

THE POTENTIAL EFFECTS OF BREXIT ON THE INTERNATIONAL TRADE OF THE UNITED KINGDOM¹⁰⁵

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Abstract: *The process of the United Kingdom (UK) leaving the European Union, as a result of the 2016 referendum, brings a lot of uncertainties regarding the impacts of new regulations of trade relations between the UK and other EU member states as well as other countries worldwide. The purpose of this research is, based on a review of the UK's history as an EU member, and the analyses of its current international trade, to determine the potential effects of the process of the UK leaving the European Union to its future trade with the rest of the world. In this paper, four different models by which further trade relations between the United Kingdom and EU could be regulated are discussed. Each of these models has its advantages and disadvantages, and it is not possible to determine with certainty which one of them would be the most beneficial for the UK. Even though a large number of UK's trade partners are not EU members, it is evident that the trade with other countries worldwide can easily be a subjected to change. For that reason, the United Kingdom should primarily base its trade on relations with EU member states, with the assumption of further cooperation with other countries.*

Keywords: *BREXIT, EU, international trade, United Kingdom*

1. INTRODUCTION

In 2016 the United Kingdom became the first EU state member who activated Article 50 of the Treaty on European Union¹⁰⁹, and based on the referendum results, began the process of withdrawing from the EU¹¹⁰. The last phase of the exiting process should be finished in February 2019 when the UK will officially become a “former “state member. If the history of this country regarding European integration is taken into consideration, it is evident that the exiting process is merely an extension of a behavior pattern this country has had during the years, including special demands and needs based on their historical and economical success.¹¹¹ The end of this process represents new economic, political and social challenges both for the United Kingdom and for the European Union. Furthermore, the trade aspect, as the focus of this paper, represents an important part of their future relations.

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¹⁰⁹ Implemented as one of the key changes of the Treaty of Lisbon from 2007. It implies that any Member State may decide to withdraw from the Union.

¹¹⁰ Commonly known under the term Brexit. The referendum votes were 51,8% in favour of leaving the EU.

¹¹¹ In fact, in 1975, shortly after entering the European Economic Community in 1973, Great Britain held a referendum about staying in the Community where 67.2% of votes were in favour of “remain”.

The core research problem emerges from the current inability to determine clear practices of the UK's international trade once they are no longer a member state of the EU. The aims of this research are to analyze the historical course of the UK's trade, and to determine the potential impact of Brexit on future international trade relations. The purpose of the research is to scientifically determine the potential perspectives of the UK's trade policy outside of the EU. In this paper, the descriptive analyses of key figures for the UK's international trade have been applied, which have been collected from relevant international databases (World Bank and The Observatory of Economic complexity). This research is based on the available data for the period 1973 to 2017.

After the initial considerations in which the key research elements are defined, the descriptive analysis of the UK's international trade has been conducted, and the potential effects of exiting process on the future flows of Britain's trade have been determined. The research is continued by determining potential directions of the UK's trade outside the EU. Lastly, the paper is concluded with final considerations representing the synthesis of scientifically based facts which emerged as a result of this research.

2. ANALYSIS OF THE UNITED KINGDOM'S INTERNATIONAL TRADE

The analysis of the UK's international trade has been based on the following indicators: (1) export and import of goods and services (% GDP), (2) international trade balance (% GDP), (3) foreign trade coverage ratio, and (4) the Terms of trade (ToT). While, the calculation of foreign trade coverage ratio is based on the following equation:

$$k(m) = (X + M) / Y \quad (1)$$

where X represents export, M represents import and Y represents national income of a certain county.

Furthermore, the benefits of foreign trade are usually presented using the indicator ToT, which can be calculated as a ratio between import and export prices:

$$P_m / P_x \text{ [i.e. } P_x / P_m] \quad (2)$$

Where P_m represents import prices, and P_x export prices.

The United Kingdom (UK) became a member state of European Economic Community in 1973, and since then it started developing strong trade relations with other members, primarily through the Customs Union [5]. Data from Appendix 1 illustrates, with a few exceptions, the constant increase in shares of import and export in its GDP which the UK made since 1973. For example, the export increased from initial 20.2% of GDP to 28.2% of GDP in the observed period, while the import has increased from initial 24.2% of GDP to 31.9% of GDP. In addition, it is possible to conclude that throughout this period, the UK was mainly an import-oriented country, and it mostly had a trade deficit. The trend in foreign trade coverage ratio indicates a higher importance of foreign trade in comparison with the beginning of the period. The average value of ToT leads to the conclusion that the UK benefited from its foreign trade throughout the whole observed period (the average value of ToT in the observed period is 180.6792), and those benefits are especially noticeable before the year 2000.

