



The Taming of the Brexit

Path to exit, key scenarios, and economic implications

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Executive summary

The withdrawal notification sent by the UK government to the European Council on March 29th triggered the two-year countdown specified by Art. 50. As a result, we expect the ratification of the EU exit agreement to be held between Fall 2018 and March 2019. Divorce talks will mainly focus on the UK's outstanding commitments, the end of the UK inclusion in several EU institutions and the rights of EU citizens living in the UK and vice versa.

The UK economy will continue to be resilient during the negotiations period but consumer spending would take a hit from higher inflation and slowdown in wages, and investments could go into wait-and-see mode. Overall, we expect UK GDP growth to slow down to +1.4% in 2017 from +1.8% in 2016 and to +1.0% in 2018.

The two-year timeframe is not realistic to agree on both the exit deal and the trade deal. We thus expect both parties to adopt a transition deal (80% probability) covering EU-UK relations to bridge the gap between the end of Brexit negotiations and the final Free Trade Agreement (FTA). A final deal could come in 2021 after the H1 2020 general election. Our baseline scenario is a Limited FTA where selective sectors would be duty-free while others would be subject to tariffs. Annual GDP growth should slow down to +0.3% in 2021.

In the UK, impacts would be visible on households, companies, markets and policymaking.

Outside of the UK, investors and exporters doing business in the UK will be negatively affected through the currency depreciation (-5% on average), slowing domestic demand and the rise in insolvencies (+5% in 2017 and +6% in 2018). Looking at trade and investment relationships, the EU countries which are expected to be most affected are: the Netherlands (-1.8pp of GDP growth cumulative 2017-21 in the baseline scenario), Ireland (-1.2pp) and Belgium (-1.0pp). Overall, we expect a moderate impact on eurozone GDP (-0.4pp).

The loss in attractiveness of the City of London could benefit Luxembourg, Ireland, the Netherlands, and Germany, in that order.

Note that a cliff-edge scenario is still possible yet very unlikely (20% probability). It could come from either a lack of a transition deal in 2019 or a final extreme World Trade Organization-like status in 2021. In both cases, disruption in trade flows will have a significant negative impact on the UK and the EU. Overall, GDP would fall by -1.2% in 2019, and remain in recession until 2021. For UK exporters, losses could amount to GBP30bn for goods and GBP36bn for services. For the rest of the world, 2019 could be a particularly costly year for exporters in Germany (~EUR8bn), the Netherlands (~EUR4bn), and France (~EUR3bn), as the pound loses another 20% and tariffs apply.

In the long run, even with a limited FTA agreement, Brexit does mean a GDP growth average of 1.3% for the UK, below its pre-Brexit average of close to 2%. Stronger yet one-sided trade, monetary or fiscal policy boosts would have only limited positive effects.

Act I (The resilience): Much Ado about Nothing?

In the aftermath of the Brexit vote, the UK economy managed to maintain its solid momentum. In the second half of 2016 the average quarterly growth rate registered at +0.6% q/q, bringing annual GDP growth to +1.8% in 2016 after +2.2% in 2015. **This resilience came from the following 8 reasons:**

Act I, Scene 1: Politics & Policy

1. **Political uncertainty contained.** Following David Cameron's resignation, a new government was formed much more quickly than expected with Theresa May already taking over as Prime Minister in mid-July instead of September as initially expected. After months of silence from the Government, the UK eventually reassured investors that it is seeking an orderly exit from the EU.
2. **Proactive monetary policy response.** Following the vote in favor of Brexit, the Bank of England pledged to provide an extra GBP250bn to ensure monetary and financial stability. Moreover, in early August the BoE's swift reaction – despite not having any hard data by which to judge the impact of Brexit – helped avoid tighter financing conditions and ensured sufficient liquidity in the financial system. Measures included: (i) 25bp rate cut bringing benchmark rates down to 0.25%; (ii) QE expansion by an extra GBP70bn including also corporate bonds; (iii) a new Funding for Lending style scheme worth up to GBP100bn; and (iv) lower capital buffer rate for domestic banks to 0% from 0.5% to free-up GBP150bn of new loans.
3. **Supportive fiscal policy.** Targeted infrastructure spending and fiscal relief for households and companies should lift nominal GDP growth by +0.5pp per year on average over the next four years.

Act I, Scene 2: Economics

4. **A strong starting point?** By the time of the Brexit vote, the UK economy had already recovered strongly from the global financial crisis: GDP returned to pre-crisis levels by early 2014 and by the time of the Brexit vote was 8% above the 2008 peak. This compares to +4% above the 2008 peak for France, for example.
5. **The British consumer saved the day.** Factors which explain this resilience are: (i) the contained negative impact on confidence; (ii) stable wage growth; (iii) a declining savings rate (at 5.6% the lowest level since 2008); and (iv) the strong labor market trend – unemployment declined to 4.8% in September 2016 and has remained stable since. Consumer price inflation started to accelerate only towards the end of 2016 and reached +2.3% y/y in February 2017.
6. **Investment is holding up.** Business confidence remained resilient (PMI index at 54.77 in Q4 vs. 52.37 in Q3), yet it softened at the start of 2017: the Composite index fell to 53.80 in February from 55.5 in January. Overall in 2016, business investment contracted by -1.5%. As for foreign investments, the intrinsic attractiveness of the UK and the drawn-out process of Brexit helped stop the hemorrhagic capital flight in Q3 2016 (positive FDI and portfolio inflows).
7. **The service sector continued to grow.** Services, especially business and financial ones, continued to dominate GDP growth last year. They contributed +0.6pp to 2016 Q4 growth. Expected policy changes (tax e.g.) in neighboring countries did not help with relocation trend.

8. **Stock markets boosted by weaker pound.** Besides resilient domestic demand, the GBP depreciation – around -15% in 2016 – has been positive news for the FTSE 100, with the majority of listed companies denominating their earnings and profits in a currency other than Sterling.

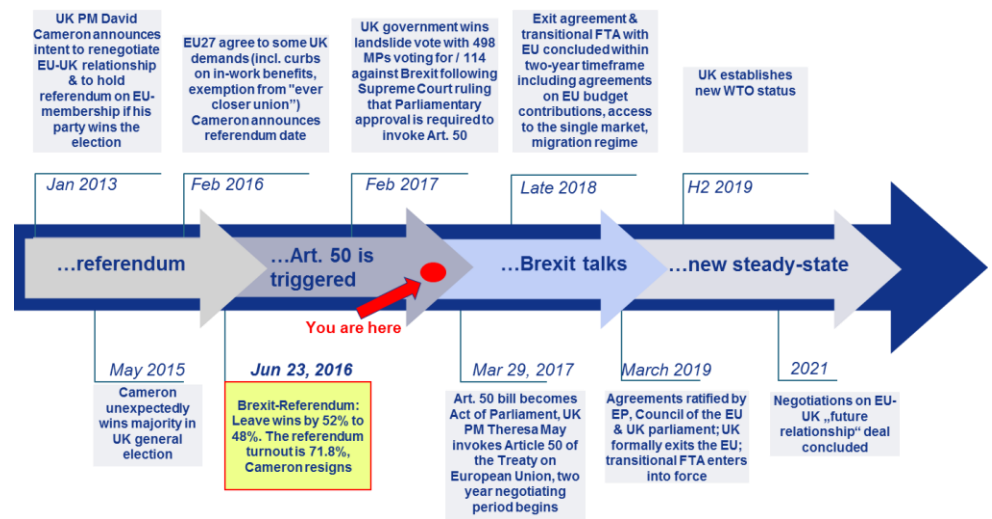
Act II (The negotiations): The Merchant of Venice

We present below a brief overview of the tentative timeline and negotiations posture of both sides of the Channel.

