BBVA RESEARCH

June

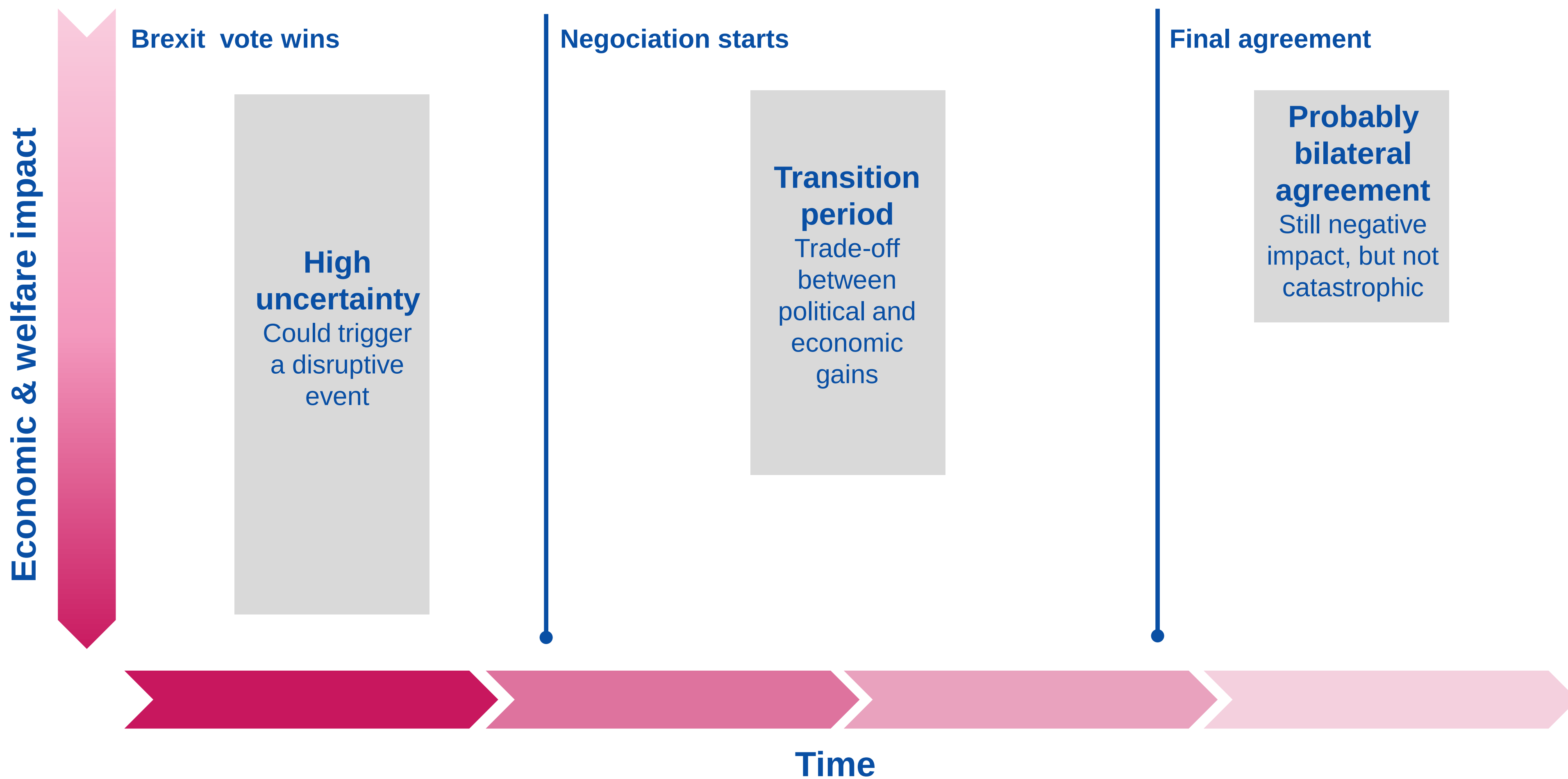
2016

The Economic Consequences of Brexit

Key messages

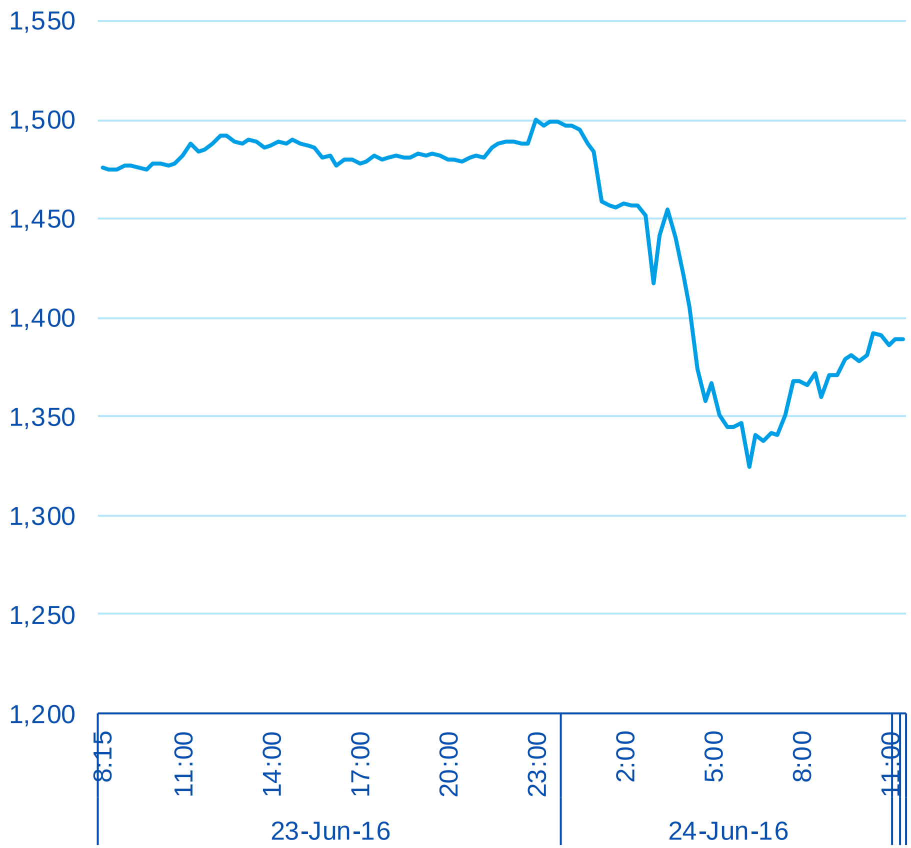
- The decision on **Brexit has been based more on politics and emotions** than economics.
- **High uncertainty about the timeline of negotiations and the new relationship agreements**.
- **New agreements**: The more beneficial politically, the more damaging economically. **The most likely outcome would be a bilateral agreement UK-EU** –neither “Norway model” nor WTO status.
- The **economic impact in the long term for the UK is undoubtedly negative (range of 2% - 8%** lower GDP level by 2030), but not dramatic.
- The current level of **political and economic policy uncertainty is already damaging activity.**
- **The largest uncertainty relates to the short-term impact of Brexit**. For financial markets, the impact is potentially serious, especially for the UK, with contagion effects to Europe (periphery) and global impact. However, there are no clear fundamentals to justify a large and persistent contagion effect. It will depend on the political negotiation, which will be difficult.