The UK's export mainly consists of cars (12%), pharmaceutical drugs (5.2%), gold (4%), gas turbines (3.5%) and aircraft parts (2.5%). On the other hand, the UK mostly imports gold (8.2%), cars (7.8%), pharmaceutical drugs (3.1%) and car parts (2.5%) [8]. The UK's most important trade partners, with 14% of total export, are the United States. Moreover, it is important to mention that six out of fifteen UK's most important trade partners are countries outside the EU, and are as such the destinations for almost 30% of the UK's total export (Table 1).

Table 1: Top 15 United Kingdom's partners in export and import in 2017

No.	Export countries	% of total export	Import countries	% of total import
1	USA	14	GERMANY	14
2	GERMANY	9.5	CHINA	9.8
4	FRANCE	6	USA	7.5
5	NETHERLANDS	6	NETHERLANDS	7.3
6	SWITZERLAND	5.1	FRANCE	5.8
7	IRELAND	5.1	BELGIUM	5.3
8	CHINA	5	LUXEMBOURG	5.3
9	BELGIUM	4.7	ITALY	3.9
10	LUXEMBOURG	4.7	SPAIN	3.4
11	SPAIN	3.3	IRELAND	3
12	ITALY	3.2	NORWAY	2.9
13	HONG KONG	1.9	JAPAN	2.6
14	JAPAN	1.7	TURKEY	2.5
15	UNITED ARAB EMIRATES	1.7	SWITZERLAND	2.2

Source: developed by authors based on The Observatory of Economic Complexity (2018)

Similar to export, 27.5% of the UK's total import comes from the non-EU countries, mostly from China and the USA. This kind of import and export structure indicates that the UK is sufficiently connected with global partners outside the EU. The situation mentioned above should represent the base for the development of new trade agreements after the exiting process finalizes. Nevertheless, it should be noted that the current situation is a consequence of the UK's integration in international trade as a whole. It is uncertain whether those trends will continue once the UK becomes an independent entity faced with the challenge of developing its own and separate trade relations with global partners.

3. POTENTIAL EFFECTS OF BREXIT ON UNITED KINGDOM'S TRADE POLICY

The concrete effects of Brexit will be seen in the long run. In the near future, changes are possible in the decision making process, regarding the trade and foreign direct investments, changes in headquarters (from the EU to the United Kingdom and vice versa, depending on company's business orientation) as well as the effects on export due to the devaluation of the currency [6]. Having the long-term consequences in mind, the UK will, due to Brexit, find itself outside the European Single Market and the Customs Union; therefore, some tariff and non-tariff barriers will have to be implemented, which will increase the costs of international trade. However, such situation offers new possibilities of developing trade partnerships outside of Europe for the UK. Having Britain's current trade relations in mind, the question of

strengthening trade relations with the USA and other members and of NAFTA,¹¹² creating a free trade zone along with the Commonwealth countries,¹¹³ poses itself as a possibility.

The data mentioned earlier demonstrates the connection between the United Kingdom and trade partners outside the EU, in accordance with the UK's current trade policy. According to it, a question emerges: should the import share from countries of South America, Asia, and certain developing countries have been higher during the last three or four years [7]? The stated does not necessarily have to represent a high-risk level because the lower contribution to trade of those countries can be explained by certain economic cycles and by adjustments on the market in China. That thesis is supported by the IMF reports from 2016 [4], which show positive growth perspectives for economies in Asia, Middle East, Africa and Central Europe (Appendix 2). Based on the report, in the period between 2016 and 2021, China and Hong Kong should have the highest growth of GDP (in average, 6%), followed by, countries from the Middle East and North Africa, while the lowest growth is predicted for countries from the ex-Soviet Union.

