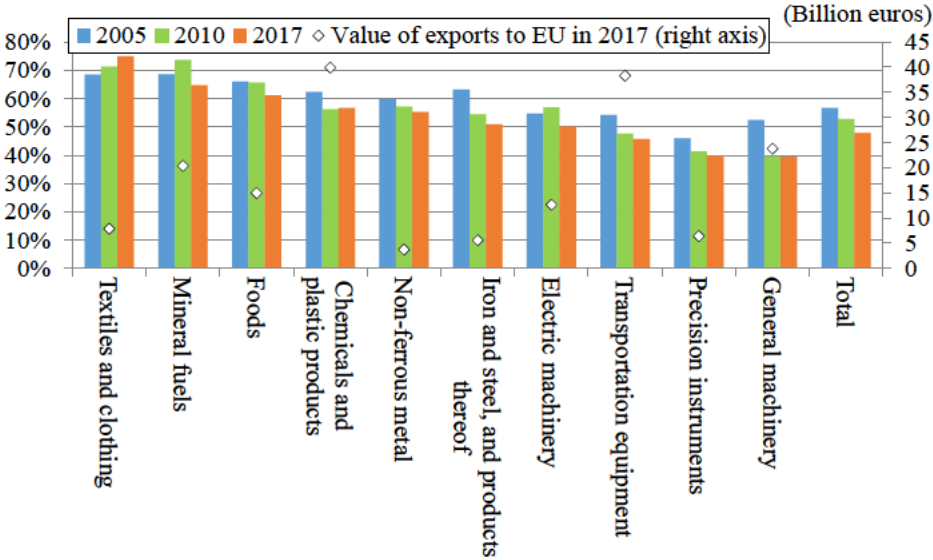
Concerning the relationship between the United Kingdom and the EU in terms of trade dependency by main item of trade, the United Kingdom depends heavily on the EU for the supply of many manufactured products in both imports and exports. With respect to chemicals/plastics and transportation machinery in particular, the impact may be significant depending on the specifics of trade

⁹³ New U.K. regulations that will replace the EU regulations that are now in force, in addition to the existing U.K. regulations.

arrangements, as the value of trade is large (Figures I-2-2-31 and I-2-2-32).

On the other hand, the EU’s dependency on the United Kingdom is less than 10% with respect to all major items of trade. Furthermore, as the EU’s dependency on the United Kingdom has been trending downward compared with the middle of the 2000s, the proportion of companies that will be affected by Brexit is expected to be smaller among EU companies than among U.K. companies (Figures I-2-2-33 and I-2-2-34).

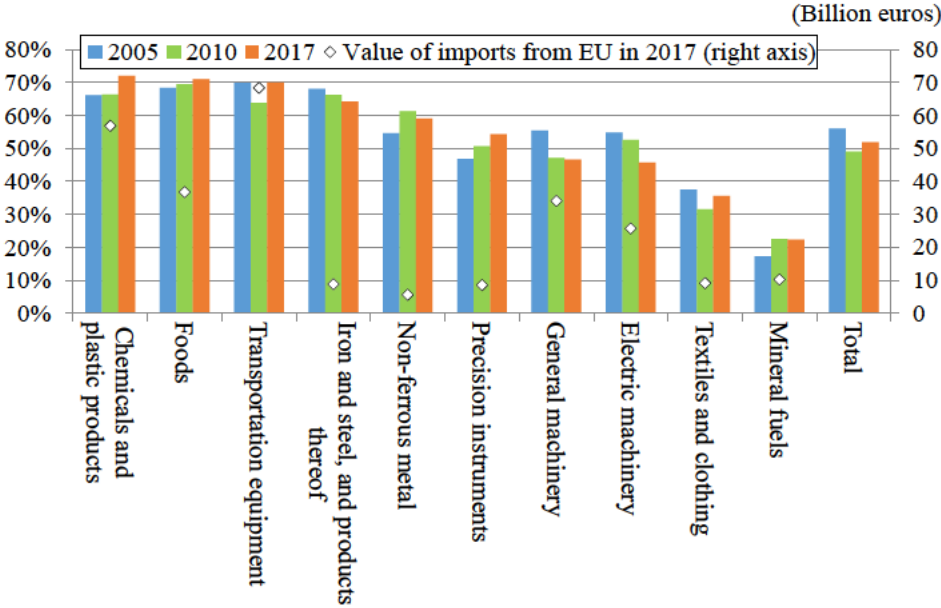
Figure I-2-2-31 Shares of the EU in total export values in the United Kingdom (by item)



Notes: EU28 countries; euro basis.

Source: Eurostat.

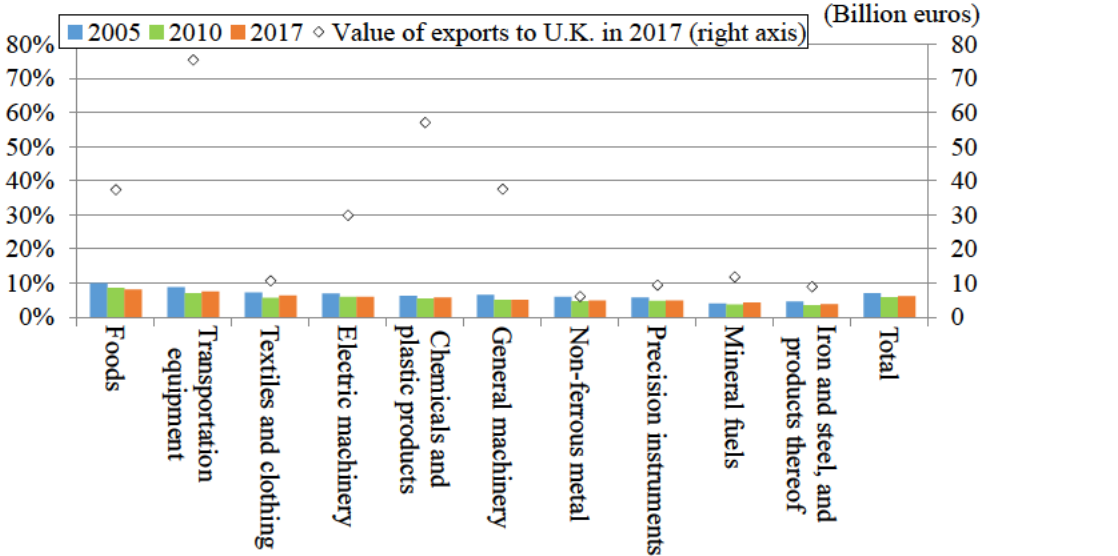
Figure I-2-2-32 Shares of the EU in total import values in the United Kingdom (by item)



Notes: EU28 countries; euro basis.

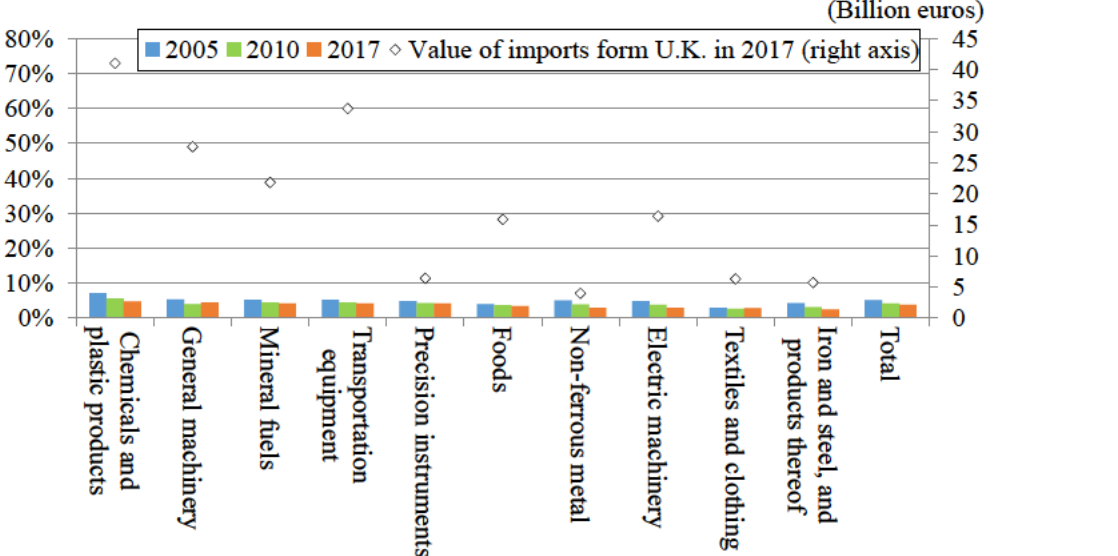
Source: Eurostat.

