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## Brexit and Europe's future: A game theoretical approach

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# **Brexit and Europe's Future – a Game Theoretical Approach**

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## Summary

Following the British decision to leave the European Union, the question arises as to how relations should be conducted going forward. The objective of the negotiations between Great Britain and the EU is to ensure which strategy is best – both for the British and the EU. Another important element is what long and short-term advantages can be obtained. Here, the authors will examine these questions from a game theoretical perspective. In any case, it is evident that the EU will benefit the most from an uncompromising approach to the negotiations in the long term, whatever the benefits in the short term.

## 1. Initial position<sup>1</sup>

The European Union (EU) is dominated by the Brexit vote. The British government remained quiet for a long time about the ideas and objectives which it intends to take into negotiations with the other member states, but a speech by Theresa May on 2 October 2016 at the Conservative Party conference has revealed the first key points. Regaining national sovereignty – and therefore control over immigration – is right at the top of the British agenda. This is likely to mean the end of the free movement of persons between Great Britain<sup>2</sup> (GB) and the European Union, and therefore also British access to the EU's internal market, provided that one of the parties does not accept a compromise.

The government's long silence was understandable, because even those in favour on the island were surprised, but most of all unprepared. There was no clear description of what should be achieved with Brexit and what the future cooperation with the EU might look like, nor was there a negotiation strategy. Even after the Prime Minister explained that she would invoke Article 50 of the EU Treaty by the end of March 2017 at the latest and set control over immigration as the red line for the country's departure, it still remains unclear what the future cooperation between the island and the continent will ultimately look like. While the British can determine when negotiations begin, the results remain a matter of negotiation.

On the part of the EU, the changes in the relationship with Great Britain are just as unpredictable. The need for the EU to reform existed long before the referendum and will continue to exist after a possible exit by Great Britain. Brexit is therefore primarily a British phenomenon that was driven by British politicians based on domestic and party political motives. In principle, it is therefore separate from the institutional reforms of the European Union – but depending on the future institutional link between Britain and the EU, there will be far-reaching implications for the Union. Of course, the Brexit vote strengthens the political pressure on continental Europeans to tackle the already existing need for reform. Nevertheless, it is particularly important when determining possible negotiation strategies for Great Britain's withdrawal not to

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<sup>1</sup> This paper was first published in *Wirtschaftsdienst*, Volume 96, 12, page 883-890.

<sup>2</sup> For reasons of simplification, the term "Great Britain" will subsequently be used to refer to the entire United Kingdom of Great Britain and Northern Ireland.

confuse the two strands of action. Otherwise an adequate political response would hardly succeed.

Despite escalating uncertainty, the mood was quick to settle down, at least on the continent. Life went back to normal instead of debating about what the whimsical British would do next and when. The sense of ambiguity is further compounded by the fact that, given the Scottish concern over a withdrawal from the EU, there are question marks surrounding the cohesion of Great Britain after Brexit. However, there is a certain time pressure given the deadline for the forthcoming European Parliament elections in the spring of 2019 and the preparation for the next multi-annual financial framework for the period after 2020. If it goes ahead in March 2017, the British government will not be included in the next elections and the next financial period.

Despite Theresa May having made the announcement, the whole negotiation process can only begin once the British have submitted a request to withdraw under Article 50 of the EU Treaty and commenced the two-year period. The representatives of the other EU member states and the EU Commission made it clear immediately after the referendum that negotiations will only begin after this, ruling out any form of prior consultations. From an EU perspective, this is wise for the sake of negotiations, because it requires that the UK first discloses its negotiating objectives. There is therefore an asymmetry before the negotiations have even begun, which is likely to affect how they progress.

If one still wants to work out which negotiation results are conceivable and plausible in spite of this situation, it is important to first identify the red lines on both sides in order to subsequently pinpoint possible solutions based on the chosen strategies. It is important to know who has the potential to threaten and is thus able to defend their red lines more effectively. For the European Union, its reliable continuation is essential; anything that could endanger this will not be negotiable on the EU side. On the other hand, the British government will have to take great care to ensure that migration to the island can be significantly reduced. Without progress on this front, it will be difficult to face the electorate.