Furthermore, it is necessary to consider the future trends regarding the UK's export (Appendix 3) and its future destinations (Appendix 4). Conducted research illustrates that the UK's export will reach the highest growth rates in the period between 2014 and 2020, while in the long run (between 2021 and 2030) the growth slowdown can be expected. Higher growth in the near future will mostly be a result of higher export in fast growing countries (13% in 2030, which is three times larger rate than in 1999; 4%) E7¹¹⁴, especially China and India, due to the fast economic growth in those countries. However, the European Union will remain UK's most important trade partner [6]. In fact, the trade with developing countries (especially export) can easily face changes because of unexpected events on foreign and domestic markets. This will not be the case with export-oriented countries whose economies are much more similar to the UK economy. Due to that, it is important for the UK to maintain current trade relations with the EU member states, as well as with the USA. The politics of president Donald Trump will surely have a big impact on the development of future trade relations with the USA as he stated that Brexit can only have positive effects on British trade, and has announced some new trade agreements between the USA and the UK in the future [3]. With his previous decisions and protectionist approach in mind, it is not possible to claim with a great certainty whether those trade agreements will be realized.

4. DEVELOPMENT PERSPECTIVES OF UNITED KINGDOM'S TRADE RELATIONS AFTER THE WITHDRAWAL FROM THE EU

The development perspective for the UK's trade relations after Brexit is complicated and uncertain, and due to that it is not possible to make a singular conclusion. In this paper four different models of the future UK trade are taken into consideration; Norwegian Model, Swiss Model, EFTA Model and WTO model.

By implementing the *Norwegian Model*, the UK should organize its trade in accordance with rules and principles of the European Economic Area (EEA), founded in 1994, which gives the opportunity to countries outside the EU to (mostly) participate in the European Single Market.

¹¹² North American Free Trade Agreement, member states are USA, Mexico, Canada. However, the protectionist approach that the USA has and the possible implementation of tariffs in certain sectors bring the existence of this organization into question.

¹¹³ Common name for a community of 53 countries, mostly former British colonies.

¹¹⁴ Common name for a group of fast-growing countries: China, India, Brazil, Mexico, Russia, Indonesia and Turkey.

Among the EEA members¹¹⁵ there is a free movement of goods, services, labour and capital¹¹⁶ [1]. Even though there is free trade between the countries within the EEA, they are not a part of Customs Union, which enables them to determine the way of conducting their own trade policy for countries outside of the EU¹¹⁷. Some restrictions of this model are: the implementation of rules of origin in export, the possibility of the EU implementing anti-dumping measures, payments to the EU funds for regional development. If the UK embraces this model, it would certainly have to pay for its participation in the EEA.

Furthermore, it is possible to determine future trade relations by implementing the *Swiss Model*¹¹⁸, whose key advantages are the flexibility and freedom in the decision making process regarding the participation in EU initiatives, as well as the similar level of integration and trade of goods as in the case of the EEA¹¹⁹ membership [2]. Implementing the Swiss Model could be beneficial if the UK wants to have more freedom in deciding in which segments of EU policies it wants to participate. On the other hand, this kind of “a la carte“ approach does not bring the same level of market approach as it does with the membership in the EEA, which could in future cause extra expenses for the UK. The models are based on solutions which enabled future economic integration with other EU member states, and partial participation in the European Single Market¹²⁰.

EFTA approach is a possible solution, based on which the British goods exported to the EU, as well as the ones imported from the EU, would not be charged with tariffs. However, the free movement of labour or services would not be possible. Due to the fact that the UK in this case would not be a part of the Single Market it can be assumed that there could be some dissents in certain EU directives and in non-tariff barriers to the trade. If changes in core paradigms of the EFTA¹²¹ would happen, primarily regarding the non-tariff barriers and free movement of labour and capital, it can be concluded that this approach would not be an adequate solution for the UK because the only benefit in this case is the absence of tariff barriers which is not nearly enough.

In the fourth model, if the UK and the EU do not make any of the prior mentioned agreements, the future trade of the UK will be regulated based on the rules of the World Trade Organization (WTO), by which export to the EU, and other state members of the WTO, would be a subject to tariffs based on a principle of the most favored nation. Due to the fact that the WTO has not

¹¹⁵ Current members of the EEA are EU state members, along with Iceland, Norway and Liechtenstein.