Act II, Scene 1: A tentative divorce timeline

- **29 March 2017: Article 50 is triggered.** The Brexit bill passed the two chambers of parliament without delay despite two tentative amendments from the House of Lords. It allowed Theresa May to meet her self-imposed deadline for launching the legal process that enables a state to withdraw from the European Union by end-March. The process started with May invoking Art. 50 by notification of the European Council that the UK intends to withdraw from the European Union.
- **March 2017 – fall 2018: Brexit talks.** The withdrawal notification triggers the two-year countdown specified by Art. 50 to Britain's formal breakaway – a deadline that can only be extended by unanimity from all member States (EU 28). The actual time for negotiations is much shorter – perhaps 18 months or less. Firstly, direct negotiations between the EU 27 and the UK will only start once the European Council (ex. UK) has adopted by unanimity a negotiating mandate (“guidelines”) for the European Commission, which will then negotiate on behalf of the EU. For 27 countries with diverging negotiating objectives and different red lines, to agree on a common stance could prove challenging and may take several weeks. Secondly, enough time has to be allowed for the ratification of the agreement before the 2019 deadline.
- **Fall 2018 – March 2019: Ratification of exit agreement.** The European Parliament will have to consent to an exit agreement by simple majority and the European Council agrees by qualified majority. May also promised a vote on the final agreement, though no possibility to go back to the “No” vote. The approval of a mixed agreement - which not only touches on EU exit and EU pure community competences (such as trade) but also member state competences - would require unanimous approval from the European Council and every EU member state according to constitutional requirements (national and regional parliaments). If no deal is reached and ratified within the two-year timeframe, and unless the European Council together with the UK unanimously decides in favor of extending the deadline, the UK will drop out of the EU without any form of legally binding agreement governing either the divorce proceedings or the details of future UK-EU relations.
- **Up to 2021: Trade deal extended negotiations.** The two-year deadline for the EU exit negotiations is considered short already. As for the future **relations** between the EU and the UK, it is impossible to seal a deal within this timeframe: The negotiation of a Free Trade Agreement takes 5 years on average. A transition deal is expected to be adopted between 2019 and 2021 to extend the current status of the UK, and avoid a cliff-edge scenario for companies on both sides of the Channel.

Figure 1 – Breaking up is hard to do



Act II, Scene 2: Bones of contention

The UK is seeking a clean break from the European Union (“Hard Brexit”), including an exit from the single market and the customs union – which will allow it to negotiate its own bilateral trade deals with third countries going forward –, a withdrawal from the jurisdiction of the European Court of Justice and a limit on EU immigration.

In negotiations the UK government will be seeking a comprehensive Free Trade Agreement (FTA) covering goods and services with unencumbered access for specific sectors such as finance and cars. In order to ensure sectoral access, May has voiced willingness to make contributions to the EU budget. Rather than accepting a bad deal, Prime Minister May is willing to let the UK fall out of the Union when the countdown is up and no deal is in place.

Prime Minister May is looking for a phased implementation of the new trade agreement aimed to be agreed with the EU by 2019 covering issues like immigration controls, customs systems, tariffs and financial regulation in order to give businesses time to adapt. Moreover, May has stated that the UK wants to continue its cooperation with other EU countries in areas such as security, intelligence and defense.

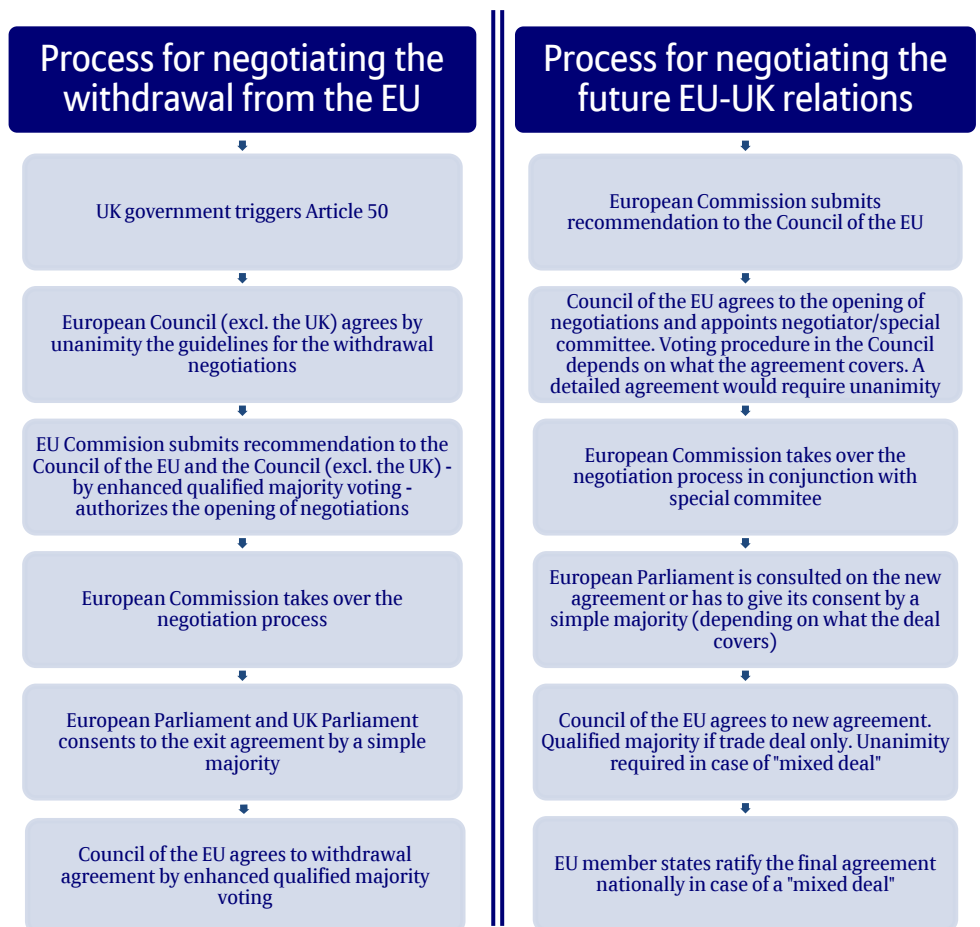
The EU Commission will press to first finalize the exit agreement before moving on to negotiating the future EU-UK relationship insisting that the two deals are separate. That way, the EU Commission is hoping to recover the Brexit bill from the UK before even discussing market access. The negotiations will seek to prioritize the Article 50 issues during 2017, in the hope of focusing on the transition (trade) deal in 2018.

There has been a clear agreement so far among the EU 27 (as well as the EU institutions) that Britain should not be allowed to cherry-pick the best bits of membership (such as the EU single market) while avoiding the obligations (free movement of people, compliance with the European Court of Justice - ECJ) as this would provide an incentive for other EU countries to seek similar deals, which in turn would cause the whole European project to unravel. At the same time, it is in the interest of the EU to retain the UK as a strong strategic partner, economically

as well as politically. Given heightened geopolitical uncertainty, the EU needs to ensure an ongoing successful cooperation with the UK particularly in areas such as security and defense.