Only the possible threat of economic deterioration is capable of having a mitigating effect. The overall economic situation may soften Great Britain's red line. In the case of the EU, however, the dissolution of the Community is likely to be associated with

the expectation of unfavourable economic prospects, thus reinforcing its red line. This correlation suggests that compromise solutions intending to make the British a quick and reasonably generous offer in a bid to avoid short-term economic costs are inappropriate (Pisani-Ferry et al. 2016). The Brexit negotiations should instead be seen for what they are: a strategically driven, tactical game in which each side attempts to realise their own interests. It is not about punishment or revenge, but about stone-cold sober calculations.

## 2. Four possible negotiation solutions

Game theory lends itself to the analysis of these types of negotiations. From this perspective, the search for the optimal negotiation strategy for Great Britain's exit from the EU can, in light of the above-mentioned issues, be presented as follows: both players, GB and the EU, simultaneously choose between two negotiation strategies – a compromising one and an uncompromising one. In this game theory analysis, the possibility of mixed strategies is not taken into consideration for reasons of clarity. However, this limitation is plausible in view of the fundamental need for each negotiating partner to describe a starting position. Here there are only the two corner solutions: "unwillingness to compromise" and "willingness to compromise". In addition, a rational player is aware that their strategy has both short-term and (possibly different) long-term effects. The players would summarise the effects in the present and the future, basing their decision in time preferences. Since this discount factor is not known to either the EU or Great Britain, the short and long term are considered separately, which is equal to the two maxima of the discount rate of zero and one. In general, it is also assumed that the negotiations will be conducted on the following topics:

- Access to the European single market (EU-SM),
- Free movement of persons (FMP),
- Payments to the EU.

The different negotiation strategies and topics result in the game theory table that is shown in Figure 1 with the four possible results:

1. *World Trade Organisation (WTO) exit*: If both the British and Europeans conduct uncompromising negotiations, then this means that the British will

completely lose access to the European single market by withdrawing from the European Union.

Economic cooperation would then be organised in the same way as it is with other WTO members. In this case, the British would not have to grant EU citizens free movement of persons or make payments to the EU. The most clearly touted goals of Brexit advocates would be achieved, but the price would certainly be high: a complete loss of integration with a status as a WTO member that would still have to be negotiated; this solution is therefore not an automatic fall-back position for Great Britain.

**Figure 1: Game theory table**

Player	Strategy	EU	
		Tough	Easy
UK	Tough	<b>„Exit-WTO“</b> UK becomes WTO-member without institutional bonding to EU (no free market access, no free movement of people, no contributions)	<b>„Cherry-Picking-UK“</b> UK enforces all demands (free market access, no free movement of people, no contributions)
	Easy	<b>„Norway“</b> UK loses political participation within the EU, institutional bonds remain (free market access, free movement of people, high contributions)	<b>„Norway +“</b> Comparable to „Norway“, institutional bonds mostly remain (free market access, restricted movement of people, low contributions)

Source: Cologne Institute for Economic Research

2. *Cherry picking*: If, on the other hand, Great Britain conducts tough negotiations and the EU is willing to make concessions, Great Britain could have its demands fully met. In the case of this "cherry picking", the EU would grant its partner full access to the single market without the need to impose the free movement of persons or demand payments in return.
3. *Norway*: There would be an outcome resembling the current status of Norway if the Brits were willing to compromise and the EU unyielding. Norway grants EU citizens full freedom of movement and makes payments to the EU. In return, the country has access to the EU single market, but it does not have



any say in political decision-making. Norway's contribution to the policy of economic and social cohesion in the EU between 2014 and 2021 amounts to almost €400 million per annum. Given that the gross domestic product of Great Britain is six to seven times the size of Norway's, this would mean a hypothetical contribution of around €2.5 billion per annum. This amount would be even higher if it were based on the different population size; Great Britain has 65.1 million inhabitants, while Norway has 5.2 million. If the contribution were calculated as 12 times the Norwegian population figure, this would bring the British payment to nearly €5 billion per annum. That would be a high price; for example, Great Britain's average net contribution between 2010 and 2015 was around €9.4 billion. According to a study by the British House of Commons, the British contribution in the "Norway" case could be even higher (House of Commons Library, 2013).