- **Bank of England’s reaction will favor monetary easing** unless inflation rises or capital rapidly flows out
- **The UK would lose its Passport rights for financial services**, hampering access to the EU market. The actual impact will depend very much on the negotiation process and political climate towards the City
- The economic long-term impact on the rest of the EU should be limited, but the road could be noisy. **Brexit might hamper the integration process in the EU and is the biggest unknown that we will face. The attitude of the core European countries will be key.**

Uncertainty after Brexit will be higher in the first steps



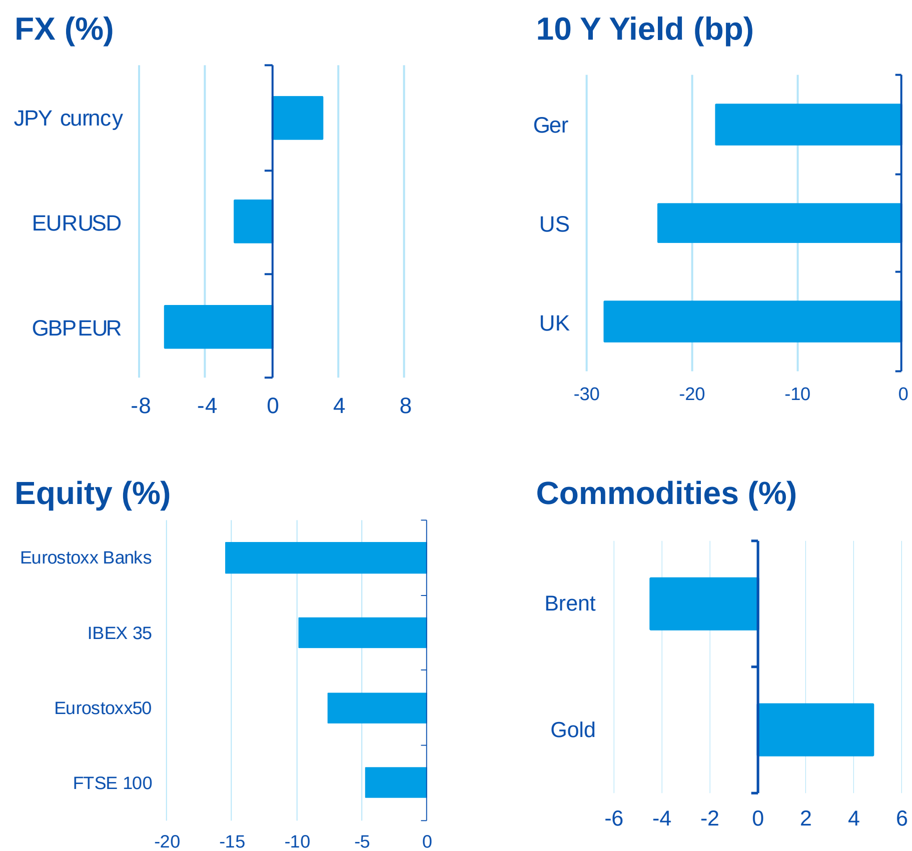
Markets react to shock Brexit vote: depreciation of the British Pound, flight to safety (lower bond yields) and correction of risky assets (equity)

British pound intraday performance



Source: Bloomberg

Asset performance (1D chg.)