Eventually, we assume that both parties will agree to a largely tariff-free access for goods produced in the UK to the single market (2% trade-weighted average tariffs, similar to what Switzerland has). The bigger concern is non-tariff barriers such as rules of origin, customs administration and divergence in regulations. The latter is the reason why future access to EU services markets (80% of the British economy), will likely fall well short of the access that especially UK-based financial and business services companies enjoy at present. The closer the UK remains to established EU regulatory standards, the greater the degree of access the UK can have to the single market – and vice versa. Sectoral deals for selected industries are in the interest of the EU 27, notably as most European countries run a trade deficit in services vis-à-vis the UK (against a trade surplus for goods). UK-based financial services are pivotal for a well- functioning European financial system: UK-based financial services account for 40% of Europe’s AUM and 60% of its capital markets business, UK-based banks provide more than GBP1.1tn worth of loans to other EU member states. Though passporting rights are expected to be revoked with EU Membership, the equivalence principle offers the advantage that the UK can retain EU market access without having to accept or mirror EU law.

Figure 2 – Negotiation process: Who is in charge?



In summary, the negotiators' check list includes:

1. **The UK's outstanding commitments, or Brexit bill:** Agreement on who is responsible to cover EUR2.2bn pension liability of British Eurocrats; and how to cover the shortfall in the EU budget that will result if the UK leaves before 2020 (the end of the current EU budget framework) since the UK is a net contributor (GBP8.5bn in 2015). Overall the EC estimates UK's total remaining liabilities at EUR40-60bn. As for the EU, the options are either to work with a smaller budget going forward by making spending cuts or to replace the UK net contribution with higher payments from the EU 27;
2. **Rights of EU citizens living in the UK, and vice versa;**
3. **Access to EU agencies** that play a role in UK domestic law, e.g. EU Medicines Agency, and the closure/relocation of EU agencies based in the UK;
4. **Cross-border security arrangements** including access to EU databases; and
5. **Treatment of EU derived rights**, from fishing rights to information protection and data transfer to ensuring continued UK access to the Single European Sky and the EU's internal energy market.

In addition, negotiations on the future EU-UK relationship will tackle the following issues:

1. **Access for UK-produced goods and services to the EU single market** and access for EU goods and services to the UK including agreement on: product standards and other legislation; and other trade-related issues (rules of origin, corp. taxation, social legislation etc.);
2. **A possible future financial contribution of the UK to the EU budget;**
3. **Participation in EU programs**, such as those for EU-funded research or student exchanges ;
4. **Regulatory cooperation:** In how far the UK needs to comply with EU regulations to maintain single market access and how it can influence rule-making in the EU once it is no longer a member ; and
5. **Future cooperation in other policy areas** including Justice and Home Affairs (which includes the fight against organized, cross-border crime and terrorism), security & foreign policy, transportation, energy and climate policy etc.

Apart from negotiating the exit agreement and the new deal on bilateral EU-UK relations, the UK has another long list of tasks to complete related to leaving the EU. Key issues include:

- **Transposing all current EU laws and regulations** into domestic UK law via the Great Repeal Bill which will repeal the European Communities Act 1972 on Brexit day;

- Reviewing and amending or deleting / replacing current legislation which reflects EU arrangements that will no longer be applicable after Brexit e.g. **passporting**;
- Arrangements for /re-drafting of contracts drawn up in accordance with EU law. Revision of international agreements between the EU and third countries to account for UK no longer being part of EU;
- **Informal negotiations on the UK's WTO schedule.** First the EU's schedules need to be changed to account for the UK exiting, followed by a renewal of the UK's schedule of commitments, which will entail talks with all 163 WTO members;
- **The EU has concluded around 40 trade agreements with third countries, which the UK might want to continue to apply or renegotiate.** The British government has also indicated that it wishes to strike trade agreements with countries that the EU has so far no specific agreements with, for example China. Since the UK cannot legally conduct trade negotiations while still a member of the EU customs union, it can only explore the scope for maintaining existing FTAs and striking new ones before 2019. Moreover potential partners first want to see the details of the EU-UK FTA before signing an agreement with the UK; and
- **To decide on which EU subsidies to replace** by national ones, in particular payments for farmers and for regional development

Act II, Scene 3: What could go wrong?

At this stage, some risks should be clearly identified, though their likelihood is very limited:

1. **Dispute on Brexit bill**, with the risk of the case potentially ending up in front of the international Court of Justice.
2. **A final *Bremain* vote?** As the outcome of the negotiations and the associated economic implications become clearer, the thin majority for Brexit may evaporate. This may encourage the British parliament to reject the agreed Brexit deal if considered a bad deal. A second referendum is also a possibility.
3. **Running out of time for the EU exit agreement and/or future EU-UK relations.** A lack of unity among the EU 27 or global events may delay the process to after the two-year period. In that case, PM May stated she preferred “no deal over a bad deal”. However, the disruptive economic implications of a no deal scenario should hasten the negotiations to avoid the absence of a deal. As for the future trade relationship between the UK and the EU, in order to avoid a disruptive outcome we would expect both parties to agree on a transitional deal covering EU-UK relations to bridge the gap between the end of Brexit negotiations and the final FTA. A transition deal would provide legal certainty and ensure a period of stability for British businesses as they prepare for life outside of the EU. Given the time constraint on negotiations the easiest solution would be for the UK to stay in the single market until a final deal has been agreed upon. In return for market access the UK would have to continue to abide by EU rules for the duration of the interim deal (contribution to EU budget, single market rules, e.g.)

4. **A Scotexit?** Nicola Sturgeon, First Minister of Scotland and leader of the Scottish National Party has announced she would seek approval from the Scottish parliament for a second independence referendum before the UK finalizes its Brexit deal with a view to maintaining Scotland in the EU while the rest of the UK leaves.

The Barroso Doctrine states that if one part of an EU country becomes an independent state it has to apply for EU membership. This rule was put in place to deter other separatist movements in the EU. An independent Scotland would have to go through the accession process, so EU membership would not be guaranteed or automatic. However in practice the Scottish application for membership could be fast tracked since it is already in accord with EU regulations.

The process to organize a referendum requires an approval of the draft orders by the UK parliament. This could end in two ways: the unlikely agreement by PM May for an immediate vote and the more likely agreement to a post-2019 vote. The current risk of a *Scotexit* is considered low as the economy is highly dependent on the UK economy (one third of Scottish exports go to the UK) and public finances are not Maastricht-compliant: in 2016, Scotland may have run a deficit of 9.5% of GDP.

Act III (The economic scenarios): Measure for Measure

We expect the UK economy's resilience in the aftermath of the Brexit vote to persist. However, in H2 2017 economic growth will come in decidedly lower, with consumer spending, the main driver for growth until now, expected to take a hit as inflation rises (+2.5% from 0.7% in 2016) and wage growth starts to moderate (+1.6% from +2.4% in 2016).

Meanwhile competitiveness gains due to the weaker pound are expected to be limited, as the exchange rate elasticity of British exports is rather low, given the high share of imported intermediary goods.

On the investment side, the wait-and-see mode will continue. While the stock of corporate investment will not diminish fast, given the high costs associated with relocating, flows are expected to be much lower, given the ongoing uncertainty related to future EU-UK economic ties. However, as we approach the EU exit, UK-based firms will reconsider investment plans with regard to location and timing: half of FDI in the UK comes from the EU. In addition, the domestic investment outlook is weakened by the slowing economy and deteriorating firm profitability, with the relation of input/output prices at its worst level since 2008. Overall, we expect UK GDP to slow down to +1.4% in 2017 from +1.8% in 2016 (see Figure 3).

