

6

Bilateral Trade and Investment Between Britain and Germany Ahead of the UK's Impending Departure from the European Union

Andreas Bielig

6.1 Introduction

It is not an exaggeration to say that the Brexit referendum decision on 23 June 2016 caught international markets by surprise. In Germany, only diehard pessimists were advancing the worst-case scenario of the UK leaving the EU, but that was exactly what happened. With the required minimum of 51.9% of the vote, 17,410,742 British citizens voted for the exit option, while only 16,141,241 voted "Remain". Although the UK had long played a distinctive role in the EU, most economic decision-makers in Germany were surprised by the new signals of dissatisfaction with the Union coming from Britain. In Germany, the UK was seen as a key business partner and a stabilising element of the political order in Europe. Even though they differ substantially on future political developments in Europe, economically the

A. Bielig (\boxtimes)

Collegium of World Economy,

SGH Warsaw School of Economics, Warsaw, Poland

e-mail: abielig@sgh.waw.pl

two countries will remain natural partners for cooperation in the future. The track record of bilateral economic cooperation between Germany and the UK is impressive in both quantitative and qualitative terms. With Zero Hour fast approaching, the rules of this partnership must be readjusted and economic decisions and projects must be adapted to the new policy regime post-Brexit. This holds for many areas of economic activity of which two are analysed here: trade development and foreign investment. This chapter analyses trade between Germany and the UK from 2008 to 2016 using descriptive statistics, and it also traces the development of bilateral direct investment, providing an insight into the potential implications of Brexit for two-way exchange.

6.2 Development of Trade Between Germany and UK from 2008 to 2016

Trade between Germany and the UK has developed successfully in the last few decades. In the 1990-2016 period, German exports to Britain grew by 204.8%, from EUR 28.26 billion in 1990 to EUR 86.15 billion in 2016, with average annual exports at EUR 52.83 billion. After a period of stagnation in the early 1990s, exports increased each year until the start of an economic crisis in 2007, and then rose again from 2010 onwards. In 2016, when 51.9% of the British people voted in favour of their country leaving the EU, exports decreased by 3.2%, as shown in Fig. 6.1. In 2016, the UK was ranked third among Germany's largest export partners,² so potential trade barriers in the future would pose an immense risk. Also, 12.2% of Germany's EU exports were to the UK (2nd place after France).³ The fastest growth in exports was recorded in 1997, at 17.7%, whereas the greatest decrease took place in 2009, at 17.0%. Exports grew at a respectable annual rate of 4.7% in 1990-2016, so bilateral trade between Germany and UK can be described as a success story for both partners.

¹Destatis (2017a).

²Destatis (2017b).

³Destatis (2017c).

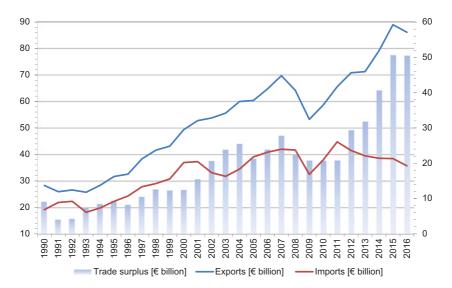


Fig. 6.1 Bilateral trade between Germany and UK, 1990–2016, exports and imports [EUR billion] left axis, trade surplus [EUR billion] right axis (*Source* Own elaboration on basis of Destatis [2017a])

The same conclusions, with some minor modifications, hold true for imports. The UK is not among Germany's top 10 import partners, being ranked in 11th position in 2016,⁴ which nevertheless means that this direction of trade flows plays a substantial role. The UK was in eighth place among Germany's largest import partners, with 6.5% of total imported goods.⁵ Imports increased by 86.6% from EUR 19.1 billion in 1990 to EUR 35.7 billion in 2016. Even if the growth trend in imports was not as stable as in the case of exports (with a remarkable decrease in 2002 and 2003), imports in general—except in crisis years—followed an expansion trend, with annual growth rates of 3.0%. The greatest growth of 18.0% was recorded in 2011, whereas the largest decrease was in 2009 at 22.1%. Average imports in 1990–2016 were EUR 32.63 billion. Since 2012, the import growth path has appeared

⁴Destatis (2017b).

⁵Destatis (2017c).

to be interrupted and uncoupled from export dynamics, with average annual growth rates negative at 4.4%. These shrinking German imports seem to point to a declining competitiveness of British exporters.