¹¹⁶ On the other hand, the limitations of the agreement refer to agriculture and fishing, Customs Union, common trade, common foreign and security policy, judicial system, internal affairs, and economic and monetary union.

¹¹⁷ By withdrawing from the EU, the United Kingdom automatically stops being a member of the EEA. If the UK wants to once again become a member of the EEA, it would first need to enter the EFTA, which is questionable because in that case, the UK would have to accept the EU legislation, continue with payments and accept the jurisdiction of the European Court of Justice and the European Commission.

¹¹⁸ Even though it is not a member state of the EU or the EEA Switzerland has arranged its trade relations with the EU with bilateral agreements, and by being a member of European Free Trade Agreement (EFTA) it has the right to trade with all non-agricultural goods among all state members of the EU.

¹¹⁹ Switzerland decided to be a part of integration with the EU state members by accepting and applying most of the EU directives, it also pays a contribution to the European Regional Funds.

¹²⁰ The reason why Brexit was carried out was the fact that the UK voters were unsatisfied with its position in the EU, and they decided to make some changes regarding their participation in the Union. Due to that, it is possible to question if the prior mentioned models represent an acceptable change in comparison to the previous level of integration they were clearly unsatisfied with.

¹²¹ EFTA started with its activities to accomplish the goal of *reducing tariffs in order to reduce the costs of trade and promoting international economic integrations*. However, with the affirmation of WTO, EU and bilateral agreements the focus in making the trade relations has been put on removing the non-tariff barriers and on free movement of labour and capital.

made a progress in market liberalization of services, such as the European Union did, the prior mentioned could block access to the EU market of services for the British companies. Furthermore, the WTO does not assume the free movement of labour, but there are no restrictions in the movement of capital [16]. One of the positive aspects of this model is the possibility that the UK sets its own tariffs for import. In case the trade is regulated only by the WTO rules, the UK would be able to set the same tariffs as the EU did in earlier stages, which could possibly lead to their decrease¹²². In addition, by rejecting the participation in a higher level of integration, the UK would gain greater political power¹²³. The summary display of the prior mentioned models is given in Table 2.

Table 2: Trade possibilities for United Kingdom outside of EU

Model	For	Against
EEA – Norwegian Model	<ul style="list-style-type: none"> • being a part of the Single Market • the possibility to make trade relations independently from EU 	<ul style="list-style-type: none"> • application of the Single Market rules without the possibility to influence their decision making process • respecting the rules of origin for the export of goods • the possibility to apply anti-dumping measures of the EU • deposing funds to the EU budget
Swiss Model	<ul style="list-style-type: none"> • free movement of goods and people within the EU • the possibility of making trade relations independently from the EU • the possibility of non-participating in EU programs on a case basis 	<ul style="list-style-type: none"> • obeying the EU rules of origin based on bilateral agreements, without participating in their decision making process • no agreement with the EU regarding the trade of services • paying the fees for participating in EU programs
EFTA	<ul style="list-style-type: none"> • free trade of goods within the EU • the possibility of making trade relations independently from the EU • no obligation to accept economic policies and regulations of the EU • no obligation to contribute to the EU budget 	<ul style="list-style-type: none"> • no free movement of people within EU • no access to the EU market of services • goods exported to the EU need to comply to EU standards for products

¹²² In case of import tariffs the UK would implement, they would be lower than the EU ones, and that would have a positive effect on its consumers. However, this kind of approach would have a negative effect on British producers who would have bigger competition due to cheaper import.

¹²³ If the United Kingdom would stop being a part of the Single Market, they would be able to determine their own policies and standards, independently from the EU. It is important to note that every disagreement in prior mentioned policies could cause a non-tariff barrier which would make the trade more difficult and increase its costs.

WTO	<ul style="list-style-type: none"> • the possibility of making trade relations independently from the EU • no obligation to accept economic policies and regulations of the EU • no obligation to contribute to the EU budget 	<ul style="list-style-type: none"> • no free movement of people within the EU • trade with the EU is based on the principle of the most favored nation and non-tariff barriers from the WTO • goods exported to the EU need to comply to EU standards for products • no access to the EU market of services
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Source: Developed by authors

5. CONCLUSION

The conducted research indicates key challenges for the United Kingdom's trade relations they might face once the process of Brexit is finalized. The efficiency of future trade flows and the adjustment to global trends will mostly depend on the choice of the right trade model and the adjustment of economic and political power holders to new conditions. The scientific contribution of this paper comes from an overview of Britain's international trade throughout the years and identification of key challenges and impacts of Brexit to the UK's future trade flows. Future research in this area should be oriented on quantifying the Brexit effects on economic growth and employment, as well as other macroeconomic indicators which will occur due to changes in the UK's trade paradigm.