Figure I-2-2-33 Shares of the United Kingdom in total export values in the EU (by item)



Notes: EU28 countries; euro basis.
Source: Eurostat.

Figure I-2-2-34 Shares of the United Kingdom in total import values in the EU (by item)



Notes: EU28 countries; euro basis.
Source: Eurostat.

(2) Business groups’ reactions to Brexit

In order to mitigate the effects of tariffs and non-tariff barriers to be caused by Brexit, business groups in various countries are calling for the governments of the United Kingdom and other EU member countries to take actions.

For example, regarding the framework of the European Commission’s REACH regulation (regulation concerning the registration, evaluation, licensing and restrictions related to chemicals), the U.K. Chemical Industries Association is requesting that the United Kingdom be permitted to participate

in it with the same status as EU members.⁹⁴

The REACH regulation, which was put into force in 2007, obligates companies manufacturing or importing chemicals into the EU to submit a registration dossier to the European Chemicals Agency (ECHA) before releasing the chemicals in the EU market.

Since the introduction of this system, companies in EU countries have handled the burdensome procedures required by the REACH regulation. If the United Kingdom becomes a non-EU member country, U.K. companies will need to comply not only with the REACH regulation but also with the U.K. domestic regulation. In addition, as the procedures concerning REACH can be implemented only by importers or sole agents located in the EU, U.K. companies cannot implement those procedures in the UK, so their cost will increase substantially.

Moreover, the REACH regulation obligates compliance not only by companies manufacturing or selling chemicals but also by companies manufacturing or selling products containing some chemicals. Therefore, if Brexit occurs without necessary coordination being done between the United Kingdom and the EU with respect to this regulation, not only chemicals but also many products, including the main U.K. items of export, such as automobiles and aircraft, may become subject to the obligation for the submission of a registration dossier in EU member countries, and as a result, the impact could extend to entire supply chains in Europe.⁹⁵

In addition, the U.K. automobile industry is importing and exporting finished vehicles and automotive parts, as it is deeply integrated into the supply chain straddling the United Kingdom and the EU (Figure I-2-2-35). Therefore, there are concerns that if free access to the single market is lost due to the withdrawal from the EU, the U.K. automobile industry's competitiveness may decline because of the loss of time due to regulatory compliance and customs clearance work and the cost of tariffs. Therefore, the Society of Motor Manufacturers & Traders (SMMT) is arguing for the need for mutual certification concerning model certification and the necessity of applying the principle of accumulation to EU components under the rules of origin and of avoiding delays in customs clearance work. In addition, on the ground that a preparation period of longer than one year is necessary for implementing emergency measures, such as reorganizing warehouse and inventory management required by the re-introduction of customs clearance procedures, the SMMT is also requesting that the authorities quickly indicate the possibility that it will become necessary to make such preparation.⁹⁶

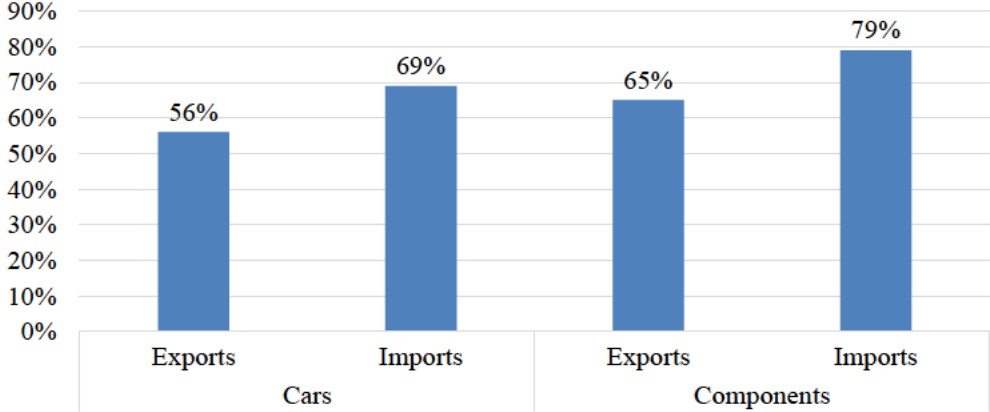
On the other hand, business groups in the EU are also concerned over negative effects of Brexit.

94 Chemical Industries Association (2017a), Chemical Industries Association (2017b).

95 ADS (2017).

96 Business, Energy and Industrial Strategy Committee of House of Commons (2017).

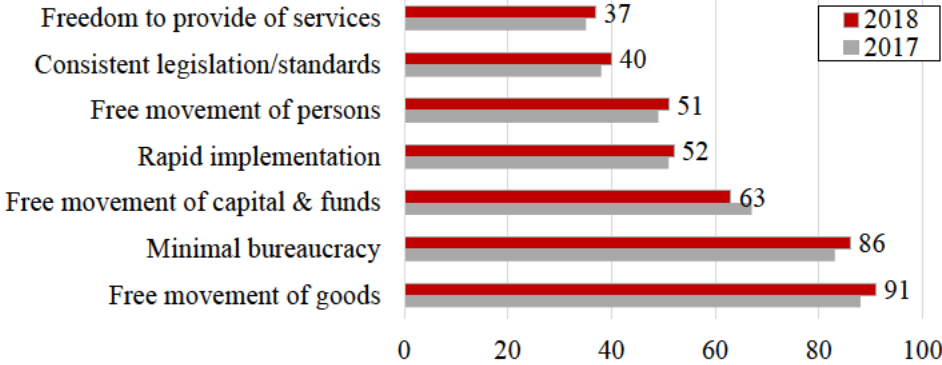
Figure I-2-2-35 Shares of the EU in total automobile trade in the United Kingdom



Source: *SMMT Motor Industry Facts 2017* (SMMT).

According to a survey conducted by the German Chamber of Commerce and Industry, many German companies cited securing the free movement of goods and curbing bureaucracy in customs procedures as priority matters in the Brexit negotiations⁹⁷ (Figure I-2-2-36).

Figure I-2-2-36 Priority matters for German companies (in the Brexit negotiations)



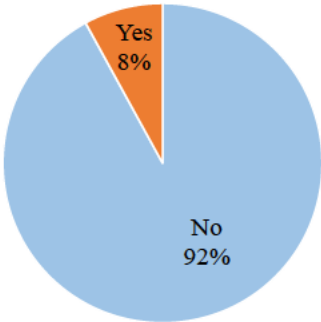
Notes: This figure shows the questionnaire-survey results in February 2018, targeting about 900 German companies doing business with U.K. companies.

Source: *Auswirkungen des Brexit-Going International 2018* (German Chamber of Commerce and Industry).

In the survey, 8% of the respondent companies replied that they were planning to shift investment from the United Kingdom to Germany and other regions (Figure I-2-2-37). On the other hand, a majority of companies were not preparing for Brexit, and the reason for the lack of preparation is considered to be a lack of transparency over the post-Brexit relationship between the United Kingdom and the EU (Figure I-2-2-38). In the survey report, small and medium-size enterprises which only have experience of trade within the EU area and which are unaccustomed to customs clearance procedures, in addition to companies integrated into a complex supply chain, were cited as companies which may be significantly affected by Brexit.

97 DIHK (2018).

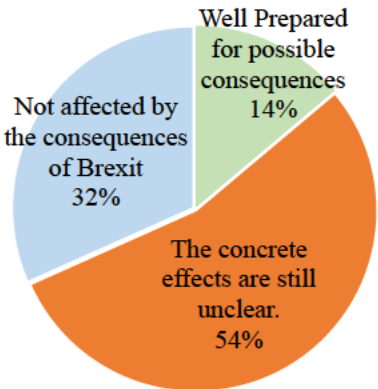
Figure I-2-2-37 Plans of shifting investment from the United Kingdom to other markets (German companies)



Notes: This figure shows the questionnaire-survey results in February 2018, targeting about 900 German companies doing business with U.K. companies.

Source: *Auswirkungen des Brexit-Going International 2018* (German Chamber of Commerce and Industry).

Figure I-2-2-38 Assessment of effects of Brexit (German companies)



Notes: This figure shows the questionnaire-survey results in February 2018, targeting about 900 German companies doing business with U.K. companies.

Source: *Auswirkungen des Brexit-Going International 2018* (German Chamber of Commerce and Industry).