In 2018, we expect the slowdown of the economy to continue, in light of lower consumption growth and deterioration in investment. GDP growth is expected to reach +1.0% in 2018. Meanwhile, sterling is likely to weaken further (up to 5% depreciation) exerting additional upward pressure on inflation (2018 forecast: +2.7%).

Act III, Scene 1: A transition deal in 2019 (80% probability)

In spring 2019 we expect the UK to leave the EU orderly (EU exit). Meanwhile, we think it is next to impossible to finalize and ratify an agreement on the future EU-UK relationship (finalized trade deal). **As a result, we expect the two negotiating**

parties to agree on a transitional deal (80% probability) covering the time span from Brexit till discussions on the future EU-UK final trade deal are concluded by 2021, after the general election planned for H1 2020.

By avoiding legal uncertainty and keeping trading arrangements with the EU unchanged, the UK economy would stay resilient for the duration of the transition deal, investment however would continue to contract. The modest depreciation of Sterling (-1 to 2% compared to 2018) would help contain inflation just above 2% and limit the deterioration in profitability of companies (see Figure 3).

Act III, Scene 2: After the transition deal, a limited Free Trade Agreement (55% probability)

Following the 80% scenario of a transitional deal, we see two main scenarios for the future EU-UK trade relations¹: (i) a limited Free Trade Agreement (baseline scenario; 55%); and (ii) an extensive Free Trade Agreement (25%)

1. **Scenario 1 - The Limited Free Trade Agreement:** *Selective sectors will be duty-free; others will be subject to non-prohibitive tariffs. The weighted average tariff would reach 2 to 3% on goods, few services sector add-ons (tariff equivalent additional costs of 10% tariffs on average)*².

Note that agricultural products would be taxed at a weighted average of 10% vs. 1 to 2% for the non-agricultural goods³. In this scenario, customs procedures would be established at the border while the existing standards in terms of packaging, labelling etc. between both countries would help make non-tariffs barriers less burdensome. The UK would retain its ISO and IEC membership after exiting the EU while working closely with the European Standards Organization to ensure compliance with the EU product laws. As for services, we would expect non-tariffs barriers (licensing, administrative costs etc.) to represent additional costs of 10%. The financial services would lose passporting rights but gain market access based on regulatory equivalence with the EU.

Annual GDP growth should slow down to +0.3% in 2021. This deterioration would come mainly from a sharp drop in investment (-4%) and exports (-2.5%) due to the change in trade relations with the EU, i.e. the imposition of moderate additional costs. Total export losses for goods would reach GBP12bn in 2021, or 2% of total UK exports. Total losses in exports of services would reach GBP14bn.

Sterling would depreciate by 5-7% to reach 0.97-0.98 against the EUR. The currency depreciation should proceed relatively smoothly despite the high current account deficit. While EU market access is an important driver of FDI, there are other factors explaining the UK's attractiveness for foreign investors regardless of its EU membership, including the favorable business environment, the strong rule of law and the English language. We hence do not forecast a sudden drop in FDI and think a currency crisis is unlikely.

2. **Scenario 2 – The extensive Free Trade Agreement:** *Most goods (notably in strategic sectors: automotive, energy, chemicals, pharmaceuticals, agri-food) will be*

¹ We took as benchmarks for the future trade deal countries with which the EU has already a FTA such as Switzerland, Norway and Mexico. In the case of a no agreement we looked at countries like the United States and China.

² We looked at the sectors on which the EU is currently accepting duty-free and we compared this with the UK export structure. Overall, the sectors where negotiations could prove easy are machinery, energy and chemicals while for automotive and agri-food negotiations could prove more challenging (see Figure 4).

³ Looking at the average tariffs that the EU is applying on imports there is clearly a divergence between the agricultural and non-agricultural tariffs. For example, dairy products exported from the UK to EU could be taxed by as much as 36% while chemicals and automotive by 5% and 4% respectively (see Figure 4).

tariff-free (less than 1% weighted trade average), substantial services sector add-ons (3% additional tariffs)

GDP growth would only marginally decelerate, to +0.7%, as private consumption growth stabilizes thanks to the anticipated Sterling appreciation (5 to 7% against the EUR) and moderating inflation (+2.3%). The contraction in investment (-1.5%) and exports (-1.0%) would also prove much softer. Total goods export losses would reach -GBP5bn while exports of services could lose -GBP4bn.

Figure 3 – Economic implications of Brexit

	2016	2017	2018	Step 1: EU exit		Step 2: Finalized trade deal with the EU		
				2019	...	2021		
	Pro-Brexit vote in June	EU exit negotiations with EU	EU exit negotiations with EU	Transition deal (80%)	No transition, WTO rules (20%)	Extensive FTA (25%)	Limited FTA (55%)	No FTA, WTO rules (20%)
Real GDP (y/y)	1.8%	1.4%	1.0%	0.9%	-1.2%	0.7%	0.3%	-0.4%
Real private consumption (y/y)	3.0%	1.9%	1.4%	1.2%	-1.0%	1.0%	0.8%	-0.3%
Real business investment (y/y)	-1.5%	-1.9%	-2.3%	-2.5%	-8.0%	-1.5%	-4.0%	-2.5%
Real total exports (y/y)	1.4%	2.4%	1.7%	1.6%	-6.0%	-1.0%	-2.5%	-3.0%
Inflation (CPI, y/y)	0.7%	2.5%	2.7%	2.4%	3.5%	2.3%	2.7%	3.0%
BoE benchmark interest rate	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
GBP/EUR (eop)	1.17	1.12 - 1.15	1.05 - 1.10	1.04 - 1.08	0.84 - 0.87	1.07 - 1.12	0.97 - 0.98	0.79 - 0.81
Manufacturing firms' turnover (y/y)	1.7%	2.0%	1.6%	1.5%	-1.0%	1.3%	1.2%	-0.8%
Non-financial corporations firms' margins (pp)	-0.5	-0.8	-0.7	-0.5	-2.0	-0.3	-1.0	-1.5
Business insolvencies (y/y)	-1.0%	5.0%	6.0%	3.0%	15.0%	1.0%	8.0%	5.0%

NB:

Transition deal = Bridge solution which allows the UK to obtain equivalence for financial services and have no tariffs and non-tariffs barriers on goods and services in exchange of contributions to EU, maintenance of EU regulations and no control on migration