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APPENDICES

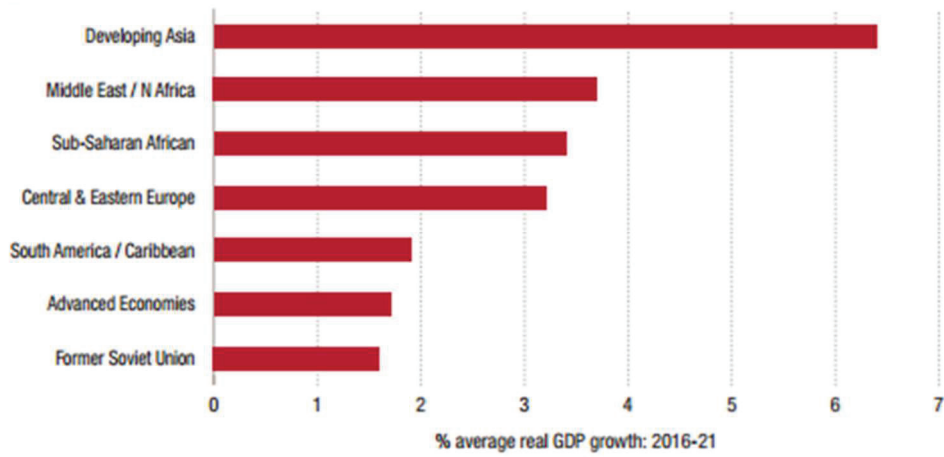
Appendix 1 Key Trade Indicators of the United Kingdom in the Period 1973-2017