The growing divergence between export and import dynamics led to a remarkable increase in Germany's trade surplus. It increased by 452.1% from EUR 9.14 billion in 1990 to EUR 50.45 billion in 2016. The average annual trade surplus was EUR 20.21 billion. Until 1996, the export-import relation developed symmetrically but then increasingly went out of balance, which created space for growing trade surpluses. With the exception of the crisis period of 2008–2010 rapidly growing surpluses were recorded. The greatest growth rate was 76.9% in 1993, while the biggest decrease was 55.3% in 1991. The average growth of the trade surplus was 9.6% p.a. But the 0.3% drop in the surplus in 2016 hints at potential future developments after the full implementation of the Brexit agenda, which remains unclear for now.

By far, machinery and transport equipment is the dominant category of products traded between Germany and the UK at the one-digit level of the Standard International Trade Classification (SITC). A new SITC classification by the Statistical Office in Wiesbaden provides data from 2008 onwards, whereas previous data use an older national classification system that is not fully compatible with the current SITC standards. Exports of machinery increased by 39.1% from EUR 33.96 billion in 2008 to EUR 47.25 billion in 2016,6 as shown in Fig. 6.2. With the exception of 2009, export volumes increased steadily, with the highest growth rate in 2015 at 16.8%. The largest relative drop in exports was recorded in 2009, at 18.6%. Between 2008 and 2016 the average volume was EUR 37.45 billion, while absolute volumes expanded at a rate of 4.8% a year on average. At the same time, the share of machinery in total UK exports grew from 52.9% to 54.8%, with the average share at 53.0%. The greatest growth of export shares was recorded in 2009 at 4.0%, yet the average annual growth, due to considerable fluctuations, was only 0.5%.

⁶Destatis (2017d).

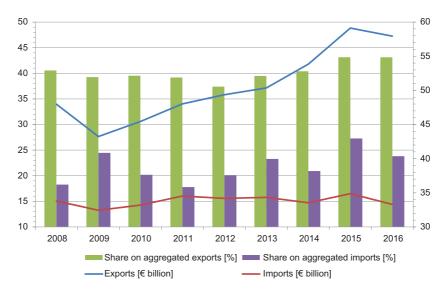


Fig. 6.2 Bilateral trade between Germany and the UK, 2008–2016, machinery and transport equipment (SITC-7), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017d])

German machinery imports from the UK showed a stagnation during the same period. They declined by 4.4% from EUR 15.08 billion in 2008 to EUR 14.41 billion in 2016. Their development followed a path nearly symmetrical to that of the average level of imports, which stood at EUR 15.07 billion and showed a negative average annual growth rate of 0.1%. Despite the shrinking absolute volumes, the share of machinery in total German imports from the UK increased from 36.2% in 2008 to 40.4% in 2016, with an average share of 39.0%. The figures show that machinery was less prominent in German imports than in exports in terms of absolute shares, but it nonetheless represented the largest product group. The greatest growth was recorded in 2009 at 12.8%, whereas the biggest decline was recorded in 2010, at 7.9%. The average import share of machinery grew by 1.7% p.a.

Chemicals and related products constituted the second largest product group in terms of Germany's export volumes to the UK in 2016. Exports of chemicals increased by 55.1% from EUR 8.26 billion in

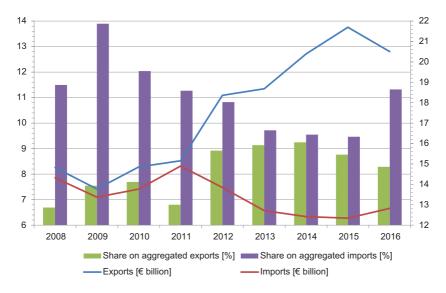


Fig. 6.3 Bilateral trade between Germany and the UK, 2008–2016, chemicals and related products, n.e.s. (SITC-5), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017e])

2008 to EUR 12.80 billion in 2016, as shown in Fig. 6.3.⁷ Reduced volumes were recorded in 2009. The highest annual growth rate, 30.1%, was recorded in 2012, while the steepest slide was in 2009, at 10.1%. On average, chemicals exports totalled EUR 10.47 billion, with an average annual growth rate of 6.3%. Because of this strong dynamics, which outstripped the average growth of overall German exports to the UK, the share of chemicals in overall exports increased from 12.9% in 2008 to 14.9% in 2016, with an average share of 14.6%. Still, the export performance of chemicals was not constantly higher than average: diminishing shares were recorded on three occasions, with the greatest slide, by 7.9%, in 2011. Curiously, the greatest increase was recorded a year later, at 20.4%. On average, the export share of chemicals grew by 2.1% p.a.

