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The Post-Brexit: Scenarios and impacts on the European Economy ما بعد البريكست: السيناريوهات و الآثار على الاقتصاد الأوروبي

Touat Othmane¹, Mecerhed Bilel²

¹University of Algiers 3, Algeria,touat.othmane@univ-alger3.dz ²University of Algiers 3, Algeria,mecerhed.bilel@univ-alger3.dz

Abstract:

This paper aim to examine the most important potential implications of the Brexit on the economies of the EU and the UK, taking into consideration the current situation of high uncertainty regarding the future economic relationship between them after the implementation of the Brexit officially.

The main results show that the expectations indicate that the Brexit will cause significant losses to both parties, whatever the agreed scenario, and these expectations suggest that the losses will be greater on the UK than on the EU. However, there is still an opportunity to minimizing losses to the lowest possible levels.

Keywords:EU, UK, Brexit, Economic Integration, European Institutions **JELClassificationCodes**:F15, F55

ملخص:

يهدف هذا البحث إلى تحليل أهم التداعيات المحتملة للبريكسيت على اقتصادي الاتحاد الأوربي والممكلة المتحدة، متزامنا مع ما يمر به الوضع الراهن من فترة ارتفاع عدم اليقين حول ما تؤول إليه العلاقة الاقتصادية المستقبلية بين الطرفين بعد تنفيذ البريكست رسميا.

و في إطار النتائج الأساسية التي توصل إليها البحث، تشير العديد من التوقعات إلى حد كبير أن البريكسيت سوف يلحق خسائر معتبرة لكلا الطرفين، مهما كان السيناريو المتفق عليه، وترجح هذه التوقعات أن

corresponding author: Touat othmane, e-mail: touatabdou@yahoo.fr.

حجم الخسائر يكون في جانب المملكة المتحدة أكبر منه في جانب الإتحاد الأوربي. إلا أن الفرصة لا زالت سانحة للتفاوض من أجلالتوصل إلى نموذج يضمن تقليل الخسائر إلى الحدود الدنيا الممكنة.

كلمات مفتاحية: الاتحاد الأوروبي، الممكلة المتحدة، البريكست، التكامل الاقتصادي، المؤسسات الأوروبية

F15 , F55 : **JEL**تصنيفات

1. INTRODUCTION

Over the past decades, world political theorists and policymakers have shown their admiration for the process of European integration, as it has been known as a unique success story in the modern era and a fundamental pillar of regional stability and prosperity. This integration, whose features began to be built in the period following the Second World War, with the expansion of economic and cultural globalization and the establishment of complementary economic and political relations between the countries of the European continent. In long periods of strenuous efforts and hard work, the harvest time was represented in the form of this union with its strong qualities in all fields, thus occupying a place in the first positions economically, politically, militarily and culturally.

However, the winds of the United Kingdom came with what the ships of the Union did not desire, as the results of the Brexit referendum that nominated the withdrawal of the Kingdom are a deep rift which affects the very complex, overlapping and complementary edifices in various fields, especially economic ones, that rift that has spread to the extent of the skepticism of a group of thinkers. In the steadfastness of the future stability of this bloc, especially since some of the emerging challenges have fed into this endeavor, such as the slowdown in growth in recent times, the continuing high unemployment rates in some countries of the Union, the migration and refugee crisis, the increasing of Russian power, in addition to terrorist threats.

This research came to consider the most important potential repercussions of the Brexit on the economy of the European Union, in conjunction with the current situation of the period of high uncertainty regarding the future economic relationship between the United Kingdom and the European Union, where negotiations are held between the two

parties in accordance with Article 50 of the Treaty The European Union, which has given two years of time to negotiate various files in order to minimize damage as possible, has the philosophy of agreeing to share the resulting costs. By the end of this period, the UK is considered outside the European Union even if no agreement has been reached between them, unless the member states are agreed in extending the negotiations

This research started by identifying the extent of economic integration between the European Union and the United Kingdom in a preliminary step, by examining the reality of trade between them, foreign direct investment, employment, and levels of contribution to the budget. In a second step, the most important possible scenarios for the future relationship between the two parties are discussed, starting with the scenario closest to the membership in the European Union represented by the European Economic Area, and the least harmful for the two parties because of the guarantee of the four freedoms, represented in the freedom of movement of goods, services, capital and people, and ending with the scenario The most distant is represented in the World Trade Organization. Finally, the most important effects on the economy are reflected in the levels of GDP.