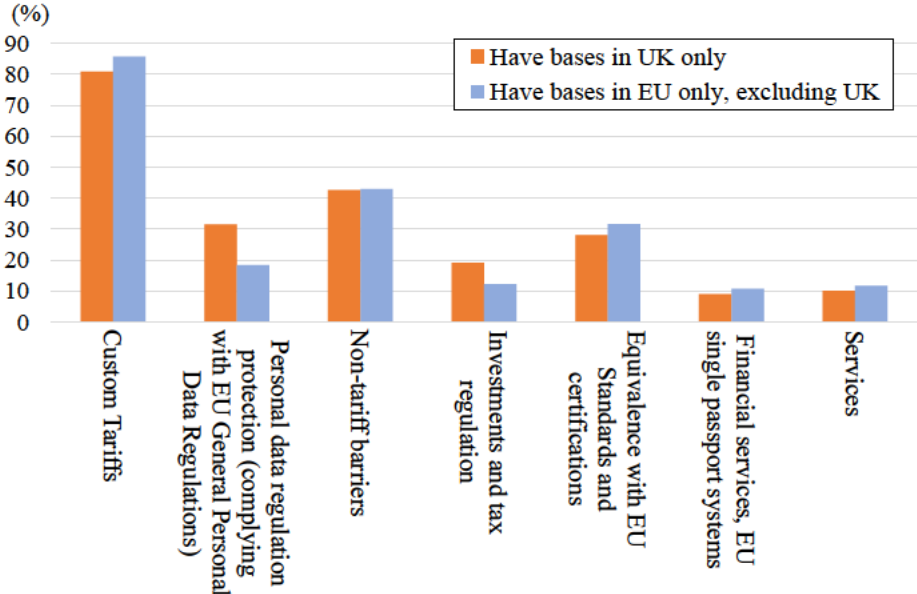
According to a questionnaire survey conducted with Japanese companies operating in Europe, more than 80% of manufacturing companies are concerned over the impact of tariffs. Around 40% are concerned about non-tariff barriers, while around 30% are concerned over standards and certification.

Meanwhile, many Japanese manufacturing companies recognize the need to make adjustment preparations or review operations in relation to the introduction of customs clearance procedures, distribution and supply chains⁹⁸ (Figure I-2-2-39). While the number of companies which gave a reply concerning the time needed for such adjustment and review is relatively small, more than half of the respondents expect that adjustment and review will take longer than two years except with respect to customs clearance procedures (Figure I-2-2-40). A provisional agreement was reached on setting a

98 JETRO (2017a).

transition period of one year and nine months from March 30, 2019⁹⁹ if a transition period is to be set after the conclusion of the U.K.-EU negotiations. From the results of the above questionnaire survey, it is unclear whether companies can actually make sufficient adjustments during the transition period. It is essential for the United Kingdom and the EU to make quick progress in their negotiations on post-Brexit arrangements.

Figure I-2-2-39 Fields about which Japanese companies are concerned over effects caused by changes in regulations

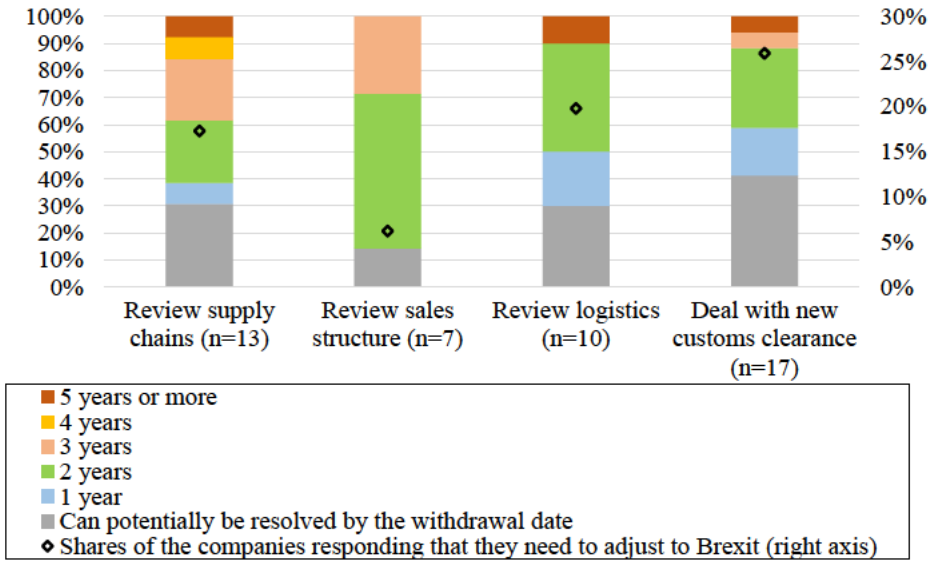


Notes: This figure shows the questionnaire-survey results targeting Japanese manufacturing companies: 89 companies having bases in the U.K. only and 196 companies having bases in the EU only, except the U.K.

Source: *FY2017 Survey on Business Conditions of Japanese-Affiliated Companies in Europe* (JETRO).

⁹⁹ European time.

Figure I-2-2-40 Necessary transition period if the UK does not stay in the single market of Customs Union



Notes: This figure shows the data on responses of the questionnaire survey from respondent Japanese manufacturing companies in the U.K. The category “Shares of the companies responding that they need to adjust to Brexit” shows the shares in 81 Japanese manufacturing companies in the U.K. The categories “Review supply chains” and “Review logistics” show the data on responses from respondent companies in cases where tariffs are imposed.

Source: *FY2017 Survey on Business Conditions of Japanese-Affiliated Companies in Europe* (JETRO).

In the Opinion on the second phase of the Brexit negotiations,¹⁰⁰ jointly announced by Keidanren (Japan Business Federation) and the Japan Business Council in Europe (JBCE) in March 2018, it is requested not only that a sufficiently long transition period be set and tariff-free trade be maintained but also that regarding the future U.K.-EU relationship, steps be taken to establish simple customs clearance procedures and rules of origin and to ensure consistency between the United Kingdom and the EU with respect to regulations and standards in a broad range of economic fields.

Until now, the United Kingdom and the EU have been deeply integrated with each other economically under the framework of the EU, and this has supported the growth of the U.K. economy. However, a change in the framework following the withdrawal from the EU may significantly affect supply chains that have already been established. The movement of goods, for example, is related not only to the framework of tariffs but also to a wide range of other matters, including the EU regulations and institutional systems concerning production and sales. Attention is focusing on how much the U.K.-EU relationship will change in the future.

However, the U.K.-EU negotiations started only in March 2018 with respect to a post-Brexit framework. From what has been publicly announced, the specifics of the negotiations are not clear. On the other hand, the dates of the United Kingdom’s withdrawal from the EU (March 30, 2019) and the expiry of the transition period (December 31, 2020) have already been set under the agreement on the

100 Keidanren (Japan Business Federation) and Japan Business Council in Europe (JBCE) (2018).

withdrawal being negotiated by the two sides.¹⁰¹ Meanwhile, as negotiations about the details are to be conducted after the withdrawal from the EU, it is quite unclear when a final agreement will be concluded. In this situation, there are concerns over the risk that companies cannot make adjustments quickly enough due to a lack of concrete information necessary for adapting to changes in the business environment due to Brexit.

3. Trade policy trends

(1) EU's trade policy

The former European Community (EC) established a tariff-free regional customs union at an early time, in 1968. The number of member countries increased from six when the community was established as the European Economic Community (EEC)¹⁰² to 12 by 1986. Since the community developed into the European Union (EU) in 1993, the number of member countries has now increased to 28.

The EU has made active efforts to conclude trade agreements with countries and regions outside Europe: by the middle of the 2000s, it put into force a customs union with Turkey,¹⁰³ an economic partnership agreement with Mediterranean countries¹⁰⁴ and a free trade agreement with Mexico.¹⁰⁵

In 2006, the EU announced Global Europe, a report summarizing its new trade strategy. This report, which is intended to indicate the EU's trade policies concerning growth and employment, indicated that in order for European companies to compete globally, it is necessary to keep the global market open and that to do so, it is necessary not only to abolish tariffs but also to conclude in-depth, comprehensive trade agreements covering such matters as goods, services, investment, intellectual property, government procurement and sustainable development.

Concerning the criteria for selecting new partners for free trade agreements (FTAs), this report made clear that a new partner's market size should be large and the level of protection against exports from the EU (tariff or non-tariff barriers) should be high. Based on the criteria, the EU conducted negotiations with the ROK, ASEAN¹⁰⁶ and Mercosur¹⁰⁷ about FTAs that provide for the liberalization of services sectors and the abolition of non-tariff barriers as well.

In 2015, the EU-ROK FTA was put into force.¹⁰⁸ The EU-ROK FTA provides for the abolition of not only tariffs on goods but also non-tariff barriers concerning trade in the automobile and pharmaceutical product sectors and covers market access related to services sectors and investment. With Mexico, which concluded an FTA with the EU earliest, in 2000, among the central and South

101 The expiry date of the transition period is among the items of the provisional agreement.

102 The EEC member countries were Belgium, France, Germany, Italy, Luxembourg and the Netherlands.

103 The agreement was put into force on December 31, 1995.

104 These agreements were concluded based on the Barcelona Declaration, a framework of comprehensive cooperation intended to establish a free trade area that was agreed upon in 1995. They were put into force respectively in the 1990s to the middle of the 2000s.