⁷Destatis (2017e).

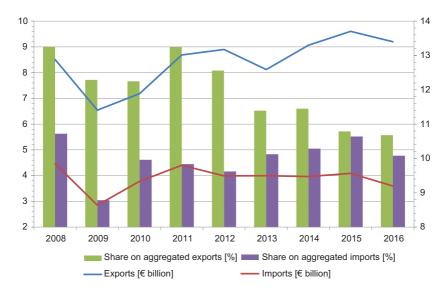


Fig. 6.4 Bilateral trade between Germany and the UK, 2008–2016, manufactured goods classified chiefly by material (SITC-6), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017f])

Meanwhile, German imports of chemicals from the UK showed some minor declines in absolute figures. They declined by 15.3% from EUR 7.86 billion in 2008 to EUR 6.66 billion in 2016. After a temporary recovery in 2011, with a peak in import volumes at EUR 8.32 billion, an overall downward trend set in. Average imports amounted to EUR 7.11 billion. The greatest dynamics, at 12.2%, was recorded in 2011, whereas the greatest decline was in 2013, at 12.1%. The average annual growth rate was negative at 1.7%. The import performance of chemicals was worse than that of overall German imports from the UK, as shown in Fig. 6.1. The import share of chemicals decreased from 18.9% in 2008 to 18.6% in 2016. The greatest increase was recorded in 2009, at 15.9%, while the biggest drop was in 2009, at 10.6%. Despite these negative developments, the average share of chemicals grew by 0.2% p.a. The average share of chemicals in overall imports was 18.3%.

Manufactured goods form the third largest group of German exports to the UK. In terms of size, they represented 19.5% of the largest group in 2016. Exports of manufactured goods increased by 8.1% from EUR 8.5 billion in 2008 to EUR 9.2 billion in 2016, as shown in Fig. 6.4.8 Average exports during that period amounted to EUR 8.42 billion. The highest annual growth rate was recorded in 2011, at 20.9%, while the steepest decline was in 2009, at 23.1%. The average annual growth rate for the period was 1.8%, below the average for overall exports. As a result, the share of manufactured goods declined from 13.2% in 2008 to 10.7% in 2016, with the greatest growth in 2011, at 8.2%, and the largest drop of 9.3% in 2013. The average share of manufactured goods in overall exports in the period was 12.0%.

Meanwhile, imports of manufactured goods exhibited a negative trend in both absolute and relative terms. They declined by 19.4% from EUR 4.46 billion in 2008 to EUR 3.6 billion. The average value of imports in that period was EUR 3.9 billion. After 2012, imports showed a stagnation trend with nearly no volatility compared with the prior period, with an annual growth rate of 32.5% in 2010 and a 36.2% drop in imports in 2009. The average annual growth for the whole period was negative at 0.7%. Also in relation to total imports, the share of manufactured goods declined: from 10.7% to 10.1%. Manufactured goods achieved the greatest gain in terms of their share of overall German imports in 2010, with 13.4%, while the biggest decline occurred in 2009, at 18.9%. In absolute terms, the average annual growth in the share of manufactured goods was negative at 0.4%.

Miscellaneous manufactured articles rank number four among German exports. In quantitative terms, however, the role of these goods is limited. In 2016, they represented 16.9% of the largest export category in 2016. Nevertheless, manufactured goods exports grew by 13.2% from EUR 7.05 billion in 2008 to EUR 7.98 billion in 2016, as shown in Fig. 6.5.9 The development of exports was characterised by a stagnation trend. Only in 2014 and 2015 were the annual growth rates near the double digits. The largest decrease was recorded in 2009, at 15.0%.

⁸Destatis (2017f).

⁹Destatis (2017g).