4. *Norway+*: If both parties were willing to compromise in the negotiations, this could result in a so-called "Norway+" construct. Great Britain would then be in a similar but more comfortable situation than Norway is today. It would have to contribute less financially, would not have to guarantee the full freedom of movement of persons and would have unlimited access to the EU single market, but it would have no say in political matters. Such a solution – possibly even embellished by a political say for Great Britain in the EU without it being a member of the European institutions or participating in EU public services (Pisani-Ferry et al. 2016) – would lend credence to the myth of a virtually undisturbed internal market at any price. The EU would accept virtually all of Great Britain's wishes and a new understanding of European integration. The negotiations would be purely technical in order to implement the British stipulations. The "Norway+" solution is similar in a way to the Swiss option, whereby contracts requiring a great deal of negotiation would be concluded on desired issues and policy areas in order to integrate the British into specific sectors. However, what developed over a long period of time for Switzerland due to historic reasons is unlikely to be feasible for a coherent negotiating process. The Swiss solution will therefore not be given further consideration.

If only the economic effects of these four alternatives are taken into consideration for both of the negotiating partners and, for example, issues of national sovereignty in Great Britain and possible domestic conflicts are ignored, this would lead to the

changes in the status quo shown in Figures 2 and 3 once the respective solution has been implemented. The economic impact of the four solutions that have been outlined above as conceivable differs according to the time horizon of the parties involved in the negotiations. On a long-term horizon, effects on growth form the basis of the negotiating decision. In the short term the effects of uncertainty-driven implications for the business cycle, and the attempt to reduce this, dominate.

The possible payoffs of the players range from strongly negative (--), negative (-), neutral (0) to positive (+) and strongly positive (++) effects, as well as intermediate values from logical combinations of the effects.<sup>3</sup> The figures show the payoffs for Great Britain in the bottom left and the EU in the top right for the respective scenarios. These payoffs give only an ordinal ranking of the effects and are not to be understood as a metric quantification of the differences between the effects.

### 3. Payoffs in the long term: Growth effects

In the "WTO exit" solution – the cutting of virtually all institutional links and the return to relatively high WTO tariffs between the negotiating partners – the EU and Great Britain would each lose an important free trade partner with which they currently carry out a great deal of seamless trade. Minis produced in Oxford, for example, would have a whopping surcharge of 10% imposed on them when they are imported into an EU country. As a result, investors would think twice about whether they want to build a plant on the island without access to the EU single market. According to a statement by the Director-General of the WTO, British exporters would have to fork out up to £5.6 billion annually. Furthermore, the search for the best staff in Europe would be increasingly complicated and bureaucratised. In British industry, one in every ten employees is currently from the EU, even more than in the international financial sector. Moreover, in the event of the "WTO exit" solution, the latter would be faced with the loss of important banking license rights that currently allow British banks to offer financial services in EU countries without any bureaucratic obstacles. According to a study by the City of London, this would lead to a direct loss of some 70,000 jobs in the London financial sector (Wyman, 2016).

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<sup>3</sup> In this case, the intermediate values are strictly better or worse than the other values.

**Figure 2: Game theoretical results in the long run**

Player	Strategy	EU	
		Tough	Easy
UK	Tough	<u>-/0</u>	- -
		-	-
	Easy	<u>0</u>	-
		<u>-/0</u>	<u>0</u>

Source: Cologne Institute for Economic Research

In the long term, the uncertainty would subside for both stakeholders and the British would probably conclude free trade agreements with third countries, but the new frictions on the markets for goods, services, employees and capital would remain in place. These negative effects would have a stronger impact on Great Britain than the EU. Ultimately the British would lose free access to at least 27 national economies (-), while EU countries would only lose free access to one (-/0). In addition, the more severe negative impact for Great Britain is based on the fact that British trade with inevitably more distant economies would go hand in hand with higher costs in accordance with the "law of gravity" (Sampson et al., 2016). The EU's tough negotiating tactics as well as the negative economic consequences would reduce the incentives for Brexit copycats in the long term. The EU is most likely stabilised and its red line be secured.