105 The agreement was put into force in 2000.

106 Regarding the ASEAN countries, the negotiations with Viet Nam and Singapore have already been concluded (although the EU initially aimed to conclude an FTA with the ASEAN region, it made a policy shift to concluding FTAs with individual ASEAN member countries).

107 The negotiations about an EU-Mercosur free trade agreement were suspended in October 2004. They were resumed in 2010, suspended again in 2012, and resumed again in 2016.

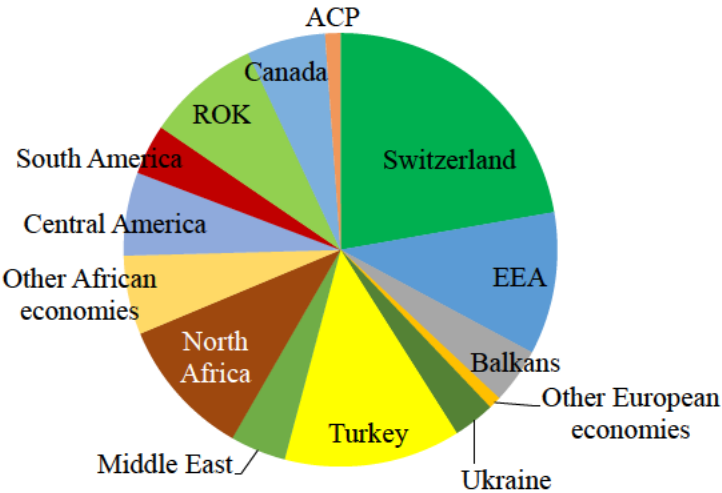
108 The negotiations were started in 2007, and the agreement started to be applied on a provisional basis in 2011 and was put into force at the end of 2015.

American countries, negotiations about modernizing the FTA are now ongoing.

Moreover, the EU-Canada Comprehensive Economic and Trade Agreement (CETA), the application of which started in September 2017 on a provisional basis, and the Japan-EU Economic Partnership Agreement (EPA),¹⁰⁹ the negotiations over which were concluded in December of the same year, ensure a high-level mutual liberalization of tariffs and non-tariff barriers between the parties to the agreements and commit them to the protection of workers' human rights and the environment¹¹⁰ at a time when support for anti-globalization initiatives is growing. In particular, the Japan-EU EPA is expected to serve as a model for open and fair trade and investment rules amid the spread of protectionist moves.¹¹¹

As a result of the above FTA negotiations, the EU's FTA coverage ratio in terms of the value of goods trade with Extra-EU countries/regions (the share of countries/regions with which FTAs have been put into force and Extra-EU countries/regions with which customs unions have been established) increased. In 2017, the FTA coverage for the 28 EU member countries was 32% (including provisional basis FTAs and FTAs signed but not put into force) (Figure I-2-2-42). Looking at changes in the value of trade by the EU15 member countries as of 1995, the share of countries with which FTAs have already been put into force rose from 14% in 1997 to 39% (43% if provisional basis FTAs included) in 2017 (Figure I-2-2-43). Regarding the trade value, including Intra-EU trade, as well as Extra-EU trade, the EU's FTA coverage ratio is higher than 70% and also higher than the ratios for other major countries (Figure I-2-2-44).

Figure I-2-2-41 Shares of trade partners of the EU with which FTAs have been enforced

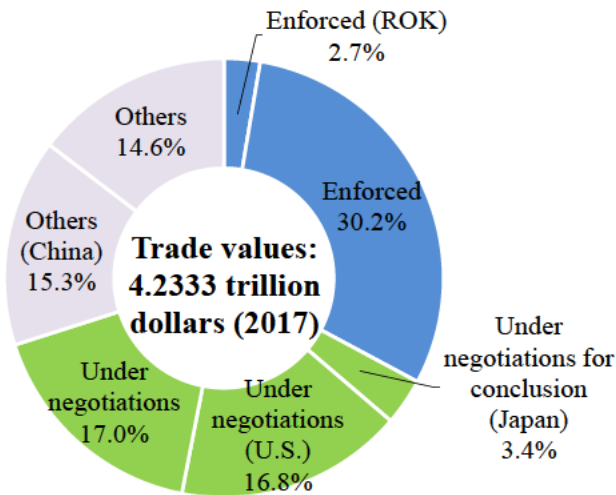


Notes: This figure shows the shares of trade values (2017) in the 28 EU member countries concerning the economies (outside the EU) with which FTAs or customs unions have been enforced or provisionally applied as of March 2018.

Source: Global Trade Atlas, European Commission website.

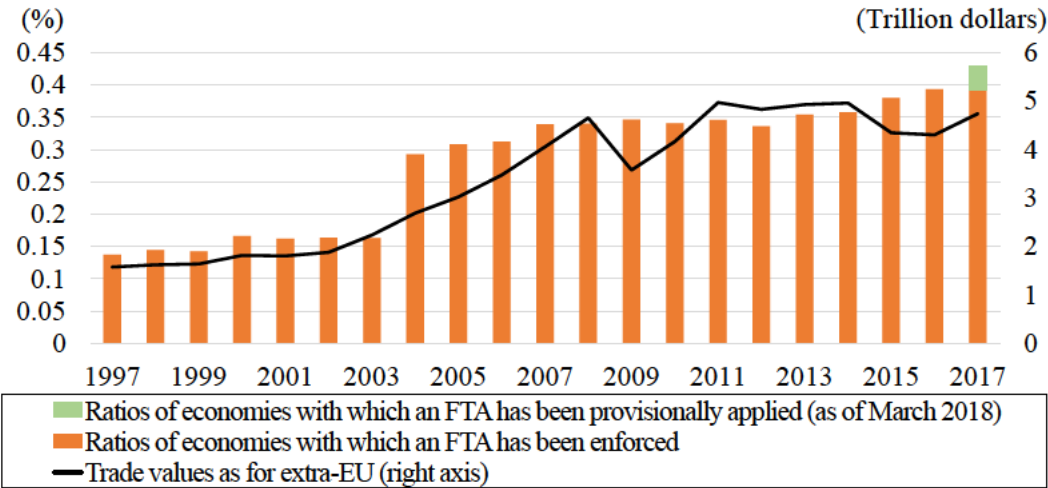
109 The negotiations were concluded in December 2017 (as of March 2018, the agreement was waiting to be signed).
 110 European Commission (2016), European Commission Website (as of February 2018) (<http://ec.europa.eu/trade/policy/in-focus/eu-japan-economic-partnership-agreement/agreement-explained/>), European Commission (2017a).
 111 Ministry of Foreign Affairs, Japan (2017).

Figure I-2-2-42 The EU's FTA coverage ratios (trade values with economies outside the EU area)



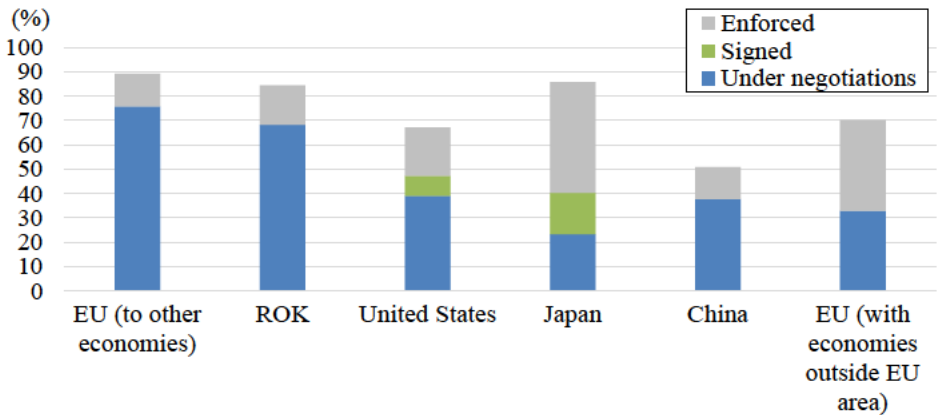
Notes: As of the end of March 2018; Shares of the extra-EU28 trade.
 Source: *Direction of Trade Statistics* (IMF).

Figure I-2-2-43 Changes in coverage ratios of FTAs (enforced) in the EU15 member countries



Notes: This figure shows the coverage ratios of economies with which FTAs or customs unions have been enforced or provisionally applied, in the extra-EU trade values (the EU refers to 15 member countries as of 1995). It shows the data on the agreements enforced in the target year. As for the agreements provisionally applied, it shows the data as of 2017 alone.
 Source: Global Trade Atlas, European Commission website.