Fig. 6.5 Bilateral trade between Germany and the UK, 2008–2016, miscellaneous manufactured articles (SITC-8), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017g])

The average annual growth of manufactured goods exports was nonetheless positive at 1.9%. This limited dynamics led to a 15.7% reduction in the proportion of manufactured goods in total German exports to the UK, from 11.0% in 2008 to 9.7% in 2016. The biggest drop, at 11.6%, occurred in 2010, while the fastest growth was in 2013 at 6.2%, with a negative average annual growth rate of 2.0%. The average share in the period was 9.7%.

Like exports, imports of manufactured goods increased between 2008 and 2016. They rose by 41.0% from EUR 2.21 billion to EUR 3.12 billion. Average imports in that period were EUR 2.66 billion, with a peak of EUR 3.29 billion recorded in 2014. The most dynamic growth was also recorded in 2014, at 17.7%, while the biggest drop, at 6.1%, occurred a year later. Annual imports grew by 4.6% on average. This dynamics was sufficient for "miscellaneous manufactured articles" to increase their share of total German imports from the UK from 5.3% in 2008 to 8.7% in



Fig. 6.6 Bilateral trade between Germany and the UK, 2008–2016, food and live animals (SITC-0), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017h])

2016. The average share in that period was EUR 6.89 billion. The greatest growth in the share was recorded in 2009, at 22.3%, while the biggest drop took place a year later, at 8.7%. The average share of manufactured goods in overall imports was 7.1%.

Food and live animals are No. 5 among German exports to the UK, according to volumes traded in 2016. They represent 8.2% of the largest export group and are of minor importance to the development of overall trade between the two economies. Exports of food and live animals increased by 29.3% from EUR 3.01 billion in 2008 to EUR 3.89 billion in 2016, as shown in Fig. 6.6.10 The greatest increase in such exports was recorded in 2012, at 12.5%, while the largest decrease was seen in 2009, at 9.5%, with average annual growth at 3.5%. Average exports were roughly EUR 3.34 billion in the studied period. However,

¹⁰Destatis (2017h).

the dynamics was insufficient for this group of goods to maintain their role in overall German exports to the UK. The share of food and live animals in total German exports to the UK decreased from 4.7% in 2008 to 4.5% to 2016. The greatest annual growth of 9.1% was observed in 2008, while the greatest slump was recorded in 2014, at 7.9%. The average growth rate was negative at 0.3%.

Imports of food and live animals increased by 48.1% between 2008 and 2016, from EUR 0.64 billion to EUR 0.94 billion. The greatest annual growth was in 2010, at 34.9%, while the steepest decline was reported in 2008, at 8.8%. The average annual growth rate was 5.7% and the average import volume in the period was EUR 0.83 billion. The substantial import dynamics led to food and live animals increasing their share of overall German imports to the UK from 1.5% to 2.6%. The average share in the period was 2.1%, with a growth peak of 17.1% in 2009 and a low of 3.0% in 2011. The import share of this group of goods grew at an average annual rate of 7.3%.

Three other German product groups saw their export volumes increase to the UK: "commodities and transactions not classified elsewhere in the SITC" (up by 193.9% as shown in Appendix, Fig. 6.12); "crude materials, inedible, except fuels" (up by 25.5% as shown in Appendix, Fig. 6.13); and beverages and tobacco (up by 17.2% as shown in Appendix, Fig. 6.15). Meanwhile, two product groups saw downward trends in export volumes. Those were mineral fuels, lubricants and related materials (see Appendix, Fig. 6.14); and animal and vegetable oils, fats and waxes (see Appendix, Fig. 6.16). Only one product group, commodities and transactions not classified elsewhere in the SITC, increased its share of total exports to the UK. On the import side, traded volumes increased in only two groups: commodities and transactions not classified elsewhere in the SITC (up by 118.5%), and beverages and tobacco (up by 44.7%). Four of the five groups increased their shares of total imports, the exception being mineral fuels, lubricants and related materials. However, the largest of these product groups, commodities and transactions not classified elsewhere in the SITC, represented just 6.9% of the top group in terms of overall German exports, so the quantitative importance of these five categories is limited. With the exception of mineral fuels, lubricants and related materials, all the other product groups recorded trade surpluses, which means that German exporters are strongly dependent on their British partners. Brexit could affect both exports and imports in diverse ways.