1. Economic integration between the European Union and the United Kingdom

1.1 Trade

The volume of trade in goods between the European Union and the United Kingdom is very large, and it is among the indications of the extent of economic interdependence and integration between them, as the exports of the European Union to the United Kingdom amounted to 306 billion Euros in 2018, while its imports from them amounted to about 186 billion Euros for the same year. Table.1 shows the total merchandise trade between the two parties.

Table 1.Total merchandise trade between the European Union and the United Kingdom in 2018

	EXPORT	% GDP	IMPORT	%GDP	TOTAL TRADE	% GDP
UE	306	2.5%	184	1.5%	491	4%
UK	184	7.1%	306	11.6%	491	19.1%

Source: Eurostat Data base, 2019, https://ec.europa.eu/eurostat/data/database

The European Union is the primary trading partner for the United Kingdom, receiving about 42% of its total merchandise exports, and covering about 56% of its total merchandise imports. While the United Kingdom receives 7% of the total exports of the European Union and covers 5% of its total imports (Fig. 1 and 2).

42%

58%

56%

IMP from EU IMP from World

Fig.1: UK - European Union Total merchandise Trade 2018

Source: EurostatData base, 2019, https://ec.europa.eu/eurostat/data/database

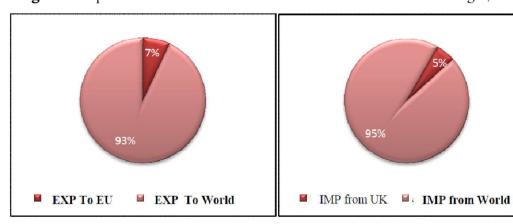


Fig .2: European Union- UK Trade for their total merchandise exchanges, 2018

Source: Eurostat Data base, 2019, https://ec.europa.eu/eurostat/data/database

However, given the European Union, according to each country in it, the volume of exchange with the United Kingdom varies greatly between them, as for exports, we find that Germany is the largest source of the United Kingdom from the European Union with a value of about 68 billion Euros, followed by the Netherlands with about 34 billion Euros, then France with 28 billion, then Belgium with 23 billion, then Italy with 18 billion, then Spain with 16 billion and Ireland with 14 billion Euros. As for the rest of the Union, the value of its exports to the United Kingdom is less than 10 billion Euros. The picture corresponds roughly to the size of each country's economy, with the exception of the neighboring countries of the United Kingdom such as the Netherlands, Belgium and Ireland, whose exports are greater than the proportional representation of its economy in the European Union. This description also applies to the case of import with some difference in arrangement and reduction in values. We find Germany first with 34 billion Euros, followed by France with 20 billion, then the Netherlands and Ireland with 19 billion, then Belgium with 13 billion Euros.

However, these absolute values do not accurately reflect the extent of the trade association of each country in the Union with the Kingdom's market, and the percentages of its GDP may be better translated into this association. For example, we find that Germany's exports to the United Kingdom represent only 2.8% of its output. Belgium's exports represent 6.8% of its output, although the volume of German exports exceeds three times the volume of Belgium's exports to the Kingdom. Also, for Ireland, its exports represent 6.9% of its output, and the Netherlands 6.3% of its output, while the rest of the countries of the Union do not exceed 3% of its GDP. As for imports, most percentages approx. 1% of each country's gross domestic product, by increasing or decreasing, with the exception of Ireland, Malta, Cyprus, the Netherlands and Belgium with high proportions, resulting from geographical convergence, or historical attachment to the United Kingdom, for example Ireland has a proportion of imports from the Kingdom 9 % Of its GDP, which represents the highest percentage compared to the rest of the European Union(Booth Stephen, 2017, p. 15)

Trade in services is of great importance between the European Union and the United Kingdom due to its large size, as imports of services from the European Union amounted to 122 billion Euros in 2018, while exports amounted to 94 billion Euros for the same year, bringing the total volume of service trade between the two parties to 216 billion Euros, which represents nearly half of the total merchandise trade between them, which amounted to 491 billion Euros. It is worth noting here in trade in services that the European Union faces a deficit of 28 billion Euros, which is considered a surplus for the United Kingdom, in contrast to the goods account in which it achieved a large surplus estimated at 128 billion Euros, which is a deficit for the United Kingdom.