Figure I-2-2-44 FTA coverage ratios of major economies and regions

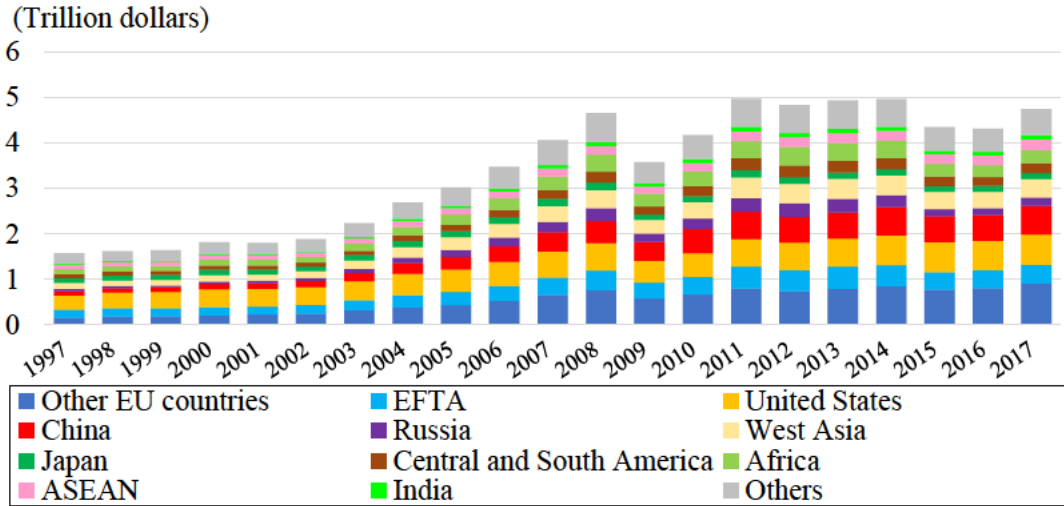


Notes: The term “FTA coverage ratios” refers to the ratios of trade with economies and regions with which FTAs have been enforced or signed in total trade (as of the end of March 2018). The trade values are based on the trade statistics in 2017. The EU refers to 28 member countries. The category “under negotiations” include economies with which FTA negotiations have been concluded.

Source: Trade Statistics of Japan (Ministry of Finance (MOF)), *Direction of Trade Statistics* (China, ROK, U.S., and EU) (IMF).

Against the backdrop of the conclusion of those trade agreements and the expansion of the global economy, the trade value of the EU is increasing with respect to both goods and services. Regarding the EU 15 member countries as of 1995, after the fourth expansion of the EU, the trade value with other countries tripled between 1997 and 2017 (Figure I-2-2-45). The growth rate of trade in goods was the highest for trade with China among the main trading partner countries/regions. The value of imports from China in 2017 was seven times more than in 1997, while the value of exports to China was more than six times as large. China’s share in the trade value by the EU 15 countries with other countries was 13% (Figure I-2-2-46).

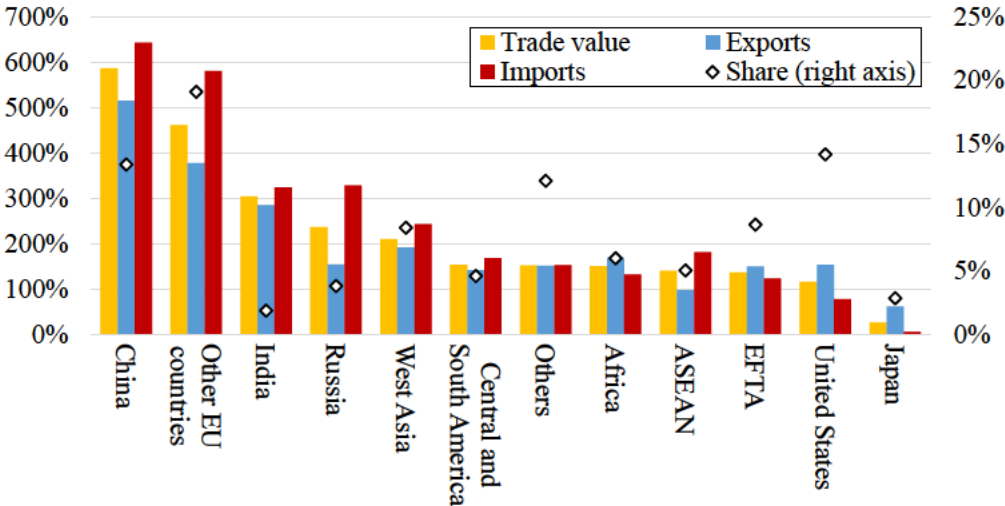
Figure I-2-2-45 Changes in the extra-EU trade values of the EU (15 member countries) (by partner and region)



Notes: This figure shows the changes in the trade values (imports + exports) in the EU15 member countries as of 1995, with economies outside the EU area. The category “Other EU countries” refers to the rest of the EU member countries, i.e., 13 member countries. The category “China” includes Hong Kong.

Source: Global Trade Atlas.

Figure I-2-2-46 Growth rates of trade value of goods in the EU (15 member countries) (by partner or region)



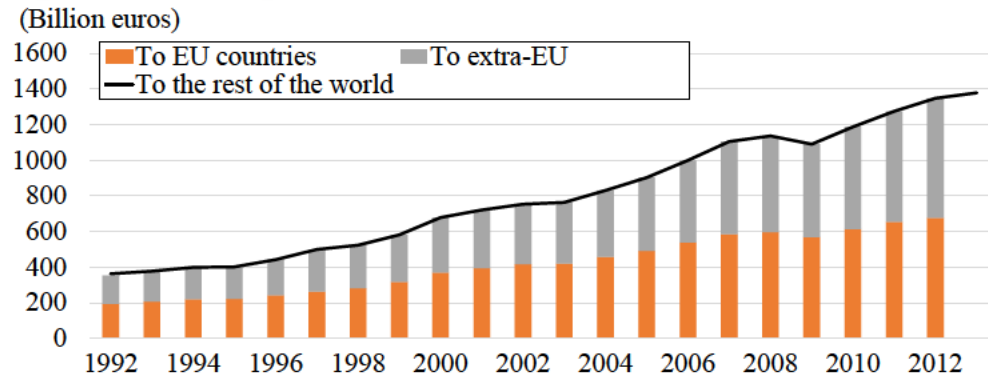
Notes: This figure shows the 1997-2017 growth rates of the trade value in the EU15 member countries as of 1995, with economies outside the EU. The category “Other EU countries” refers to the rest of the EU member countries, i.e., 13 member countries. The share shows the proportion to the trade value with the extra-EU in 2017. The category “China” includes Hong Kong.

Source: Global Trade Atlas.

(2) EU’s amendment of AD regulation

As described in the previous paragraph, the EU’s basic stance is promoting free trade. However, on the other hand, the EU has implemented antidumping measures (hereinafter referred to as “AD measures”) as necessary and import restriction measures, such as anti-subsidy measures. The EU is ranked second in the world, after the United States, in terms of the number of cases of implementation of AD measures. Although the number of cases of implementation of AD measures has been trending downward since the middle of the 2000s, the number of such cases against China has recently been rising. (Figures I-2-2-49 and I-2-2-50).

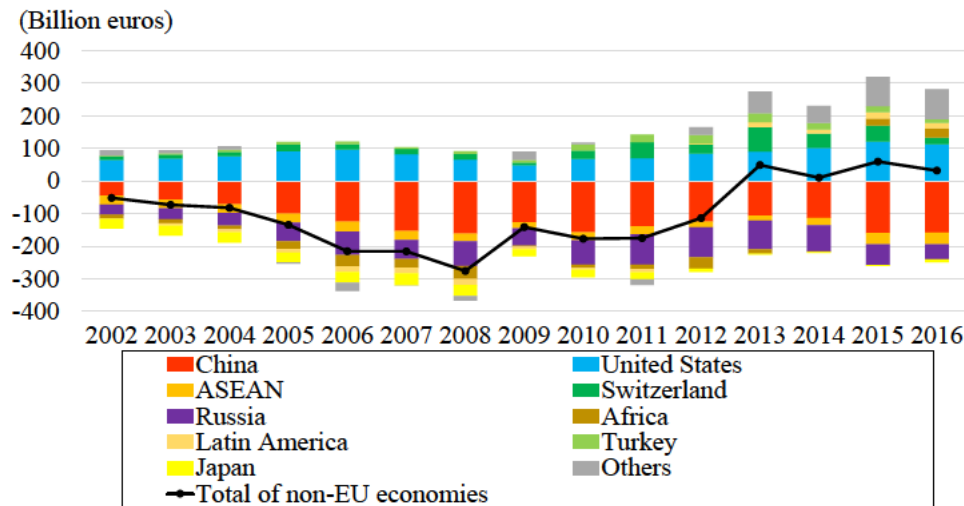
Figure I-2-2-47 Exports of services from the EU (15 member countries)



Notes: The EU refers to the 15 EU member countries as of 1995. The category “To the rest of the world” covers the data in and before 2013.