6.3 German Direct Investment in UK from 2010 to 2014

Another pillar of German-British economic relations is bilateral investment. Like with bilateral trade, direct investment in the last two-and-ahalf decades can be described as a success story. German direct investment in the UK increased by an impressive 1626.6%, from EUR 7.7 billion in 1989 to EUR 128.57 billion in 2014, as shown in Fig. 6.7.11 The average investment in the period was EUR 63.93 billion. The investment growth rates were high until the start of the financial crisis in 2008, with the three-year moving average ranging from 6.8 to 30.0% p.a. After 2008, the growth rates were in the single digits, except for a slight decline in 2009. This marked a substantial deceleration, but the dynamics nevertheless remained remarkable, with the three-year moving average at 6.3% in 2014. The peak of investment growth was recorded in 1995, at 35.7%. The lowest point, meanwhile, was in 2008, when a 16.8% drop took place—though this last figure may be a statistical outlier rather than an outcome of the economic crisis. The average annual growth of German investment in the studied period was 12.8%, chiefly due to its high dynamics in the 1990s. However, the period of extraordinary investment dynamics for German investors in the UK has ended.

The development of British investment in Germany also adds up to a positive picture, though at a significantly lower level. In 2014, UK direct investment in Germany represented only 23.1% of German investment in the UK. Between 1989 and 2014, British investment in Germany increased by 385.6%, from EUR 6.1 billion to EUR 29.7 billion (Fig. 6.8).

¹¹Bundesbank (2017a).

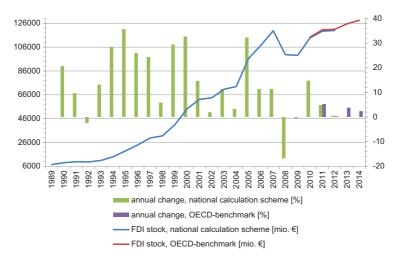


Fig. 6.7 German direct investment in the UK, 1989–2014, stocks, left axis [EUR million], annual change, right axis [%] (*Source* Own elaboration on basis of Bundesbank [2017a])

In 2010, German investors were involved in 1277 enterprises in the UK; by 2014 they had increased their involvement by 7.5% to 1373 enterprises, as shown in Fig. 6.9. The expansion trend showed a 3.6% uptick in 2011; otherwise, growth was limited. The average number of German-owned enterprises in the UK in the studied period was 1333, and the average annual growth rate was 1.85%, which means that the expansion process was steady but relatively slow. At the same time, average investment per enterprise increased by 11.5% from EUR 19.45 million in 2010 to EUR 21.67 million in 2014. Average investment throughout the period was EUR 19.44 million.

Employment at companies run by German investors in the UK increased by 14.5%, from 207,000 in 2010 to 237,000 in 2014, as shown in Fig. 6.10,¹³ with the annual growth rate peaking at 5.3% in 2011.

¹²Bundesbank (2017c).

¹³Bundesbank (2017d).

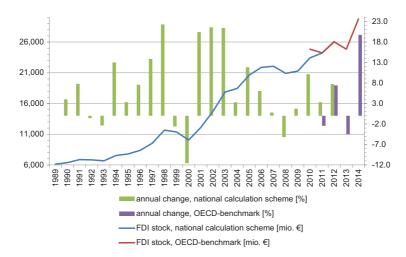


Fig. 6.8 UK direct investment in Germany, 1989–2014, stock, left axis [EUR million], annual change, right axis [%] (*Source* Own elaboration on basis of Bundesbank [2017b])

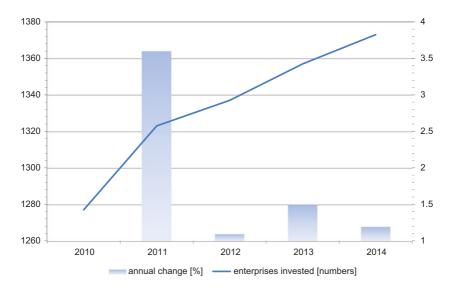


Fig. 6.9 German direct investment in the UK, 2010–2014, enterprises invested left axis [number], annual change [%] (*Source* Own elaboration on basis of Bundesbank [2017c])