The implications of the "cherry picking solution" come to the fore entirely different. The smooth trading of goods and services could continue, the banking license rights of the British financial industry would not be in danger and the Treasury could use the net payment to the EU of almost €9.4 billion per year for different purposes. Only restrictions on the free movement of persons would have a negative impact on Britain's potential in the long term, but short-term mass layoffs of EU workers are not to be expected. If the British government could achieve such a negotiation outcome,

it would probably be reversed at home. Having access to the internal market without the free movement of persons and no further payments to the alleged bureaucrats in Brussels would mean the 'exiters' had asserted all their demands and the EU had given way. While the single market may be secured in a more limited economic understanding (Pisani-Ferry et al. 2016), renouncing the four fundamental freedoms – the European standard since the 1957 Treaty of Rome – would represent a gambling-away of the political idea of European integration to simple economic reasoning.

In the long term, this outcome would provoke others to follow suit. The threat of uncompromising negotiation would have been proven empty and other countries would seek a similar result. Only after the departure of an important member state like France or the Netherlands would the EU come to an end, signalling the failure of the European project. There would be massive economic upheavals in the EU (--). The collapse of the EU would also have a negative impact on Great Britain (-).

The 'Norway' solution is often considered the most realistic negotiation outcome. In this case, the British would have to accept what they had actually voted against: the free movement of persons. One of the most popular slogans of the Leave campaign – "take back control of immigration" – was based on the fear of migration flows. In particular, Nigel Farage promised EU opponents that Great Britain would be able to decide on immigration itself if it left the EU. If the outcome happens to be a "Norway" solution, these statements will have been proven to be illusory. Furthermore, payments of between €2.5 billion and almost €5 billion could continue to flow towards Brussels. According to a study by the British Ministry of Finance and Economics, the growth prospects would in the long term decrease by around 0.2 to 0.3 percentage points annually in a favourable scenario similar to the "Norway" solution (-/0) (HM Treasury, 2016). Moreover, European legislature would act without British participation. For the economies of the EU, this would have hardly any direct economic implications. In the longer term, deviations from the status quo would arise due to the lack of liberal economic stimulus from the British. Institutionally, for example, this would be the case by switching the role of pivotal swing player, who decides whether to form a blocking minority in the European Council, to a traditionally interventionist country like France. Fewer state interventions would then be blocked at European level. However, the economic effects resulting from this would be very

indirect in nature, meaning that the growth prospects of the Union would also remain unchanged in the long term (0).

If both players were willing to compromise, Great Britain would be converted to a "Norway +" solution and, in contrast to the status of Norway, would be better off. In the long term, the British could significantly reduce their annual net contribution to the EU budget of around 0.5% of GDP. Combined with the approximate 0.2 to 0.3 percentage point decline in GDP growth, the overall effect for Great Britain would be roughly neutral (0) (HM Treasury, 2016). In addition, this negotiation outcome would probably attract a number of individual imitators. The threat of uncompromising negotiations on the EU's part would still be credible compared to the "cherry picking". The Europeans have shown themselves to be compromising, but only in response to a willingness to compromise by the British. The EU could always claim to opt for an uncompromising bargaining position if Great Britain proves to be unwilling to compromise during the negotiations. It is unlikely that many countries would trade political dependency without any participation for slightly restricted freedom of movement and a discount on contribution payments. And the first critical voices are coming from the British Bankers' Association: under no circumstances do they want rules and regulations imposed by Brussels (BBA, 2016). The EU itself would be highly likely to remain in place, but European growth would be slowed down in the long term by individual copycats (-). Norway, for example, would be predestined to negotiate better conditions.

#### **4. Payoffs in the short term: Uncertainty in the economy**

In the short term, economic effects will be primarily driven by increased uncertainty among the economic players, with the effects of a restricted freedom of movement playing a secondary role. The red line for the EU's bargaining position – the stability of the EU – remains subordinate because in the short term the risk of a dissolution of the EU is dominated by the general burden of uncertainty on the economy. In the "WTO exit" solution the high tariffs, combined with massive uncertainty among investors and consumers, would lead to very negative economic effects (--) for Great Britain which would significantly offset the elimination of payments to the EU budget. For the EU, the negative effect would be somewhat weaker (-/-) because of the lower level of uncertainty.