Source: Eurostat.

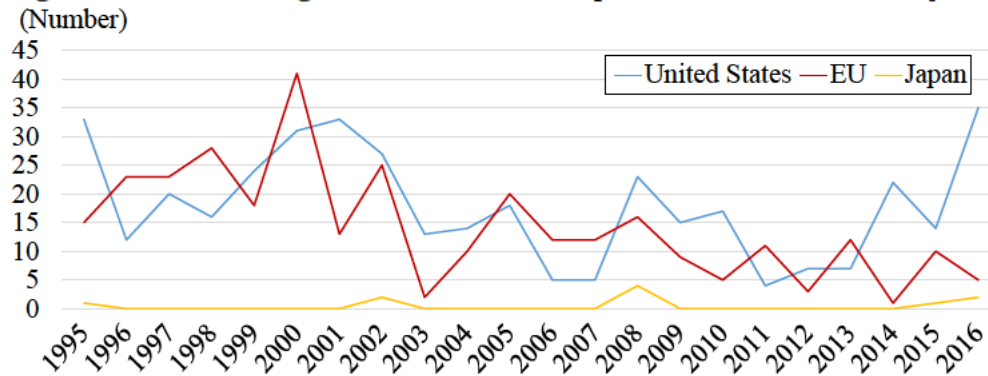
Figure I-2-2-48 Balance of goods trade in the EU



Notes: The EU refers to the EU28 member countries. The category “China” includes Hong Kong.

Source: Eurostat.

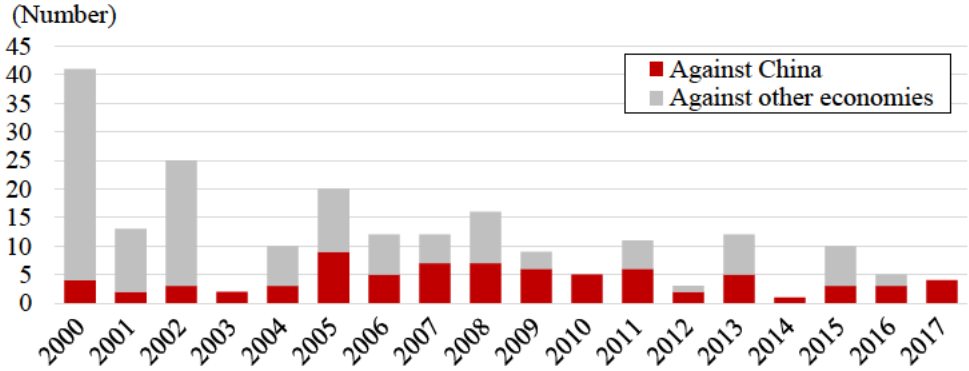
Figure I-2-2-49 Changes in the number of implementations of AD in major economies



Notes: This figure shows the number of AD implementations in and before 2016.

Source: WTO Statistics.

Figure I-2-2-50 Changes in the number of implementations of AD by the EU



Notes: This figure shows the number of AD implementations. The data in 2017 are those in the first half of the year (excluding the data on the category “Against other economies”).

Source: WTO Statistics.

The EU regulation that prescribes the EU’s framework of AD measures was amended in December 2017.¹¹² The AD regulation before amendment (EU regulation No. 2016/1036) listed China and other countries as “non-market economy (NME) countries” to which substitute prices may be applied, and required, in principle, that substitute prices be used in AD investigations. The amended AD regulation does not use the term NME countries, nor does it list specific countries. Instead, it indicates that substitute prices may be applied to countries and industries in which serious market distortion is recognized.¹¹³

This amendment was made against the backdrop of growing concerns, mainly among European business groups, that the application of substitute prices to China may not be permitted under the WTO Agreement as a result of the expiry of a portion of China’s WTO Protocol of Accession in December 2016 and that the ability to implement AD measures against China may decline as a result.

Regarding the EU’s AD regulation, whether or not the application of substitute prices to China conforms to the WTO Agreement is being disputed under the WTO panel procedures. As the reason for the latest amendment, the EU explained that the amendment was intended to enable “the EU to secure trade remedy measures suited to the present international trade environment (particularly a market distortion through state intervention, which becomes the cause of excessive supply too frequently) while fully complying with its international obligations under the WTO’s legal framework.”¹¹⁴

The EU’s stance of addressing market-distorting practices while supporting free trade is clear. Shown below is a comment by European Commission President Jean-Claude Juncker that was included in a press release concerning the amendment of the AD regulation.

“Europe stands for open and fair trade, but...we are not naïve free traders. That’s why we have to make sure that, while upholding the multilateral, rules-based trade system, our legislation allows us to ensure that our companies operate on a level playing field.” “This is not about any country in particular,

112 The amended AD regulation was put into force on December 20, 2017.
 113 In March 2018, after the amendment of the regulation, it was decided to continue the existing AD measure against the Chinese steel industry based on the use of a third-country price as the normal price.
 114 Ministry of Economy, Trade and Industry, Japan (2018).

simply about making sure that we have the means to take action against unfair competition and the dumping... that leads to the destruction of jobs.”

As emerging economies are making remarkable technological advances, European companies are more or less confronted with global competition. However, concerning some emerging economies, there is a growing perception that as government interventions are causing market distortions, companies within the EU area are being forced to compete in an unfair position. In addition, against the backdrop of the deterioration of the employment situation that was triggered by the European debt crisis and the growing awareness about income inequality in recent years, the EU’s industrial policy in recent years has tended to place emphasis on industry and employment. In this situation, the EU is exploring ways of securing rules-based, free and fair trade.

(3) Strengthening of control and regulation of inward foreign direct investments

(A) EU

Since 1993, when the single EU market, within which non-tariff barriers were abolished, was completed, inward foreign direct investments in the EU from countries not only within the EU area but also outside the area have increased against the backdrop of globalization worldwide (Figures I-2-2-52, I-2-2-53 and I-2-2-54). The EU places emphasis on free trade, and at the same time, its basic stance on inward foreign direct investments is open, so many member countries are actively inviting investments from abroad. However, against the backdrop of an increase in investments from countries outside the EU region in critical technologies and infrastructure in the region, in September 2017, the European Commission proposed a directive for the establishment of a framework for exchange of information between member countries and the submission of opinions concerning foreign direct investments in the EU area.¹¹⁵

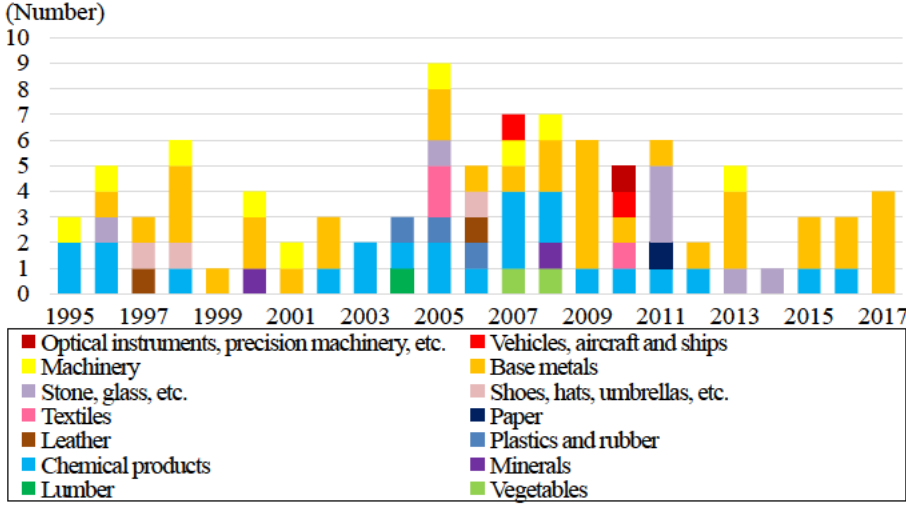
115 In May 2017, in the “Harnessing globalization” report, the European Commission expressed the following view: “Openness to foreign investment remains a key principle for the EU and a major source of growth. However, concerns have recently been voiced about foreign investors, notably state-owned enterprises, taking over European companies with key technologies for strategic reasons. EU investors often do not enjoy the same rights to invest in the country from which the investment originates. These concerns need careful analysis and appropriate action” (European Commission, 2017b).