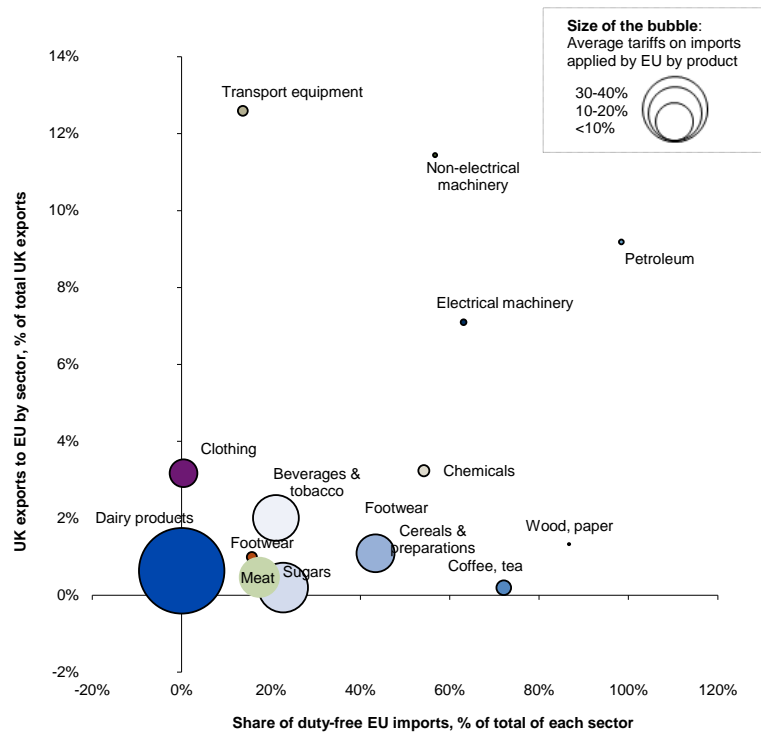
Extensive FTA = Most goods (notably in strategic sectors: automotive, energy, chemicals, pharmaceuticals, agri-food) will be duty-free (weighted average tariffs below 1%), substantial services sector add-ons

Limited FTA = Selective sectors will be duty-free, others will be subject to tariffs. The weighted average tariffs could be 2 to 3% on goods, few services sector add-ons (tariff equivalent additional costs of 10% tariffs on average)

No FTA = WTO, Most Favored Nation principle will apply (equiv. to more than 5% weighted average on goods, 20% to 30% additional costs for trade in services)

Sources: ONS, Eurostat, IHS, WTO, Euler Hermes, Allianz

Figure 4 – Share of duty-free EU imports vs. the average tariffs on imports applied by EU and the UK exports to EU by sector



Sources: WTO, ITC (2015), Euler Hermes

Act III, Scene 3: No transition deal (20% probability), and no free trade agreement

Most Favored Nation principle will apply (equiv. of 10% tariffs on average of which more than 5% weighted average on goods). The services sector would lose passporting rights and equivalence status will be hard to establish. This would be equivalent to 20% to 30% additional costs for the services sector.

Whereas it is in the interest of both, the UK as well as the EU, to agree on a deal governing future relations, there is a 20% probability of a cliff-edge situation (no transition deal and no FTA), with severe economic implication because of a disruption in trade flows. Without a viable agreement in place, Britain would trade with the EU under WTO “most favored nation” status. As a result British goods would face the EU’s full common external tariffs as well as customs checks and non-tariff/regulatory barriers causing havoc on supply chains. While tariffs are relatively contained (5% to 7% on average if we take US-EU or China-EU as examples) divergence among sectors remains high: agri-food (18.5%), electrical (14%), machinery (9.7%), automotive (9%), textile (7.8%) and chemicals (6.6%). Total good export losses would reach GBP30bn or 6% of total UK exports.

For services, there would be no special access to the EU market. Financial services companies meanwhile would lose passporting rights and equivalence will be hard to establish given possible EU reluctance. This would be equivalent to 20% to 30% additional costs for the services sector. This would translate into a loss of around GBP36bn in exports of services.

The economic implications would be severe. The abrupt drop in capital inflows would push GBPEUR further below parity, with Sterling depreciating up to 14% vis-

à-vis the Euro (see Figure 3). A decline in FDI, together with the deteriorating economic outlook, would cause a contraction (-8%) in investment activity. Meanwhile, the imposition of WTO tariffs would trigger a sharp drop in demand for UK exports (-6%). Inflation would accelerate sharply, averaging +3.5% in 2019, causing households to reduce spending notably (-1.0%).

Act IV (The impacts): The Tempest – not necessarily

In this section we analyze the impact of the economic scenarios on households, companies, policies and markets in the UK, as well as neighboring countries under our baseline (limited FTA) and extreme (WTO) scenarios.

Act IV, Scene 1: For British households

In our base case we expect household spending to slow notably over the course of 2017-21 – from +3.0% in 2016 to +0.8% in 2021 driven mostly by a sharp acceleration in inflation with annual consumer prices rising by more than 2.4% on average in 2017-21. Next to elevated inflation, the deteriorating economic outlook, slowing wage growth and a gradual increase in unemployment (5.3% in 2017), somewhat cushioned by the high flexibility of the UK labor market and reduced net migration inflows, will increasingly strain household finances. The saving rate has already fallen to 5.6%, the lowest level since 2008, and room for further reductions is limited. Rises in the minimum wage agreed on last year will only offer partial relief, given that low earners are disproportionately affected by higher prices for food and fuel.

Only in the scenario with an extensive trade agreement on goods and services will consumption growth recover to pre-Brexit strength. In the baseline as well as the WTO scenario, meanwhile, we expect consumption dynamics to be permanently weaker in line with slower GDP growth.

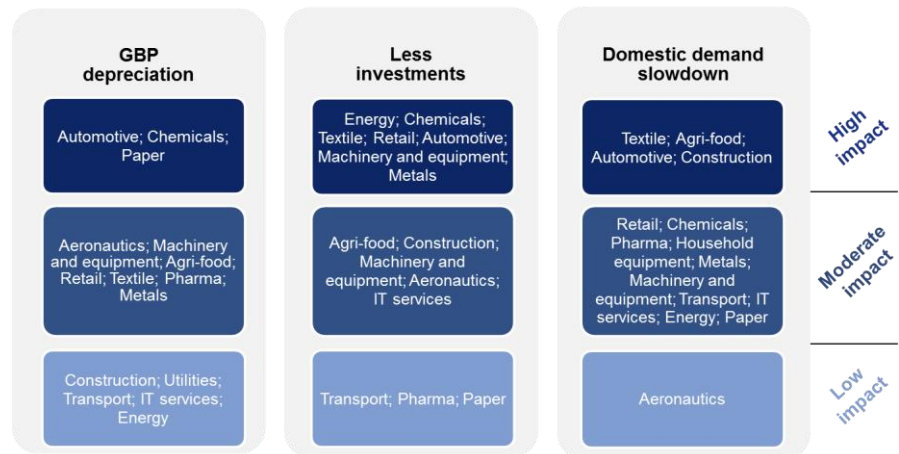
Act IV, Scene 2: For British companies and exporters

Over the negotiation period, companies in the UK, notably SMEs, will face two challenges:

1. **Lower profitability:**
 - a. Rising input cost inflation driven by the pound depreciation and higher commodity prices: automotive and chemicals first in line, see Figure 5.
 - b. Given the high share of imported intermediate goods, high input costs will at least partially need to feed into higher selling prices in order to ensure profitability
2. **Lower domestic demand**, with uncertainty holding back investment and consumer spending. Higher non-payment risk: we expect business insolvencies in the UK to increase going forward, by +5% and +6% in 2017 and 2018 respectively.