**Figure 3: Game theoretical results in the short run**

Player	Strategy	EU	
		Tough	Easy
UK	Tough	<u>-/- -</u>	-
		- -	+
	Easy	<u>0</u>	0/-
		<u>-/0</u>	<u>0</u>

Source: Cologne Institute for Economic Research

In the case of the "cherry picking", the economic effect – due to continued access to the EU single market and eliminated payments to the EU – would even be positive for Great Britain in the short term (+). However unlikely such a negotiation outcome may appear, the respective EU negotiating position is particularly advocated by some economic representatives. The EU would shoot itself in the foot if it were to take on such a position. In the short term, it would only have to replace Great Britain's contributions (-), but in the long term this negotiation outcome could lead to the worst-case scenario for the EU, where its red line would be severed.

In the short term, the "Norway" solution results in the same payoffs as it does the long term. These are determined by the fact that Great Britain has to pay comparatively high contributions to the EU and suffers from a high degree of uncertainty but does not have to adjust to any change to the European single market in relation to the status quo (-/0). From the EU's point of view, the island's lower payments are of little importance in the short term (0). In the case of the "Norway+" solution, the negative impact of uncertainty would roughly cancel out the greatly reduced payments to the EU (0). On the political front, however, the loss of political participation at European level is a high price to pay. The counterpart to this is the slight deterioration of the EU, which would have to forego contribution payments in the event of a high level of uncertainty (0/-).

## 5. Game theory equilibria

From a game theory perspective, the aforementioned payoffs give rise to clear strategy guidelines. Typically, the best answers to the opponent's strategy are sought. In the event that the negotiating position of the opponent is assumed as a given, the player chooses the higher payoff in their best answer. If the payoffs are equally high, the player is indifferent about which answer they choose. If the best answer of one player coincides with the best answer of another player, this constitutes a Nash equilibrium. In Figure 2, the best answers are highlighted in blue. Accordingly, two blue payoffs in a box result in a Nash equilibrium.

Figure 2 quickly reveals that the optimal response for the EU in the long term would be an uncompromising negotiation strategy, irrespective of the negotiating position taken by the British government: the EU would be better off with the "WTO exit" solution than the "cherry picking" and with the "Norway" solution compared to the "Norway+" solution. The uncompromising negotiation approach is therefore a so-called dominant strategy, which the EU should follow in the long term. Such a dominant strategy can also be identified for the UK in the long term. Regardless of the EU's strategy, it is always better in the long term if there is a willingness to compromise in the negotiations. The Nash equilibrium in which the players find themselves is therefore equal to the "Norway" solution in the long run. This solution, which results from the three topics examined above, does, of course, run contrary to the intentions of Brexit advocates, which would lead to vehement reactions within Great Britain. One can also argue that the EU's red line for possible compromise dominates the corresponding red line of Great Britain. The reason for this is that the British are ultimately more dependent on the EU than vice versa. The asymmetry, which already existed before the start of negotiations, is clearly evident here.

The situation is more complex in the short term (see Figure 3). The best response for the EU would be to react to an uncompromising British negotiation strategy with a willingness to compromise and to negotiate without compromise when faced with a cooperative British strategy: for the EU, the "cherry picking" would be more attractive than the "WTO exit" model and "Norway" would be more profitable than "Norway+" in the short term. This is where the best answers from Great Britain coincide: "Norway" is much more market-friendly than the economically disastrous "WTO exit" and the "cherry picking" is preferable to "Norway+" for the British. This results in both



"Norway" and the "cherry picking" as the best-response Nash equilibria in the short term.

Despite the fact that the game results in a dominant "Norway" equilibrium in the long term, the short-term analysis reveals the allure of unsustainable economic payoffs. Because if the British were allowed access to the single market without the corresponding freedom of movement of persons, the more economically damaging "WTO exit" would be prevented but the EU would then have to prepare for an existential political crisis. If the "Norway+" scenario were extended to include the political dimension, and the British were given the right to participate on a political level too, the solution would be so appealing that imitators would choose the same path and thus contribute to the break-up of the EU. This problem fails to take into account a current solution proposal (Pisani-Ferry, 2016) which declares a so-called "continental partnership" between the EU and Great Britain to be an optimal solution. This "continental partnership" is characterised by Great Britain's access to the single market, limited freedom of movement, a share in political decision-making and reduced payments to the EU budget, and therefore goes beyond the "Norway+" model discussed here.