In June 2017, the European Council agreed to analyze foreign investments in strategic sectors.

In July 2017, the European Parliament called on the European Commission to pay attention to the role played by foreign state-owned enterprises supported by governments in ways prohibited in the EU. It also called on the European Commission and member countries to screen third-country foreign direct investments in the EU in strategic industries, while bearing in mind that Europe depends on foreign direct investments.

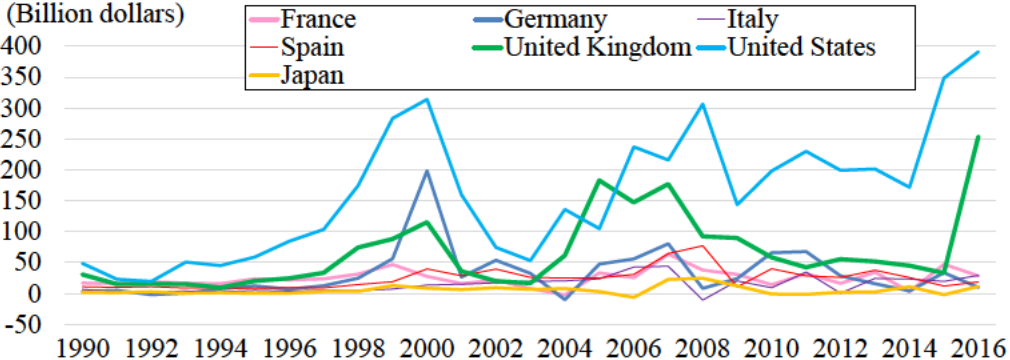
In a State of the Union address in September 2017, the European Commission’s president stated that the EU is open for business but follows the principle of reciprocity and that the EU is not a naïve free trader and must defend its strategic interests, and to that end, he expressed the commission’s intention to propose screening of investments in Europe (European Commission, 2017c).

Figure I-2-2-51 Changes in the number of implementations of AD by the EU against China (by item)



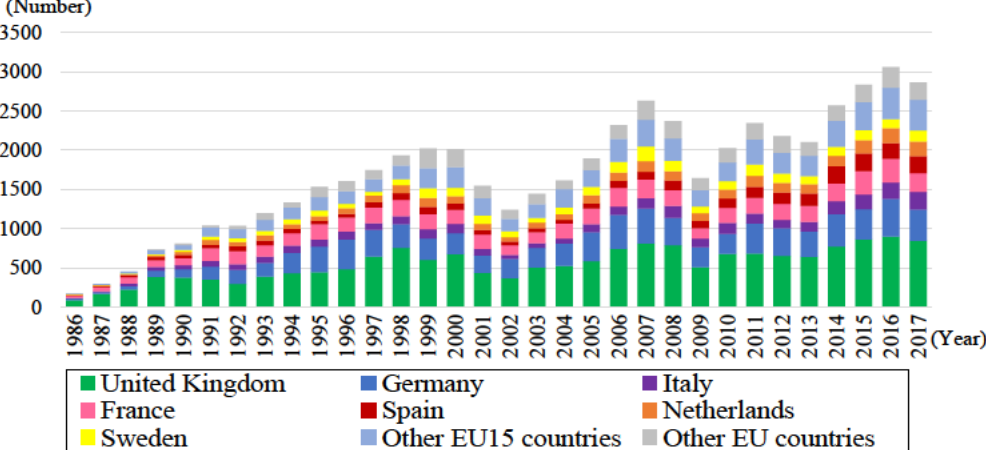
Notes: The data in 2017 are those in the first half of the year.
Source: WTO Statistics.

Figure I-2-2-52 Changes in inward direct investments of major economies



Notes: Trade values of inward direct investments in and before 2016.
Source: UNCTAD Statistics.

Figure I-2-2-53 Number of M&As in the EU area by companies in economies outside the area (by economy of acquired company)



Notes: This figure shows the M&As, in which the nationality of final, acquiring parent companies is an economy other than the EU28 member countries. The “15 EU countries” refers to the EU member countries as of 1995. This figure shows all cases released as M&As that were reported in the year of the release. The data target those in and before 2017.

Source: Thomson One.

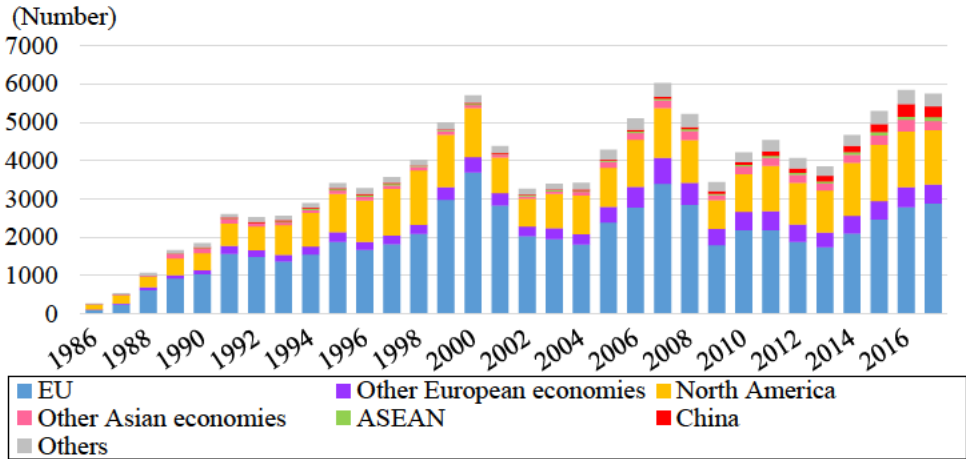
The proposed directive for a new framework, while stating that the final authority to control investments belongs to member countries, lists the following items as screening criteria that should be adopted by EU member countries from the viewpoints of security or public order: (1) the potential effects on critical infrastructure, including energy, communications, and financial infrastructure; (2) the potential effects on critical technologies; (3) the potential effects on the security of supply of critical inputs; (4) access to sensitive information or the ability to control sensitive information; and (5) whether foreign investments are controlled by the government of a third country.

Investment recipient member countries screen investments based on the above criteria. Investment recipient member countries provide information related to the screening to the European Commission and other member countries and subsequently make final decisions on accepting investments in consideration of opinions and comments issued by the European Commission and other member countries.

Regarding investments that could affect the EU’s interests, opinions may be expressed to investment recipient countries under the European Commission’s initiative. In this case, investment recipient member countries are required to respect the European Commission’s opinions as much as possible.

With respect to a specific method of screening by member countries, while the countries must meet basic requirements, such as transparency and non-discrimination between different countries outside the EU area, they are permitted to maintain distinctive investment management systems. In addition, final decisions on accepting investments are left to member countries, so this is a framework premised on the screening authority of individual countries.

Figure I-2-2-54 Number of M&As in the EU countries by foreign companies (by region of acquiring company)



Notes: This figure shows the M&As, in which the nationality of final, acquiring parent companies is an overseas economy. The M&As are those completed in the EU 28 member economies. This figure shows all cases released as M&As that were reported in the year of the release. The category “China” includes Hong Kong and the category “Other European economies” includes Russia. The data target those in and before 2017.

Source: Thomson One.

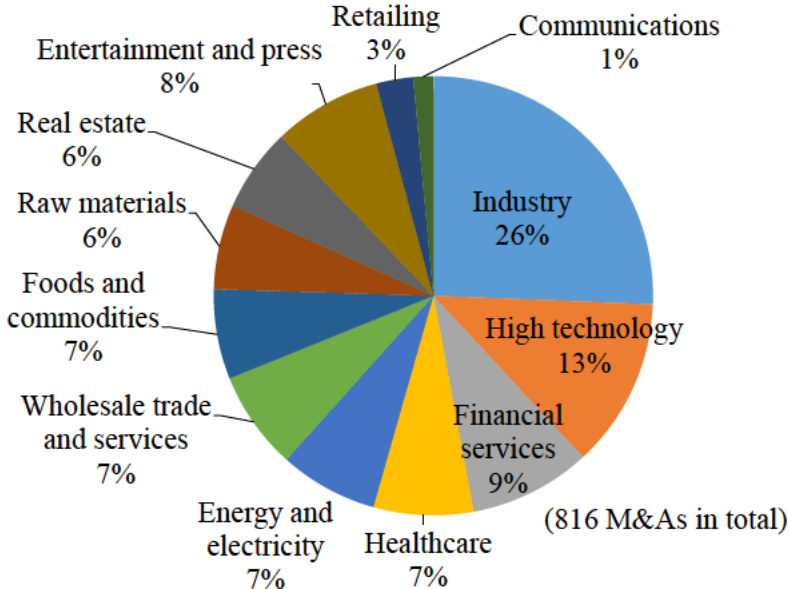
**Table I-2-2-55 Framework for Screening of Foreign Direct Investments
(Proposal by the European Commission (EC))**

The Member States conducting a screening of a foreign direct investment should inform the other Member States of the ongoing screening. The screening Member State should allow other Member States to provide comments within 25 working days.
The Commission should be informed of foreign direct investments undergoing screening under a Member State’s screening mechanism on the grounds of security or public order and the Commission should also have the possibility to provide comments within 25 working days.
The Commission may carry out a screening in the case where a foreign direct investment may affect projects or programs of Union interest.