Figure 5 summarizes the breakdown of impact by sector: **automotive, chemicals, retail (agrifood, textile) and construction could be most impacted.**

Figure 5 – Brexit: Economic consequences and their sector impact



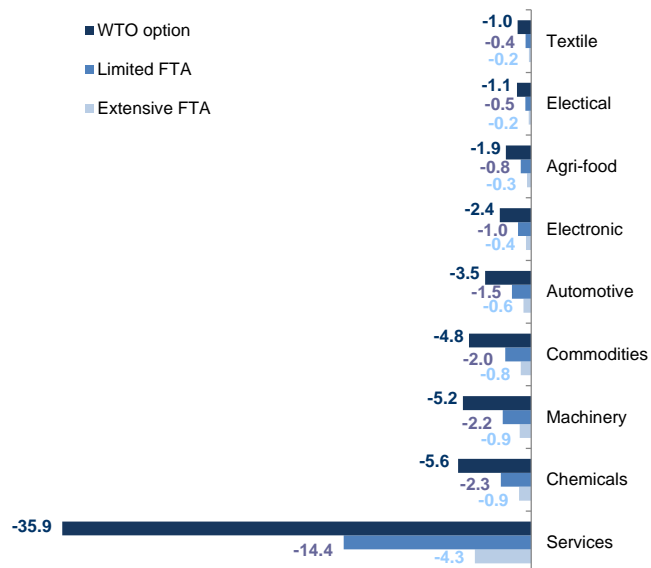
Source: Euler Hermes

As for UK exporters, after the EU exit (2019), the impact will be very different under the three outlined scenarios above. Note that we assume very little competitiveness gains from the sterling depreciation.

For the baseline scenario (limited FTA), the assumption of a 2-3% weighted average tariffs leads to -3% of contraction in exports that is to say -GBP12bn losses for goods and -GBP14.4bn for services. The industrial sectors that are expected to suffer the most are those that export the most to the EU: (i) chemicals; (ii) machinery and equipment; and (iii) automotive – see Figure 6.

For the WTO option, and a tariff of 5-7% on average (US-EU or China-EU examples), with some sectors particularly endangered - agri-food (18.5%), electrical (14%), machinery (9.7%), automotive (9%), textile (7.8%) and chemicals (6.6%). All in all, export losses would total -GBP30bn for goods and -GBP35.9bn for services.

Figure 6 – Total export losses for the UK in shock year (2019 or 2021), GBPbn



Sources: Chelem, Euler Hermes

Act IV, Scene 3: For markets

- **Currency:** Most of the GBP depreciation happened ahead of, and immediately after, the referendum. Volatility picked up and investors realized that GBP at 1.45 EUR was not sustainable considering the UK's large current account deficit. Post referendum the Pound lost an additional 10% and government comments ignited fears that the divorce may be confrontational. The currency is trading in a 1.10-1.20 GBP/EUR range which reflects a Brexit with limited Free Trade Agreements (FTA) in our view. Still, uncertainty around the negotiations remains elevated as the process has not yet begun. Fears around a very hard Brexit affecting the financial sector would open further downside towards parity.
- **UK Treasuries:** GILTS continue to hover around 1.3%, close to the levels we had seen before the EU referendum. The steeper shape of the yield curve and current levels reflect increased inflation expectations based on a lower currency. Some form of Free Trade Agreements seems priced in by markets. We believe GILTS are fairly priced and if anything there may be a bias to a flatter curve. If negotiations developed towards minimum level of Trade Agreements i.e. WTO status only, we would expect yields to fall. The Bank of England is likely to keep the short end of the curve at very low levels – a precautionary measure as economic developments continue to look uncertain and political risks continue to linger. A premature rate hike could have a depressing effect on the real economy.
- **Corporate credit:** Spreads are tight and we expect some moderate widening later this year and into 2019 as global monetary policy becomes less accommodative. A “sensible divorce” including reasonable FTA is what we see priced in by credit markets. Large UK companies should be more resilient to adverse Brexit developments than SMEs. Multinationals represent about half of the UK non-financial corporate bond market and are either non-UK based issuers or UK based issuers with production and subsidiaries across the globe (e.g. Vodafone, BHP, BP). Their spreads should be less affected by the outcome of trade negotiations than by global credit markets and cross currency interest rate conditions. Of the remaining UK domestic companies two thirds are regulated utilities (e.g. National Grid, Heathrow, Centrica, BT) and thus shielded from the impact of trade negotiations.
- **UK equities:** More than 70% of the FTSE 100 constituents' revenues are generated outside the UK. This means that global developments are actually much more important for our investment universe in the UK. However, we have observed a strong negative correlation between Sterling depreciation and performance of UK large cap stocks. Given that this relationship is perfectly in line with the high share of non-domestic revenues, we do expect this relationship to persist going forward. So if the further path was to put further pressure on Sterling, we'd therefore expect UK large caps to continue to perform well, as also valuations have still room to increase: As Sterling has depreciated, driving the performance of UK stocks, valuations of the British stock market has admittedly increased. But this has probably only led to a partial recovery of earlier losses which were unrelated to Brexit. At current levels, the relative valuation of UK stocks relative to eurozone stocks is probably still neutral to slightly cheap.

Act IV, Scene 4: For policymakers

- Monetary policy:** Despite the recent turnaround of Kristen Forbes, member of the Monetary Policy Committee (MPC), to vote for an interest rate increase from 0.25% to 0.5% and the rumors that other Members of the MPC are ready to turn more hawkish in the coming months given the rise in inflation, **we believe the BoE will be tolerant of above 2% inflation for the next few years as the economic outlook deteriorates. We therefore expect interest rates to remain unchanged until the final deal is effective**, except if the currency were to depreciate more in 2021 (e.g. more than 25%), in which case the BoE would intervene to stave off a potential currency crisis. While in the baseline scenario, where sterling is expected to depreciate by -5% to -7%, the loss in real income would make the debt burden more painful for the private sector, the adjustment would be even more painful in a tail-risk scenario where there is a currency crisis.
- Fiscal policy: The government remains committed to a stimulus**, especially for infrastructure spending. The government dropped the target of a balanced budget by 2020 in its Autumn Statement and the additional borrowing in the next five years is expected to reach GBP98bn (GBP24bn less than expected in November 2016 given higher economic growth and thus lower fiscal deficit), i.e. 5% of GDP. Almost half of the additional spending is scheduled for 2020-21, the presumed first two years post EU exit. In addition, the next general elections in the UK are scheduled for May 2020 which increases the probability of a higher fiscal stimulus to boost growth. In total, additional public net borrowing will reach GBP210bn by 2021.

Act IV, Scene 5: For neighbor countries

Figure 7 summarizes the channels of impact for companies outside the UK, mainly in EU countries: (i) GBP depreciation; (ii) lower GDP growth in the UK; and (iii) rising payment risk (insolvencies) in the UK.

Figure 7 - Channels of impact and timing for companies outside the EU

	European companies...			Impact
	...exporting to the UK	...importing from the UK	...having a branch/ subsidiary in the UK	
GBP depreciation	High negative impact	Moderate negative impact	Positive impact	Ongoing
Lower GDP growth in the UK (lower turnover growth and lower margins)	High negative impact	Moderate negative impact	Significant negative impact	Ongoing
Rising insolvencies in the UK	High negative impact	Moderate negative impact	Significant negative impact	Ongoing
Lower RoW investment in the UK	Significant negative impact	Moderate negative impact	High negative impact	Ongoing
EU tariffs on imports from the UK	Moderate negative impact	High negative impact	High negative impact	2021
UK tariffs on imports from the EU	High negative impact	Moderate negative impact	High negative impact	2021
Changes in regulation and additional administrative costs	Significant negative impact	Significant negative impact	High negative impact	2021
Restrictions on movement of people	Moderate negative impact	Moderate negative impact	Significant negative impact	2021
Restrictions on capital flows	Significant negative impact	Significant negative impact	High negative impact	2021
Restrictions on services	Significant negative impact	Significant negative impact	High negative impact	2021