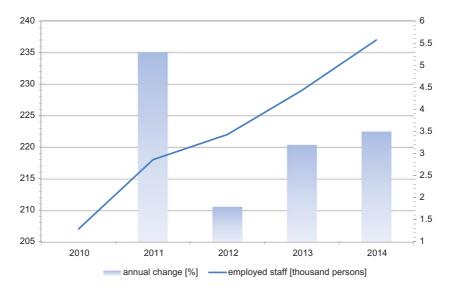


Fig. 6.10 German direct investment in the UK, 2010–2014, employment, employed staff left axis [thousand persons], annual change right axis [%] (*Source* Own elaboration on basis of Bundesbank [2017d])

The average annual growth rate for employment was 3.45% in the studied period, while average employment was 222,600. Considering jobs created by suppliers and other related enterprises, the overall figure was even greater. Adopting a leverage factor of 0.5–1.5 for additional employment effects, depending on industry, total employment provided by German investors in the UK both directly and indirectly was anywhere from 355,500 to 592,500 in 2014. The number of jobs offered in individual enterprises increased by 6.5% on average, from 162 to 173 per enterprise in 2010. This indicates that German investors not only increased their involvement in terms of the number of companies, but also invested substantially in staff needed for business activity. Average employment in the studied period was 167 workers per enterprise—fitting into the EU definition of small and medium-sized enterprises (Recommendation 2003/361/EG), meaning those that have fewer than 250 employees.

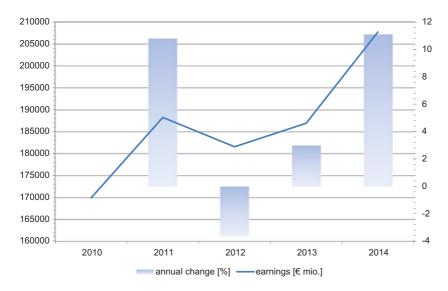


Fig. 6.11 German direct investment in the UK, 2010–2014, annual earnings, earnings left axis [EUR million], annual change right axis [%] (Source Own elaboration on basis of Bundesbank [2017e])

In terms of earnings, the development of investment was less steady than in other areas. As Fig. 6.11 shows, annual earnings increased by 22.3% from EUR 169.88 billion in 2010 to EUR 207.73 billion in 2014. But the positive development trend was interrupted in 2012 when a drop of 3.6% was recorded. By contrast, in 2011 and 2014 the annual earnings growth rates hit the double digits. On average, earnings grew at an annual rate of 5.3%. Average earnings in the studied period were EUR 186.86 billion, while average annual earnings per enterprise increased by 13.7% from EUR 133.03 million in 2010 to EUR 151.29 million in 2014. Average annual earnings per enterprise in the analysed period stood at EUR 140.14 million.

¹⁴Bundesbank (2017e).

6.4 Potential Implications of Brexit for Bilateral Exchange and Conclusions

Brexit is bound to have serious consequences for bilateral economic relations between Germany and the UK. At the pre-Brexit stage, uncertainty is probably the most accurate term to describe the atmosphere in business today concerning future market and framework conditions on both sides of the English Channel. Since the Brexit referendum in 2016, many enterprises have redefined their investment plans and allocation decisions. Some have decided ex ante to adapt to any future changes. The importance of the City of London in the banking and finance sector is waning, and the city's position as the headquarters of international banks is visibly weakening. Many of them are thinking of moving to Frankfurt, which would strengthen Germany's position as a European and global banking hub. The development of the banking sector plays an important role in the public debate as well as in planning and calculations ahead of the UK's exit from the EU. While most investment decisions are long-term in nature, the exact conditions of Brexit remain unclear. Due to prolonged uncertainty, the situation after the Brexit vote has caused serious restrictions in planning and coordination for most enterprises involved in economic cooperation with the UK. The impact of Brexit on future investment projects is likely to be visible in the medium term. Especially, sectors and enterprises with significant exposure to business with Britain may be affected. Given the huge German investment in the UK, at EUR 128.6 billion, with EUR 21.7 million worth of capital invested per project on average, the potential risks of Brexit are evident. Meanwhile, the exposure of British investors in Germany is smaller, at EUR 29.7 billion, though the qualitative aspects of investment are also important. In recent years, a global trend towards a certain "flexibilisation" has been in evidence in investment, with producers moving their operations to other locations creating flexible production chains in response to changing market and framework conditions. With respect to the UK, many German investment projects, including those in core industries, can be qualified as flexible, allowing fast shifts of production segments back to the continent,

like the assembly lines of the BMW Mini in Oxford Cowley, those of Bentley in Crewe and of Rolls Royce in Goodwood. But most German investment projects in Britain are strategic in nature and subject to adaption in the post-Brexit period. For the British economy, German investment is directly responsible for employing a quarter million people, with an average of 167 workers per company. A decline in investment after Brexit would have negative labour market implications at the aggregate level. Last but not least, the earnings of German-owned enterprises in the UK, at EUR 207.7 billion, are of substantial significance to the British economy. With average earnings at EUR 151 million per enterprise, German-owned businesses in Britain are in general large-scale enterprises, which is also important at the microeconomic level.