Notes: Proposal by the EC in September 2017.

Source: JETRO.

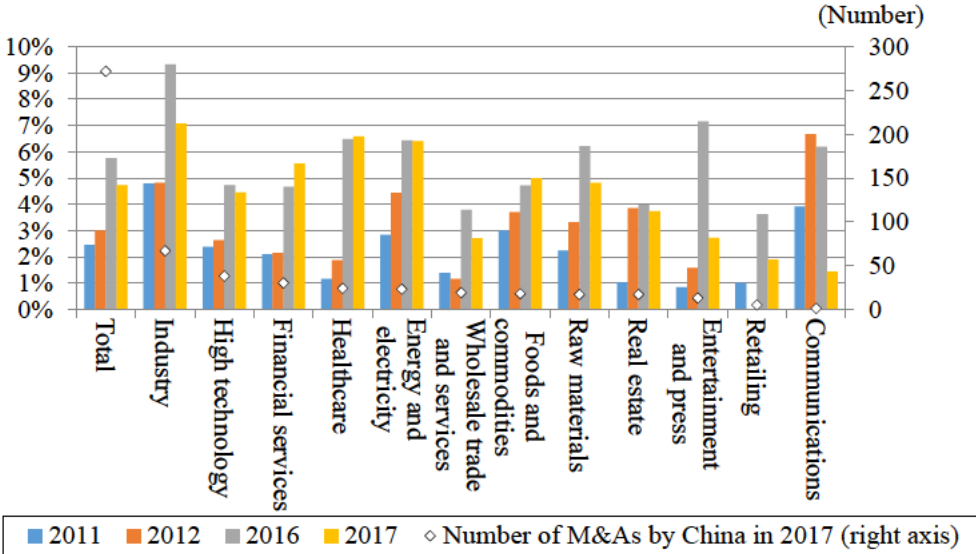
Figure I-2-2-56 Sector-based M&As by China (in the EU member countries)



Notes: This figure shows the M&As in which the final, acquiring parent company was located in China or Hong Kong (in the EU member countries). The data are based on the number of M&As released as those completed between 2015 and 2017.

Source: Thomson One.

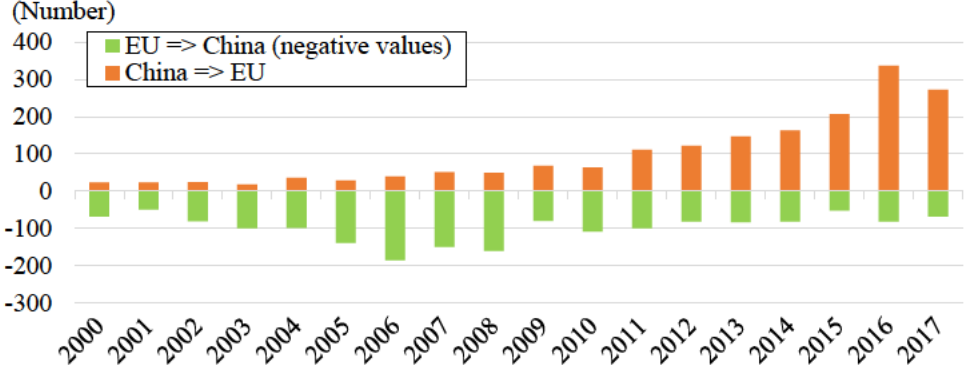
Figure I-2-2-57 Shares of Chinese companies in all M&As by foreign companies in the EU member countries



Notes: This figure shows the M&As in which the final, acquiring parent company was located in China or Hong Kong. The data are based on the number of released M&As. This figure shows the ratios of Chinese companies in all cross-border M&As by foreign companies in the EU member countries.

Source: Thomson One.

Figure I-2-2-58 M&As by the EU member countries and China



Notes: The locations are determined by the location to which the final, acquiring parent company belongs. The category “China” includes Hong Kong. This figure shows the released data only (as of March 27, 2018).

Source: Eikon (Thomson Reuters).

(B) Strengthening of Germany’s regulation of inward foreign direct investments

As Germany is actively inviting foreign direct investments, foreign capital has steadily flowed into the country. In particular, investments by China have increased since the global economic crisis (Figure I-2-2-59).¹¹⁶

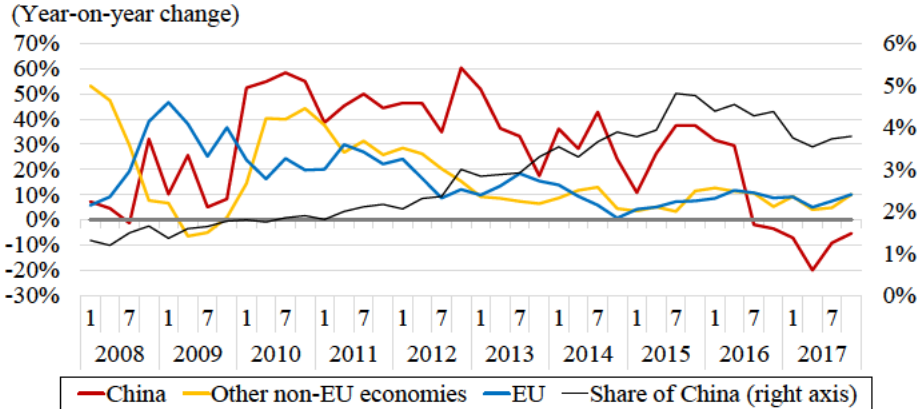
116 Since the middle of 2016, investments by China have declined steeply on a year-on-year basis. One

Germany has already had a system to screen acquisitions of German companies by residents outside the EU area ¹¹⁷ under the Foreign Trade and Payments Ordinance (AWV: Aussenwirtschaftsverordnung), and a proposed amendment of the ordinance intended to strengthen the screening of investments was approved by the cabinet¹¹⁸ in July 2017 against the backdrop of an acquisition of a German industrial robot company by a Chinese company in 2016, among other factors.

The main points of the amendment are as follows:

- (a) Expansion of the scope of industries subject to the requirement for a security-related notification (manufacturing equipment exclusively intended for weapons and related components were added to the scope of industries subject to the requirement for an advance notification from the viewpoint of security).
- (b) Specification of industries related to public order or security (while all industries had already been subject to ex-post screening, critical technologies and infrastructure, including, transportation/traffic and communication, were specified as a result of the latest amendment).
- (c) Extension of the screening period.
- (d) Strengthening of control of indirect investments intended to evade regulation (companies located within the EU area, which had previously been not subject to screening, are now subject to screening when signs of camouflage intended to evade regulation are detected).
- (e) Expansion of the scope of persons subject to the obligation to provide information concerning screening (German companies receiving investment were included as well as foreign investors).

Figure I-2-2-59 Inward foreign direct investments in Germany
(on a quarter basis; excluding reinvestments)



Notes: This figure shows the growth rates of partner economy and region in terms of total accumulated values of flows after 2005. It also shows the shares of China’s inward foreign direct investments (except reinvestments) in the inward foreign direct investments by non-EU economies. The data are on a quarter-by-quarter basis and a euro basis.

Source: Deutsche Bundesbank.

presumed factor behind the decline is the tightening of screening of foreign direct investments by the government of China to curb the outflow of capital.
 117 Direct or indirect acquisition of capital shares with 25% or higher of all voting rights in a German company.
 118 The amendment was put into force on July 18, 2017.

Concerning this amendment, the German minister of economy and energy has expressed the view that it can provide companies engaging in the critical infrastructure industry with better protection against pressure to succumb to acquisition and a greater reciprocity at a time when German companies are being forced to compete with countries with economic system not as open as Germany.¹¹⁹ On the other hand, voices of concern have been heard about the possibility that Germany's attractiveness as an investment destination will decline.¹²⁰

119 A Press Release by Federal Ministry of Economic Affairs and Energy, Germany on July 12, 2017 (<https://www.bmwi.de/Redaktion/EN/Pressemitteilungen/2017/20170712-zypries-besserer-schutz-bei-firmenuebernahmen.html>).

120 Financial Times, 13 Jul. 2017 (<https://www.ft.com/content/5087c106-66fc-11e7-9a66-93fb352ba1fe>).