Source: Euler Hermes

Figure 8 – Cumulated Brexit impact by country (2017-2021) in the baseline scenario (Limited FTA)

Cumulative Brexit impact by country between 2017-21 in the baseline scenario

		Limited FTA = FTA on goods (3% tariffs on average), few services sector add-ons (10% additional costs on average) Cumulative currency depreciation : -16% since end-2016				
		Exports of goods (EURbn)	Exports of services (EURbn)	FDI (EURbn)	GDP growth (pp)	Business insolvencies growth (pp)
High impact	Netherlands	-4.0	-0.6	-8.2	-1.8	2.0
	Ireland	-1.2	-0.5	-1.2	-1.2	1.5
	Belgium	-3.2	-0.3	-1.0	-1.0	1.0
Moderate impact	Germany	-8.4	-1.0	-2.1	-0.4	< 1
	France	-3.0	-1.2	-3.2	-0.3	< 1
	Spain	-1.6	-1.0	-1.8	-0.3	< 1
Low impact	United States	-3.5	-2.2	-13.5	-0.1	< 1
	Italy	-2.0	-0.4	-0.4	-0.2	< 1
	Austria	-0.4	-0.1	-0.1	-0.2	< 1
	Portugal	-0.3	-0.2	-0.1	-0.3	< 1
	Slovakia	-0.2	0.0	0.0	-0.3	< 1
	Finland	-0.3	-0.1	-0.1	-0.2	< 1
	Romania	-0.2	0.0	0.0	-0.1	< 1
	Greece	-0.1	-0.2	0.0	-0.2	< 1
Very low impact	China Region	-3.0	-0.3	-1.9	0.0	< 1
	Poland	-0.8	-0.2	-0.1	-0.1	< 1
	Denmark	-0.6	-0.1	-0.4	-0.1	< 1
	Sweden	-0.9	-0.2	-0.7	0.0	< 1
	Czech Republic	-0.5	-0.1	0.0	0.0	< 1
Eurozone		-24.6	-5.5	-18.2	-0.4	1.0
% of total		0.7%	0.5%	1.9%		

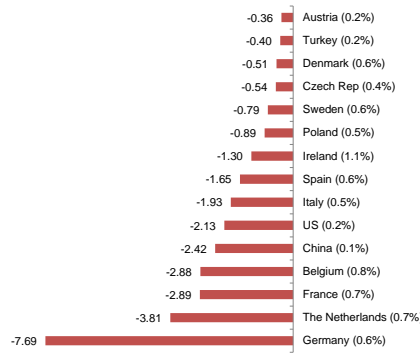
Sources: ONS, Chelem, Euler Hermes

In our baseline scenario (Limited FTA), the quantified impacts for export losses (from neighbor countries to the UK), in and out investments, overall GDP and business insolvencies (Figure 8) lead to three high impact countries: the Netherlands, Ireland and Belgium. A moderate impact would be expected in Germany, France and Spain. Overall the eurozone could lose: EUR24.6bn of export outlets in the UK for goods exporters, over 2017-2021; EUR5.5bn for service exporters; and EUR18.2 for in and out foreign direct investments (FDI); for a grand total of 0.4pp of GDP growth.

In the WTO scenario, 2019 could be tragic year for one-off losses for exporters to the UK, as the pound depreciates by another 20% and the WTO-tariffs (3% based on current EU standards) would apply. Top losers include Germany (~EUR8bn), the Netherlands (~EUR4bn), and France (~EUR3bn).

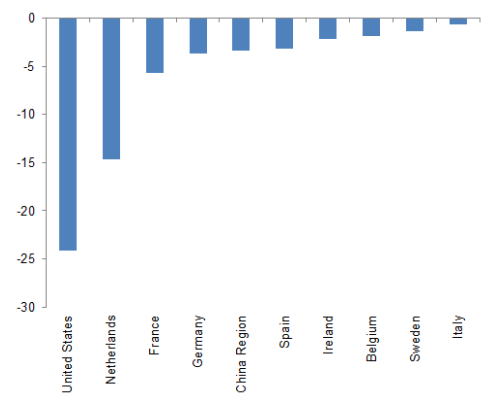
Also in the WTO scenario, investment losses (measured by FDIs) would be felt in the US (~EUR25bn), the Netherlands (~EUR15bn), and France (~EUR6bn).

Figure 9a - Export losses in a WTO scenario (EURbn and % of total exports)



Sources: ONS, Chelem, Euler Hermes

Figure 9b - Investment (FDI) losses in a WTO scenario (EURbn)



Box 1: Could the City of London move to continental Europe?

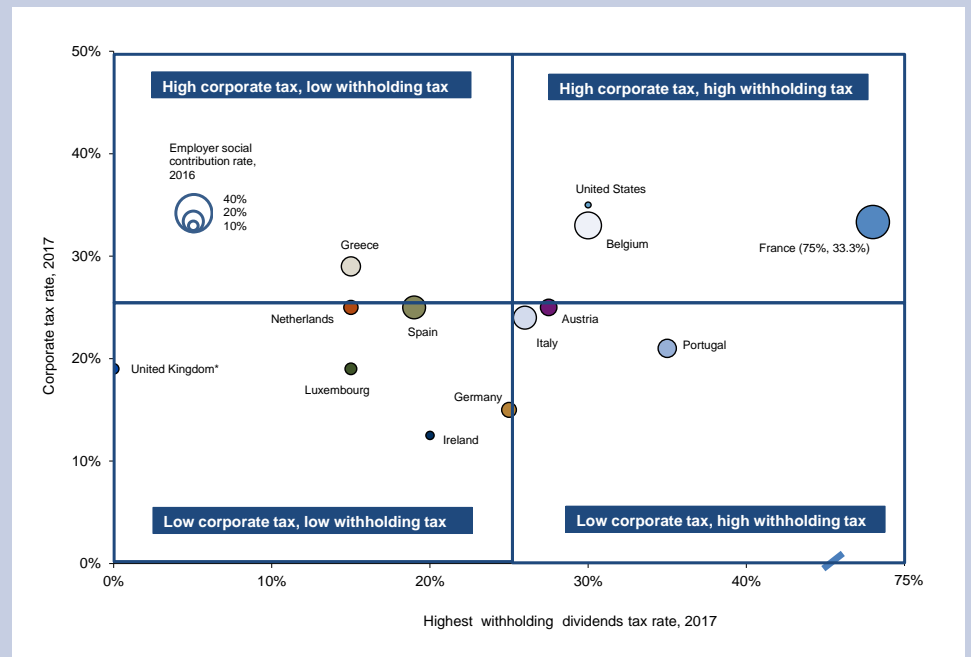
Tax environment as a proxy for attractiveness for companies give Luxembourg, Ireland, the Netherlands and Germany as winners

We have assessed the tax environment of several European countries in comparison to that of the UK, in order to identify its potential competitors in a post-Brexit European Union. By plotting corporate tax rates against withholding dividends tax rates, we find a proxy for business attractiveness (see Figure A). As a result, a group of 5 countries stand out; they have both low corporate and withholding tax rates. After applying the third criterion of low employer social contribution rates, we eventually find 4 candidates that could compete with the UK.

Luxembourg looks like the most serious candidate. Its low tax rates combined with its advantageous geographic location – at the heart of Western Europe – could attract many businesses that consider relocating. Its 2017 corporate tax cut (from 21% to 19%) signals a will to enhance its competitiveness.