Year	GDP (US dollars)	Export (% of GDP)	Import (% of GDP)	Trade balance (% of GDP)	Export (US dollars)	Import (US dollars)	Export+ Import (US dollars)	Foreign Trade Coefficient	Terms of trade (2000=100)
1973	192537971 582.56	20.20	24.27	-2.29	4231996 6193.04	4672631 9206.27	8904628 5399.31	0.462487	-
1974	206131369 798.97	21.98	31.01	-4.74	5413472 6975.22	6391300 5142.59	1180477 32117.81	0.572682	-
1975	241756637 168.14	26.26	26.55	-1.68	6013175 1769.91	6418235 5530.97	1243141 07300.89	0.514212	-
1976	232614555 256.07	24.87	28.53	-1.10	6380300 0539.08	6637110 4941.60	1301741 05480.68	0.559613	-
1977	263066457 352.17	27.43	28.37	0.68	7642943 6071.86	7463143 2408.86	1510608 68480.73	0.574231	-
1978	335883029 721.96	29.05	26.14	1.29	9213268 9165.87	8781412 0038.35	1799468 09204.22	0.535742	-
1979	438994070 309.19	27.43	26.45	0.36	1176927 73401.10	1161305 37907.67	2338233 11308.77	0.532634	-
1980	564947710 899.37	26.81	23.93	2.14	1472435 70299.79	1351651 71740.65	2824087 42040.44	0.499885	306.1728
1981	540765675 241.16	26.06	22.67	2.77	1375735 79983.92	1226141 46704.18	2601877 26688.10	0.481147	357.5758
1982	515048916 841.37	25.44	23.24	1.86	1292799 04088.05	1196771 58455.63	2489570 62543.68	0.483366	331.8182
1983	489618008 185.54	25.10	24.28	0.94	1235170 42898.29	1188972 39502.80	2424142 82401.09	0.495109	326.6667
1984	461487097 632.35	25.23	27.03	-0.06	1244569 23915.94	1247193 35328.55	2491762 59244.48	0.539942	282.4561
1985	489285164 271.05	26.97	26.23	1.09	1336428 93223.82	1283304 05544.15	2619732 98767.97	0.53542	228
1986	601452653 180.89	27.31	24.91	-0.59	1463173 72031.66	1498456 29434.18	2961630 01465.85	0.492413	142.1053
1987	745162608 269.33	24.33	24.77	-0.91	1777655 42572.32	1845797 15312.96	3623452 57885.28	0.486263	136.3636
1988	910122732 123.80	23.86	24.69	-3.20	1955301 05122.73	2246673 72287.44	4201974 77410.17	0.461693	139.3617
1989	926884816 753.93	21.48	25.51	-3.57	2033574 96400.52	2364910 17670.16	4398485 14070.68	0.474545	136.8421
1990	109316938 9204.55	21.94	24.42	-1.81	2471349 00923.30	2669643 98792.61	5140992 99715.91	0.470283	156.6038
1991	114279717 8130.51	22.61	22.27	-0.37	2502250 66137.57	2544450 71252.21	5046701 37389.77	0.44161	142.4528
1992	117965952 9659.53	21.90	22.91	-0.70	2620455 50193.05	2703090 90733.59	5323546 40926.64	0.451278	134.5455
1993	106138872 2255.55	22.21	24.42	-0.35	2554016 09928.01	2591623 70875.83	5145639 80803.84	0.484803	129.7619
1994	114048974 5944.29	24.06	25.29	-0.02	2882054 68472.61	2884457 84205.69	5766512 52678.30	0.505617	118.8679
1995	133521855 7677.13	25.27	24.89	0.27	3359381 41076.22	3322818 36831.31	6682199 77907.53	0.500457	125.4386
1996	140878159 1263.65	25.16	25.57	0.17	3625787 83151.33	3601996 87987.52	7227784 71138.85	0.513052	147.3684
1997	155248362 8028.81	25.74	24.89	0.40	3926866 40471.51	3864047 15127.70	7790913 55599.21	0.501835	146.0784
1998	163851109 6389.53	25.29	24.53	-0.79	3888721 43093.74	4018979 79463.40	7907701 22557.14	0.482615	102.9412
1999	166562368 5487.79	23.73	25.16	-1.55	3931790 97233.46	4190486 97621.74	8122277 94855.20	0.487642	105.0505
2000	164795127 8559.54	23.61	26.69	-1.84	4094129 21773.34	4397911 93826.60	8492041 15599.94	0.515309	100
2001	162151000 4318.41	24.84	27.04	-2.30	4011271 05225.28	4384986 32503.24	8396257 37728.52	0.517805	90.86948

2002	176840827 3381.29	24.74	26.57	-2.80	4204121 70263.79	4698456 23501.20	8902577 93764.99	0.503423	92.23517
2003	203839510 2040.82	23.77	25.94	-2.40	4797289 79591.84	5286971 42857.14	1008426 122448.9 8	0.494716	100.9348
2004	239855547 4185.28	23.53	26.07	-2.63	5622867 08165.51	6252709 63017.21	1187557 671182.7 2	0.495114	117.617
2005	252070181 8181.82	23.44	27.25	-2.57	6222381 81818.18	6869890 90909.09	1309227 272727.2 7	0.51939	152.9293
2006	269261269 5492.18	24.69	29.12	-2.41	7191462 74149.03	7840183 99264.03	1503164 673413.0 6	0.558255	176.4954
2007	307435974 3897.56	26.71	27.34	-2.48	7643717 48699.48	8405082 03281.31	1604879 951980.7 9	0.522021	181.6111
2008	289056433 8235.29	24.86	29.67	-2.87	7747113 97058.82	8575294 11764.71	1632240 808823.5 3	0.564679	223.3731
2009	238282598 5355.97	26.80	28.32	-2.19	6226032 09222.62	6747188 03551.96	1297322 012774.5 8	0.544447	157.9378
2010	244117339 4729.62	26.13	30.82	-2.61	6887549 84314.56	7523664 08693.95	1441121 393008.5 1	0.59034	191.8977
2011	261970040 4733.37	28.21	32.05	-1.54	7992779 37659.92	8396069 76489.97	1638884 914149.8 9	0.6256	225.3154
2012	266208516 8498.93	30.51	31.71	-1.98	7914973 27717.21	8442011 56322.77	1635698 484039.9 7	0.614443	227.2532
2013	273981868 0930.19	29.73	31.68	-2.02	8127951 26346.15	8680853 86896.45	1680880 513242.6 0	0.613501	223.8164
2014	302282778 1881.39	29.67	30.25	-2.00	8538747 77613.82	9144790 30510.28	1768353 808124.1 0	0.585	209.2686
2015	288557030 9160.86	28.25	29.10	-1.71	7901070 53896.83	8395612 18721.02	1629668 272617.8 5	0.564765	134.5188
2016	265085017 8102.14	27.38	30.33	-2.07	7490037 62572.53	8039255 92427.63	1552929 355000.1 6	0.585823	121.2276
2017	262243395 9604.16	28.26	31.93	-1.40	8005932 04589.45	8374270 58259.18	1638020 262848.6 3	0.624618	-