Table 2.Total service trade between the European Union and the United Kingdom in 2018

	EXPORT	% GDP	IMPORT	%GDP	TOTAL TRADE	% GDP
UE	84	0.8%	122	1%	216	1.8%
UK	122	4.7%	94	3.6%	216	8.4%

Source: Euro statData base, 2019, https://ec.europa.eu/eurostat/data/database

France leads the countries that export services to the United Kingdom with a value of 18 billion Euros, followed by Spain with 15 billion Euros, then Germany with 13 billion, while service exports to the rest of the Union to the Kingdom do not exceed the value of 10 billion Euros(Busch B. J., 2016, p. 7)

As for the services exports share of the GDP, the exports of the European Union to the United Kingdom amount to 0.8% of its output, while the Kingdom exports 4.7% of its output to the Union. Smaller countries top the group of countries of the Union, as the proportion of Cyprus's exports of its gross domestic product to the Kingdom reached 7.5%, followed by Malta and Luxembourg by 5.4%, and Ireland by 2.6%. Likewise, with regard to the share of imports of GDP, Malta comes first with 10.3%, followed by Luxembourg with 5.9%, then Ireland with 5%, while the rest of the Union countries have relatively small imports.

1.2 Foreign direct investment

The European Union and the United Kingdom possess huge stocks of foreign direct investment in both directions. The European Union invests a value of 7033 billion Euros outside its borders, while it receives direct investments worth 5692 billion Euros. The UK's investment outside its borders amounts to 1386 billion Euros, and receives direct investments amounting to 1314 billion Euros (table.3).

Table 3. Total foreign direct investment stocks between the European Union and the United Kingdom, 2018

	inward fdi	% GDP	OUTWARD FDI	%GDP
UE	683	5.6%	985	8.1%
UK	985	38.2%	683	26.5%

Source: Eurostat Data base, 2019, https://ec.europa.eu/eurostat/data/database

The United Kingdom invests about 683 billion Euros in the European Union, which represents 12% of the total foreign direct investment received by the European Union, while the latter invests about 985 billion Euros in the United Kingdom, which represents 75% of the total foreign investment received by the Kingdom, and from During these figures, the UK appears to be very dependent on the Union for foreign direct investment, but the reason for these data is the large amount invested by the Netherlands in the United Kingdom, which amounted to 454 billion Euros, representing 46% of the total European Union investments in UK, it is a nominal amount of investments in the Netherlands, and in fact are intermediates investments come from other sources and move from the Netherlands to the United Kingdom, for tax reasons.

1.3 The movement of persons

The freedom of movement of persons guaranteed by the laws of the European Union facilitated migration between the United Kingdom and the rest of the European Union in both directions, as the number of European Union citizens residing in the United Kingdom by the end of 2017 was estimated at about 3.35 million people, workers represented the largest segment with an estimated number of 2002000, then the number of retirees

About 223,000, then the unemployed, about 102,000, as well as the rest of the other classes, with a census of 656,000, including students(Kierzenkowski, 2018, p. 25)

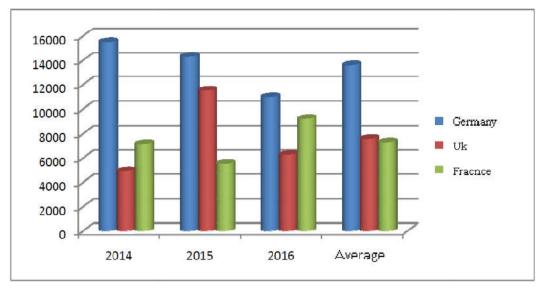
It is noteworthy that the results of the UK exit poll from the European Union, in addition to xenophobic tendencies in parts of society, as well as the depreciation of the pound and its impact on the decline in real incomes in the Kingdom, the combination of these factors led to a noticeable decline in the flow of migration from the Union countries to the Kingdom in the recent times.