The prospects for bilateral trade relations will become clearer once the terms and conditions of Brexit are defined. The direction and extent of the impact will depend on future rules governing bilateral and multilateral trade flows, which are unknown at this point. The high level of Germany-UK trade, with EUR 86.2 billion worth of German exports and EUR 35.7 billion in imports, means that Brexit holds potential risks for both economies. Possible future tariffs and non-tariff barriers in the trade of goods may negatively affect traded volumes, depending on the price elasticities of demand and supply. Apart from supplier pricing policies, exchange rate developments will contribute to the final results of bilateral trade. The greatest risk of losses in the wake of Brexit-induced trade restrictions exists in three key sectors: machinery and transport equipment, whose exposure runs at EUR 47.2 billion; chemicals and related products, with a volume of EUR 12.8 billion; and manufactured products, with EUR 9.2 billion worth of exports. The UK is the No. 3 trade partner for Germany worldwide and the second largest in Europe, so compensating for shrinking trade volumes would be rather problematic. But because a major portion of the volumes is intra-industry trade any barriers will hamper productivity in the British economy by increasing costs and reducing availability. Serious losses can be expected.

German-British economic cooperation in bilateral trade and investment has largely been a success story in recent decades, both quantitatively and qualitatively. Even if the involvement of German partners is far more intense than on the British side in quantitative terms, any trade and investment restrictions after Brexit will negatively affect both economies. It is difficult to expect that any alternative free trade agreements, bilateral or multilateral, could compensate for potential losses caused by the UK's exit from the EU.

Appendix

See Figs. 6.12, 6.13, 6.14, 6.15, and 6.16.

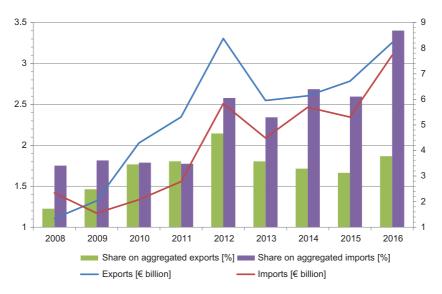


Fig. 6.12 Bilateral trade between Germany and the UK, 2008–2016, commodities and transactions not classified elsewhere in the SITC (SITC-9), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (Source Own elaboration on basis of Destatis [2017i])

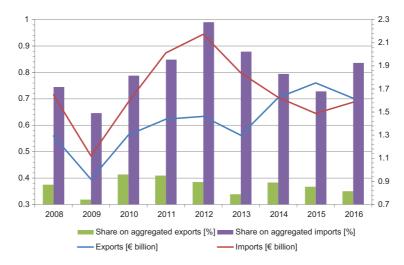


Fig. 6.13 Bilateral trade between Germany and the UK, 2008–2016, crude materials, inedible, except fuels (SITC-2), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (Source Own elaboration on basis of Destatis [2017j])

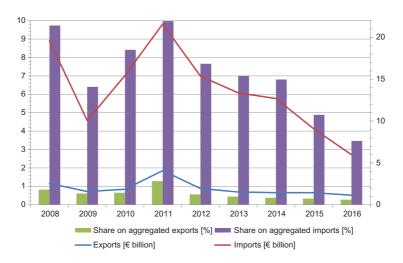


Fig. 6.14 Bilateral trade between Germany and the UK, 2008–2016, mineral fuels, lubricants and related materials (SITC-3), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017k])

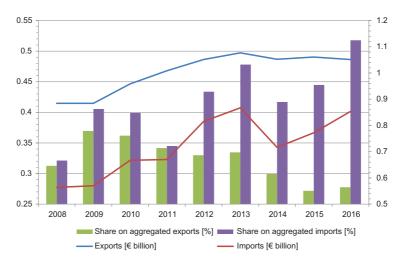


Fig. 6.15 Bilateral trade between Germany and the UK, 2008–2016, beverages and tobacco (SITC-1), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (*Source* Own elaboration on basis of Destatis [2017I])