It is by no means a question of making an example of the UK; alone the time inconsistency of European willingness to compromise in the long term means that no easy concessions can be made – the loss of credibility would be too great for future negotiations and the risk of a break-up of the EU would be too high. This would lead to massive economic upheavals in the long term. The achievements of the EU should not be sacrificed for short-term economic interests.

## **6. Political conflicts**

There is no doubt that the assumptions underlying this analysis represent a considerable simplification since both the EU and Great Britain have to take different interests into consideration and try to adhere to them in their respective strategies. The task of convincing member states that long-term economic interests should be placed above short-term profits requires a certain degree of political unity and perseverance. The very fact that both the EU Commission (Michel Barnier) and the European Council (Didier Seeuws) have appointed negotiators for talks with the British indicates that the EU is not a monolithic block. Hardliners are likely to prevail



in the Commission and Parliament, but this is not universally the case among member states. The 27 member states (excluding the UK) which make important fundamental decisions in the European Council therefore cannot be considered as a single block. However, if the national elections in the two major economies of France and Germany lead to stable majorities in 2017, this could strengthen the negotiating position and the level of cohesion. In Great Britain, there is a latent conflict between hardliners (Boris Johnson, David Davis and Liam Fox) and the more diplomatic Theresa May. In fact, there are a number of conflicts that stem from different national interests and preconceptions within the two negotiating parties:

- In EU member states, the conflict between *free traders* and *interventionists* has always existed: Great Britain is one of the most free trade-oriented member states in the EU, along with the Netherlands, Ireland and the Nordic countries (Global Counsel, 2015). In addition, there are a number of member states that pursue a more interventionist approach to economic policy, such as France and the southern member states. This also gives rise to different interests concerning Great Britain's future relations with the EU. Furthermore, the Nordic countries, but also Ireland, have close economic ties with the British and would like to link the island as closely as possible to the EU (Etzold and Opitz, 2016).
- There is also a conflict of interest between *old and new member states*: the countries of Central and Eastern Europe which joined the EU from 2004 onwards benefit from the fact that Norway, but also Switzerland, contribute financially to the policy of economic and social cohesion. They are therefore likely to have a particular interest in seeing the UK make a substantial financial contribution in the future in return for good economic ties with the EU. Moreover, the new member states will have no interest in seeing the EU grant concessions to Great Britain on the free movement of persons. In 2015, for example, almost 870,000 Poles were living on the island. Conversely, there are countries where a comparatively large number of Brits live: 301,000 in Spain and 117,000 in Ireland.
- Since the introduction of the euro, there are conflicting views between *euro states and non-euro-states*: the countries that do not have the euro as their currency will lose an important ally when Great Britain leaves the EU.

Conversely, eurozone countries can in future expect less resistance from the EU if they want to promote integration in the monetary union. Countries with strong domestic policy forces that reject the EU will negotiate differently to countries in which such parties do not play any, or a significant, role.

- But in Great Britain, too, there is not one set of interests that applies across the board. First and foremost, the *Scottish independence efforts* should be mentioned in this context: once Great Britain leaves the EU, it cannot be ruled out that the Scots will take their leave of Great Britain in a second referendum. The less connected Great Britain remains to the EU after its exit, the greater the danger is likely to be here. There are already proposals whereby only Britain leaves the EU, while Scotland (and possibly Northern Ireland) remain – the so-called Greenland solution in reverse; the latter country left the then European Community in 1985, but still belongs politically to Denmark (FT, 2016).
- The *border between Ireland and Northern Ireland* is also fraught with problems: political observers are warning of an external EU border involving controls between the Republic of Ireland and Northern Ireland, but overcoming the border in Ireland has made a significant contribution to the peace process.
- The wooing of tiny *Gibraltar* is another interesting issue: Spain could exert pressure in the negotiations with Great Britain by making political and territorial claims to this British exclave.
- What's more, conflicts of interest for Great Britain itself arise from the fact that the British have *by no means voted for a withdrawal with a clear majority*. In addition, EU opponents are not a unified group. On the one hand, there are political forces that are more protectionist-oriented and want to "protect" the island from the influx of EU citizens in particular. On the other hand, there are politicians who want first and foremost to "free" the UK from the perceived bureaucratic regulations coming from Brussels and who would like to see their country as being open to the world and involved in free trade.
- Finally, in the "Norway" solution, there are some players who are not even at the negotiating table: these are Norway, Iceland and Liechtenstein (and Switzerland), who would have to agree to Great Britain's accession to the European Free Trade Association (EFTA) so that the British could become

part of the European economic area as an EFTA member and thus retain access to the single market.