Ireland, the Netherlands and Germany are the next in line. Ireland already hosts many companies’ headquarters, and it could be an alternative choice despite the fact that it would be somewhat isolated geographically in a post-Brexit EU. The Netherlands is a strong candidate as well. Its position as a trade hub for the EU, its favorable macroeconomic environment and robust growth all factor in to the equation. However, political uncertainty around the general elections and the coalition building process as well as growing Euroscepticism among the population could discourage businesses wishing to relocate. Finally, Germany’s tax profile should be highly appealing for companies, as well as Frankfurt’s position as one of the key European financial hubs.

Figure A - Corporate tax, withholding tax dividends and employer social contribution rates in a sample of selected EU countries and the USA



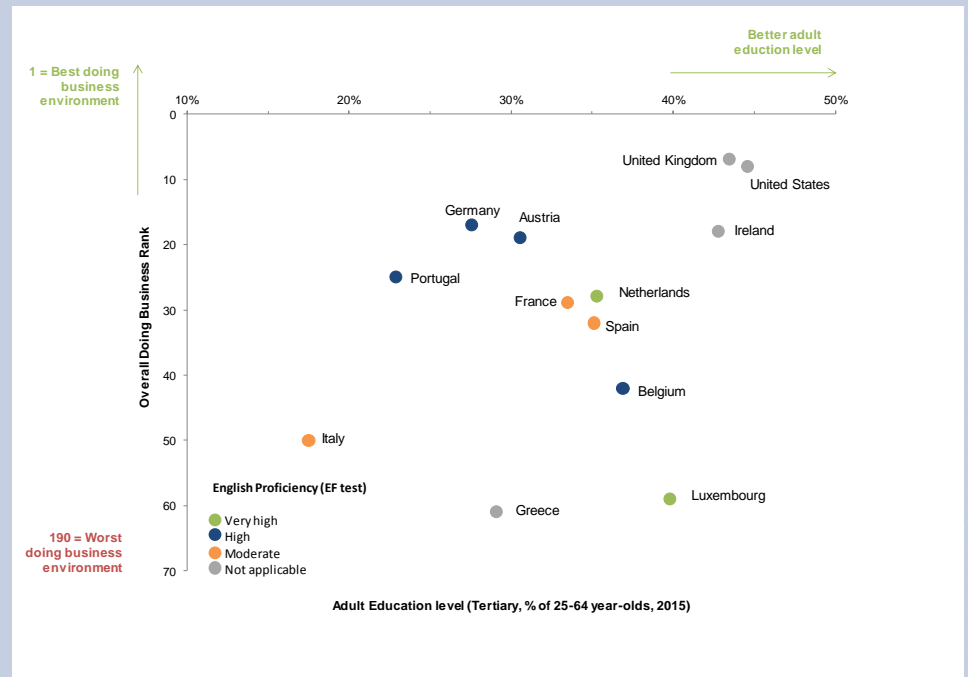
Sources: Deloitte, KPMG, Euler Hermes

The business environment and adult education levels as additional criteria give Ireland, Germany and the Netherlands as best in class

We have looked at the World Bank’s 2017 Doing Business Index in order to determine the effective attractiveness of several selected countries for companies. The UK and the US’s rankings are unmatched, although Germany, Austria or Ireland are right on their heels. If companies previously in the UK moved to another country after the Brexit, they would bring part of their labor force along. However, it is also interesting to assess the state of the labor force in competing countries. When plotting the Doing Business ranks against the adult education level in those countries, and using the results of the EF English Proficiency Index, the countries with the most favorable tax environments are again among the best performers (see Figure B).

Ireland performs best, followed by Germany and the Netherlands. Germany has lower labor skills than the Netherlands but a better Doing Business rank. The Netherlands and Luxembourg’s high English proficiency also make them strong candidates to replace the UK, although Luxembourg’s overall business environment might prove to be disappointing. Belgium’s attractiveness, stemming from high adult education level and English proficiency, is somewhat tempered by its mediocre Doing Business rank and tax environment.

Figure B - Business environment and adult education level in selected countries



Sources: OECD, World Bank, Euler Hermes

Act V (The new UK model): All's Well that Ends Well?

A limited FTA between the EU and the UK will fall well short of the degree of integration that has been achieved within the European single market. FTAs with third countries are unlikely to make up for the negative impact of lower EU-UK trade, since geographical distance and regulatory differences are the main determinants of trade flows. An analysis by NIESR predicts a long-term reduction in total UK trade of 22-30%, while new deals will increase trade by no more than 2.6%. Furthermore, services are among the most protected sectors, with high non-tariff barriers which FTAs often fail to tackle. Trade deals usually take many years to negotiate, and it is hard to see how the UK on its own may extract better terms in negotiations from non-EU countries than the EU, which enjoys more bargaining power as a bigger economic player. As the UK enters the quest for a bilateral trade deal at a time when many countries are turning more protectionist. It is highly unlikely that the UK will get a trade deal for instance with the US that both consider a victory.

After Brexit key pillars of Britain's economic success – such as the financial services industry – will be less strong. Other industries, for example in the high-tech area, which require large markets for scale-up, access to international talent and intensive R&D will also struggle. Moreover, the gains from deregulation that the UK government is hoping for will prove illusory. The British economy is not overregulated to start with: OECD measurements of labor and goods market regulation reveal that the UK is as lightly regulated as the US and Australia, and much less than the EU average. Moreover, the idea that once outside the EU, the UK would simply scrap health and safety regulations, food standards and or social entitlements is not plausible. First, those British businesses that want to export to the EU market would still have to comply with EU norms and standards. Second,

there is no majority among the British people for a drastic lowering of environmental, product and labor standards.

Brexit does not have to be an economic disaster in the long term, but in the long run the UK will clearly be worse off, if access to an EU market with more than 450 million people is at least partially restricted. In the base case scenario, we expect GDP growth in the long-run to average around 1.3%, clearly below the pre-Brexit average of close to 2%. Meanwhile, in the WTO scenario, the UK’s economic growth potential would be more than halved in the long run (0.8%).

Figure 10 - Long-term economic implications of Brexit

Annual change	Average 2000-07	Long-term forecasts, annual average		
		Extensive FTA	Limited FTA	No FTA
Real GDP	2.9%	1.9%	1.3%	0.8%
Real private consumption	3.3%	3.0%	2.0%	1.2%
Real business investment	1.6%	1.5%	1.0%	0.3%
Real total exports	5.1%	2.5%	1.5%	0.5%
Nominal GDP	5.2%	4.2%	3.5%	2.5%

Sources: ONS, Euler Hermes, Allianz

In the case that the EU-UK negotiations do not produce an agreement, the UK government has threatened to turn the country into a kind of “Singapore of the West” by lowering the corporate tax rate and relaxing regulations coupled with an implicit suggestion that Britain’s defense and intelligence contribution to Europe might be at risk. Limitations to this model would stem from:

- Limited political support: Building an economic model that relies on aggressively cutting corporate profit taxes and regulations might be political suicide for May, who has, after all, promised to tilt the playing field away from “the privileged few” to working-class people.
- Retaliation: Other countries might want to compete with low tax regime to attract foreign capital.
- Revenue losses: Further cuts to the corporate tax rate could erode the tax base, undesirable for an administration still struggling to cut a GBP76bn annual deficit. Questions about funding healthcare, social spending and pensions might arise.

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