As for the UK citizens residing in the European Union, it is estimated that there are about 1217000, of whom about 800 thousand workers with their family members, and about 400 thousand pensioners (Kierzenkowski, 2018, p. 27).

With Brexit, the European Union loses a strong contribution to its budget, facing the loss of an estimated 9 billion Euros of its annual budget, which is the net contribution value of the United Kingdom (noting that the contribution value varies from year to year).

As previously mentioned, the figure.3 shows the extent of the UK's contribution to the budget of the European Union; it comes second after Germany and before France with an average of 7574 million Euros between the years 2014 to 2016. Perhaps the consequences of stopping the UK's contribution to the budget is one of the most complicated files to negotiate between the Kingdom And the Union, as well as between the countries of the Union among themselves to rearrange matters related to this file.

Fig.3: The main net contributions to the European Union budget, in 1 million euros



The Source: Nikolas, J. B, 2017, P: 4.

2. Key scenarios of the relationship between the European Union and the United Kingdom after Brexit:

After the United Kingdom left the European Union, there are several possible alternative bilateral institutional arrangements between the United Kingdom and the European Union, economists focused on trying to limit it between two scenarios, which are termed the Norwegian scenario (or the European Economic Area EEA) As a soft Brexit, and the World Trade Organization (WTO) scenario as a Hard Brexit, the following are the most important of these scenarios.

2.1 The Norwegian scenario

This scenario is represented in joining the European Economic Area (EEA), and it includes a complete inclusion in the single market of all four freedoms, freedom of movement of people, goods, services and capital, and mandatory compliance with all the regulatory regulations by the European Union related to the European Economic Area, However, it is excluded from membership in the customs union, as well as agricultural and fish policies. He is also obliged to pay the budget contribution, which is considered significant, but it is much less than the contribution of member states in the Union. Also, dispute settlement takes place in a special court that does not deviate from the rulings of the European Court of Justice. It is

the scenario closest to full membership in the European Union(Ottaviano, 2018, p. 17)

2.2 The Swiss scenario

It is the scenario of bilateral agreements, as Switzerland's relationship with the European Union regulates the 1972 Free Trade Agreement, and a large number of other agreements resulted from a complex and long process of negotiations on various sectors including liberalization and opening the market, as it had the effect of reformulating much of the content of the region's agreement The European Economic Community, the latter of which Switzerland refused to enter after a referendum in 1992(Straathof, 2018, p. 47).

This selectivity and flexibility with the Swiss model was considered by the Union as a preliminary gesture to Switzerland's entry into the Union, but it criticizes it for its complexity and expressly declares its desire to change its relationship with Switzerland to an agreement. One, comprehensive.

This model excludes the freedom of movement of services, and obligates the conformity of all agreements with the regulations laid down by the European Union, Some of them are in full compliance with European Union laws such as civil aviation laws and Schengen rules. Switzerland also has no role in decision-making within the European Union

2.3 The Turkish scenario

This scenario can be described as a model of privileged partnership, as the European Union and Turkey have formed a customs union that includes duty-free transportation of manufactured goods and manufactured agricultural products, with the exception of other agricultural products, as well as coal and steel products. Under this customs union, tariffs and quantitative restrictions have been removed, and goods imported from third countries can be freely handled between Turkey and the European Union. In comparison with the European Economic Area, the institutional arrangements with Turkey include far-reaching rules, especially with regard

to the free movement of people, services and capital, which keeps Turkey outside the full domestic market(Busch B. J., 2016, p. 12)

An important advantage of the United Kingdom in this option is that the free movement of goods can be preserved. Moreover, union policies that Brexit advocates see as undesirable can be abandoned, such as social and operational regulations, the Common Agricultural Policy, the Fishery Policy, and others. Contributions to the budget of the European Union will also cease, as well as a departure from the obligation to settle disputes in its Court of Justice, as well as freedom from the effects of its other institutions, such as the European Council and Parliament.