Trying to determine which actor has greater negotiating power due to institutional and positional reasons involves considering many different aspects. For a full WTO membership, the consent of the 163 WTO member states to the tariffs, quotas, subsidies and concessions proposed by Great Britain is necessary, which means that every member of the EU has an implicit veto right. At the moment, the country is indirectly part of the World Trade Organisation through the European Union, but withdrawal from the EU would mean that this membership would have to be revised, and the free trade agreements with third countries such as South Korea, Mexico, Israel or South Africa which also apply to Great Britain through the EU would have to be renegotiated. Even today, British experts agree that negotiating WTO membership during the two-year period once Article 50 has been invoked could prove difficult. Once Great Britain has been included, it would become a trading partner with the 27 EU member states just like any other country without free trade agreements. This would result in foreign trade tariffs. As a result, Great Britain could try to develop closer ties with the US. However, long-term, resource-intensive negotiations similar to those for TTIP would also be needed just to conclude a free trade agreement.

## 7. Conclusion

A brief glance at the political tensions between the many factions involved reveals that before the actual negotiation process can begin, there must first be a long fact-finding phase. The extent to which economic interests play any role at all in these preliminary negotiations is difficult to assess – the political motives could overshadow the economic ones. In any event, the analysis of the economic payoffs of the different scenarios shows that there is a certain economic appeal to the EU being willing to compromise. This, however, risks breaking up the EU in the long term with devastating economic and political consequences.

## References

**BBA** – British Banking Association, 2016, UK exit from the EU: an orderly transition for banking, London

**Etzold**, Tobias / **Opitz**, Christian, 2016, Nordeuropa nach dem Brexit-Votum, SWP-Aktuell 57, URL: [http://www.swp-berlin.org/de/publikationen/swp-aktuell-de/swp-aktuell-detail/article/nordeuropa\\_nach\\_dem\\_brexit\\_votum.html](http://www.swp-berlin.org/de/publikationen/swp-aktuell-de/swp-aktuell-detail/article/nordeuropa_nach_dem_brexit_votum.html)

**FT** – Financial Times, 2016, We want to be Big Scotland, 2. July, European Edition, page. 7

**Global Counsel**, 2015, Brexit: the impact on the UK and the EU, [https://www.global-counsel.co.uk/sites/default/files/special-reports/downloads/Global%20Counsel\\_Impact\\_of\\_Brexit.pdf](https://www.global-counsel.co.uk/sites/default/files/special-reports/downloads/Global%20Counsel_Impact_of_Brexit.pdf).

**HM Treasury**, 2016, HM Treasury analysis: the long-term economic impact of EU membership and the alternatives, <https://www.gov.uk/government/publications/hm-treasury-analysis-the-long-term-economic-impact-of-eu-membership-and-the-alternatives>

**House of Commons Library**, Leaving the EU, Research Paper 13/42, 1. July 2013, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/RP13-42>

**Wyman**, Oliver, 2016, The Impact of the UK's Exit – From the EU on the UK-based financial services sector, <https://www.thecityuk.com/assets/2016/Reports-PDF/The-impact-of-the-UKs-exit-from-the-EU-on-the-UK-based-financial-services-sector.pdf>

**Pisani-Ferry**, Jean / **Röttgen**, Norbert / **Sapir**, Andre / **Tucker**, Paul / **Wolff**, Guntram, 2016, Europe after Brexit: A proposal for a continental partnership, Bruegel, <http://bruegel.org/wp-content/uploads/2016/08/EU-UK-20160829-final-1.pdf>

**Sampson**, Thomas / **Dhingra**, Swati / **Ottaviano**, Gianmarco / **Van Reenen**, John, 2016, How 'Economists for Brexit' manage to defy the laws of gravity, Centre for Economic Policy Research