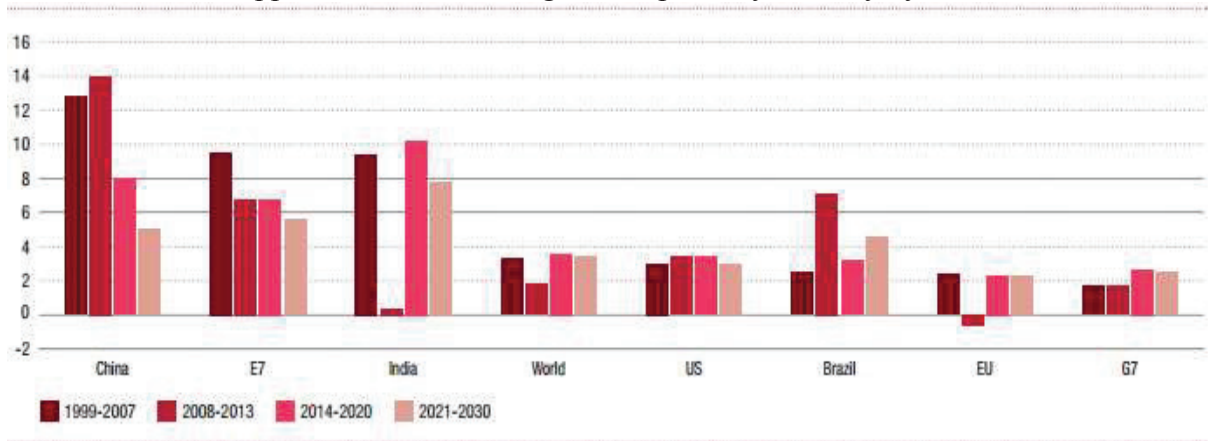
Source: Developed by authors based on World Bank (1-7). 2018

Appendix 2. GDP Growth in Medium Run for Specific Country Groupings



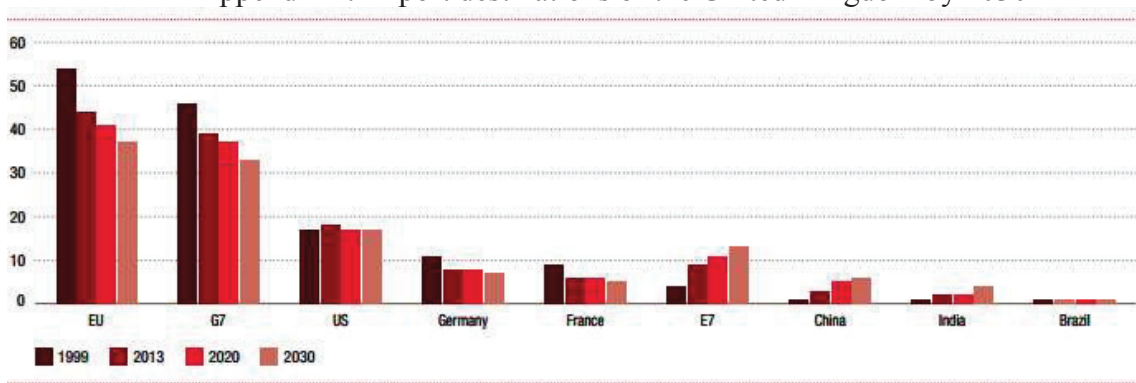
Source: IMF World Economic Outlook. 2016

Appendix 3. United Kingdom Exports By Country by 2030



Source: Sentance. 2016

Appendix 4. Export destinations of the United Kingdom by 2030



Source: Sentance. 2016