However, the exclusion of the services sector, especially the financial sector, from the internal market of the Union has a great impact on the United Kingdom, because of this sector's importance in its economy, and therefore it has to negotiate on it despite the fact that its position is weak in front of the European Union regarding this file. Even more than that, it is somewhat likely that the European Union will reject the customs union as an option for the Brexit, because this option with Turkey came within the framework of preparing for its final membership in the Union.

2.4 The WTO scenarios

Many economists argue that this scenario is the worst scenario for both the European Union and the United Kingdom, calling it with solid Brexit, and they consider it the last resort for their relationship in the event that they are unable to reach a consensual formula within the framework of the laws and the specific period for that, that formula hoped by both parties to mitigate the negative effects Brexit on the economy from both sides.

Following this scenario, the United Kingdom loses the four freedoms related to entering the European internal market, and trade between the two parties faces customs barriers represented in tariffs and customs fees that must be negotiated and determined, in addition to non-tariff barriers such as quantitative restrictions, cross-border audits, and compliance with product standards and regulations Different across countries and elsewhere, these barriers increase costs, which ultimately has a negative impact on consumers.

The Center for Economic Performance estimates that this scenario will lead to a decrease in trade between the European Union and the United Kingdom to 40% over a period of ten years. This percentage of decline will inevitably have a significant impact on the economy on both sides.

3. The economic impacts after Brexit:

There are many standard economic studies that have touched on the impact of Brexit on the economies of both the European Union and the United Kingdom, and our analysis of this component will be based on six studies that have applied simulation models to economic data for both the Union and the Kingdom, three of which are affiliated with official sources (OECD, British Treasury, The Central Planning Dutch Office), and three other independent academic and intellectual institutions (LSE London, IFO Institute for Economic Research in Munich, and Open Europe in London), where the assumptions of these studies are similar, as they simulate a set of scenarios divided between optimistic, where trade barriers between the EU and the united kingdomis small, such as the European economic Area scenario, and The pessimistic where significant trade barriers between the two sides, such as the WTO scenario, and there is a compromise between these two cases. In all embodiments, the work revolves around the effect of the Brexit on GDP.

3.1 Channels of the influence of Brexit on the economy

As we saw earlier, the degree of overlap and integration of the UK economy with the economy of the European Union is very large, through intra-regional trade, foreign direct investment, employment, and contribution to the public budget, which is one of the most important determinants of GDP, and there is no doubt that the latter is affected depending on the impact Its determinants(Treasury, 2016, p. 63).

As for trade flows, some studies indicate(Lawless, 2016, p. 42), for example, that the exports of the European Union to the United Kingdom will decrease by 30%, and the Kingdom's exports to the Union will decrease by 22%, taking into account only the customs barriers applied to the most favored country in the World Trade Organization . This means a decrease in the total exports of the Union outside its borders by 2%. It is

estimated that the countries of the Union will be affected according to their degree of commercial engagement with the United Kingdom. Ireland and Belgium are at the top of the list with rates of decrease in their total exports equal to 4% and 3.1%, respectively. As for the United Kingdom, the effect of Brexit on its total exports is much greater, declining by 9.8%.

The study(Hugo, 2018, p. 13) reached similar results, as the decrease in the total exports of the European Union is estimated at 3% in the pessimistic scenario and 1.7% in the optimistic scenario. While the Kingdom's total exports decrease by 21.8% and 12.5% in the two scenarios respectively.

On the other hand, a study(Campos, 2015, p. 33). Concluded that Brexit affects the bilateral flows of foreign direct investment between the European Union and the United Kingdom by decreasing by 28%. There is no doubt that this decline has a significant negative impact on the labor market, for example, between the years 2014 and 2015, new projects of foreign direct investment created about 85,000 new job opportunities in the United Kingdom alone(Michaela, 2016, p. 73).

With regard to the net contribution to the budget of the European Union, as we saw earlier, the United Kingdom contributes 12.2%, and because of the Brexit, the rest of the members of the Union must face two cases. The first is to reduce the budget by the same value as the contribution of the United Kingdom, in which case several projects are directly at risk. The second case is to compensate the rest of the members for the gap left by the Kingdom, which is considered one of the high costs of Brexit. All countries face an increase in their contributions in the range of 8% to 10% relative to their previous total contributions.