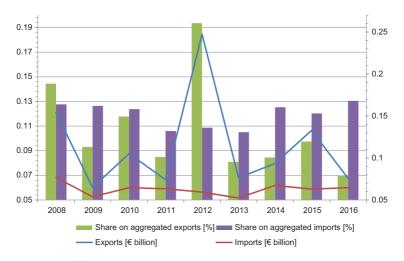


Fig. 6.16 Bilateral trade between Germany and the UK, 2008–2016, animal and vegetable oils, fats and waxes (SITC-4), left axis exports and imports [EUR billion], right axis shares of aggregated exports and imports [%] (Source Own elaboration on basis of Destatis [2017m])

References

- Bundesbank. (2017a). Direktinvestitionen, Bestandsangaben, nach der alten nationalen Berechnungsmethodik bis Ende 2012, nach aktuellen Vorgaben der OECD Benchmark Definition, 4. Auflage ab 2010, Unmittelbare und mittelbare deutsche Direktinvestitionen im Ausland (konsolidiert) / Summe; Vereinigtes Königreich. bundesbank.de.
- Bundesbank (2017b). Direktinvestitionen, Bestandsangaben, nach der alten nationalen Berechnungsmethodik bis Ende 2012, nach aktuellen Vorgaben der OECD Benchmark Definition, 4. Auflage ab 2010, Unmittelbare und mittelbare ausländische Direktinvestitionen in Deutschland (konsolidiert) / Summe; Vereinigtes Königreich. bundesbank.de.
- Bundesbank. (2017c). Direktinvestitionen, Bestandsangaben, nach aktuellen Vorgaben der OECD Benchmark Definition, 4. Auflage ab 2010, Anzahl der Unternehmen; Vereinigtes Königreich. bundesbank.de.
- Bundesbank. (2017d). Direktinvestitionen, Bestandsangaben, nach aktuellen Vorgaben der OECD Benchmark Definition, 4. Auflage ab 2010, Beschäftigte; Vereinigtes Königreich. bundesbank.de.
- Bundesbank. (2017e). Direktinvestitionen, Bestandsangaben, nach aktuellen Vorgaben der OECD Benchmark Definition, 4. Auflage ab 2010, Jahresumsatz; Vereinigtes Königreich. bundesbank.de.
- Destatis. (2017a). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 1990–2016. www.genesis.destatis.de.
- Destatis. (2017b). Außenhandel. Rangfolge der Handelspartner im Außenhandel der Bundesrepublik Deutschland 2016, Wiesbaden. destatis.de.
- Destatis. (2017c). 12% der deutschen EU-Exporte gingen im Jahr 2016 in das Vereinigte Königreich. Pressemitteilung vom 5. Mai 2017, 147-17, Wiesbaden, www.destatis.de.
- Destatis. (2017d). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Maschinen und Transport Equipment. www.genesis.destatis.de.
- Destatis. (2017e). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Chemische Erzeugnisse. www.genesis.destatis.de.
- Destatis. (2017f). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich,

- 2008–2016, SITC (1-Steller), Bearbeit. Waren, vorwieg. n. Beschaffenheit geglied. www.genesis.destatis.de.
- Destatis. (2017g). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Verschiedene Fertigwaren. www.genesis.destatis.de.
- Destatis. (2017h). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Lebende Tiere und Nahrungsmittel. www.genesis. destatis.de.
- Destatis. (2017i). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Waren und Warenverkehrsvorgänge. www.genesis. destatis.de.
- Destatis. (2017j). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Rohstoffe (ausgen. Nahrungsm. u.mineral. Brennst). www.genesis.destatis.de.
- Destatis. (2017k). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Mineral. Brennstoffe, Schmiermittel u.verw.Erzeug. www.genesis.destatis.de.
- Destatis. (2017l). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Getränke und Tabak. www.genesis.destatis.de.
- Destatis. (2017m). Genesis online, Außenhandelsstatistik, Aus- und Einfuhr (Außenhandel): Deutschland, Jahre, Länder, Vereinigtes Königreich, 2008–2016, SITC (1-Steller), Lebende Tiere und Nahrungsmittel. www.genesis. destatis.de.