3.2 The impact of Brexit on the GDP of the European Union

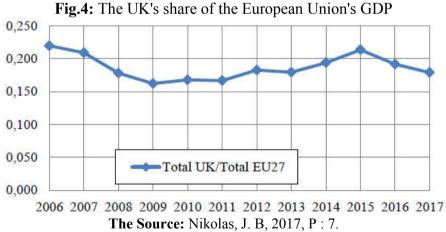
The economy of the European Union is one of the most powerful in the world, and there is no doubt that Brexit has a significant impact on the economy represented by the gross domestic product.

It is evident from the figure that the UK economy contributes between 16% to 22% in the GDP of the European Union between 2006 and 2017,

and this indicates that the GDP of the Union will decrease with the same percentage of the Kingdom's contribution to it because of the Brexit, which constitutes a decline in the competitiveness of the Union economy against the strong global economies.

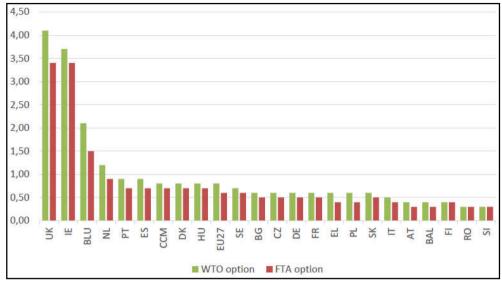
As for the impact on the GDP of the European Union without the United Kingdom after the Brexit, it will decrease by 0.11% to 0.52% according to optimistic and pessimistic scenarios, respectively. Where these values are the product of accumulation over the course of a decade until the year 2030, bringing the average annual decline from 0.01% to 0.05% of the gross domestic product, which are small proportions for the economy of the Union as a whole, but some member states have their economy more affected. While the impact of Brexit on the UK economy is much more, the drop in GDP reaches from 1.31% to 4.21% for optimistic and pessimistic scenarios, respectively. It is mentioned that these values are the average values estimated in the six models mentioned above.

As we mentioned, some countries of the Union have a significant impact on them compared to the rest of the countries (Figure 4), especially countries with close historical ties to the United Kingdom, as is the case for Ireland, which relies heavily on the Kingdom.



Likewise, the situation of Luxembourg, Malta and Cyprus is affected due to the perceived decrease in the trade in financial services between it and the Kingdom. Belgium and the Netherlands will also affect by the significant decrease in the volume of trade passing through its important ports between the European Union and the United Kingdom.

Fig.5: GDP Forecast by country for both optimistic and pessimistic scenarios



The source: Rojas-Romagos and Hugo, 2018, P:16.

4. CONCLUSION:

It was clear from this study that the European Union is economically highly linked to the United Kingdom, through the huge volume of trade exchanges between them, whether merchandise or service, in addition to the huge volume of foreign direct investment between the two parties, as well as the volume of expatriate labor between them in both directions. The withdrawal of the United Kingdom leaves a large gap in the budget of the Union, as well as creating a rift in the economy of the European Union, translated by a decrease in the volume of gross domestic product estimated by 16% to 22%, which affects the Union as a global economic power. The performance of the economy is also negatively affected by a decrease in the Union's GDP by up to 3%, with a difference between the member countries in the degree of vulnerability, according to the degree of correlation with the UK economy, while the latter is will affect by its GDP, which will decrease by more than 4%.

The effect of these effects is primarily due to the loss of the four freedoms guaranteed by the law of entry into the European internal market. After the Brexit, barriers and restrictions are imposed on the movement of goods and services, as well as capital and people, in other words obstructing the factors of production from the transmission and interaction between the two parties.

We have seen that the available studies largely agree that the Brexit will cause significant losses on both sides, whatever the agreed scenario, though in varying degrees, and these studies suggest that the magnitude of the losses is greater on the UK side than on the European Union. However, there is still an opportunity to negotiate a model that guarantees minimizing losses to the lowest possible levels.

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