Source: Bloomberg

Main questions

- **What are the immediate steps after leave vote?**
- **What is the timeline of the exit process?**
- **What are the models of post-Brexit agreements?**
- **What is the long-term impact of Brexit for the UK?**
- **What about the passport rights for the financial sector?**
- **Will London keep its financial hub status?**
- **Is uncertainty about Brexit already affecting growth?**
- **How strong is the UK exposure to EU and capital flows?**
- **How would the Bank of England deal with Brexit?**
- **What will be the effects of Brexit on the EU?**
- **Which EU country is most exposed to Brexit?**

Immediately next steps after leave vote

Fri 24 June

EC **General Affairs Council** Meeting

Meeting of **Conference of Presidents of European Parliament** followed by press conf.

Meeting of **Council** Pres. Tusk, **Commision** Pres Juncker, **Parliament** Press Schulz and Dutch PM Rutte

Sun 26 June

Meeting of **College of Commissioners** (TBC)

Tue 28 June

Emergency Plenary session of **European Parliament**

Tue 28 June – Wed 29 June

European Council Summit

October 2016

Jul 12 **OBR** fiscal outlook

Jul 14 **BoE** monetary policy decision

Jul 27 2Q16 GDP

Aug 4 BoE Inflation Report

New Prime Minister

Art. 50

BoE and ECB ready to intervene

What is the timeline of the exit process? Highly uncertain

Unknown time period

The launch of Brexit procedure (Art 50) depends on many factors:

Margin of victory in referendum

Cameron's successor

Strength of Parliament (where 70% of MP's favour Remain)

Strategy of Brexiteers (second referendum?)

Voters' disappointment if there are delays

Sharp increase in uncertainty

Opposition from Europe to delays

Risk of Scottish Referendum

Up to two years after Art. 50

Existing EU membership

1. New relationship with EU
2. Trade agreement with other countries
3. Set domestic legislation

Up to a decade or more

Three alternative scenarios

Exit and new EU agreement (EEA, EFTA, FTA)

Exit WTO rules → New agreement?

Unknown time period → Up to a decade or more

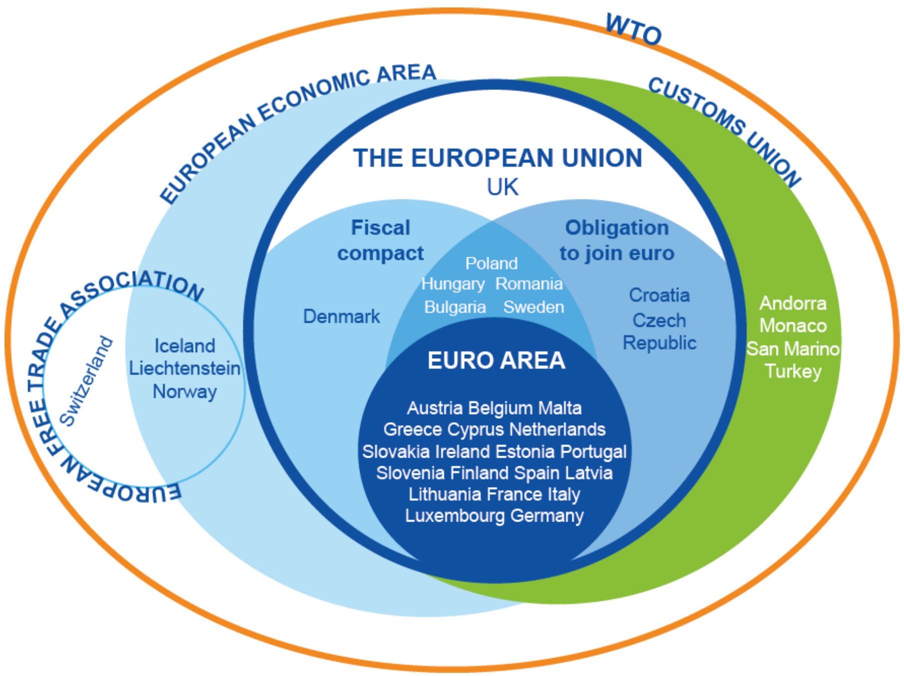
More likely scenario

Extended EU membership (EU unanimity) → New EU agreement (EFTA, FTA)

Annex: Description and implications of exit models

What are the models of post-Brexit agreements?

Current EU membership groupings



Source: HM Treasury

Implications of different exit models.

Colours indicate attractiveness from a UK policy perspective

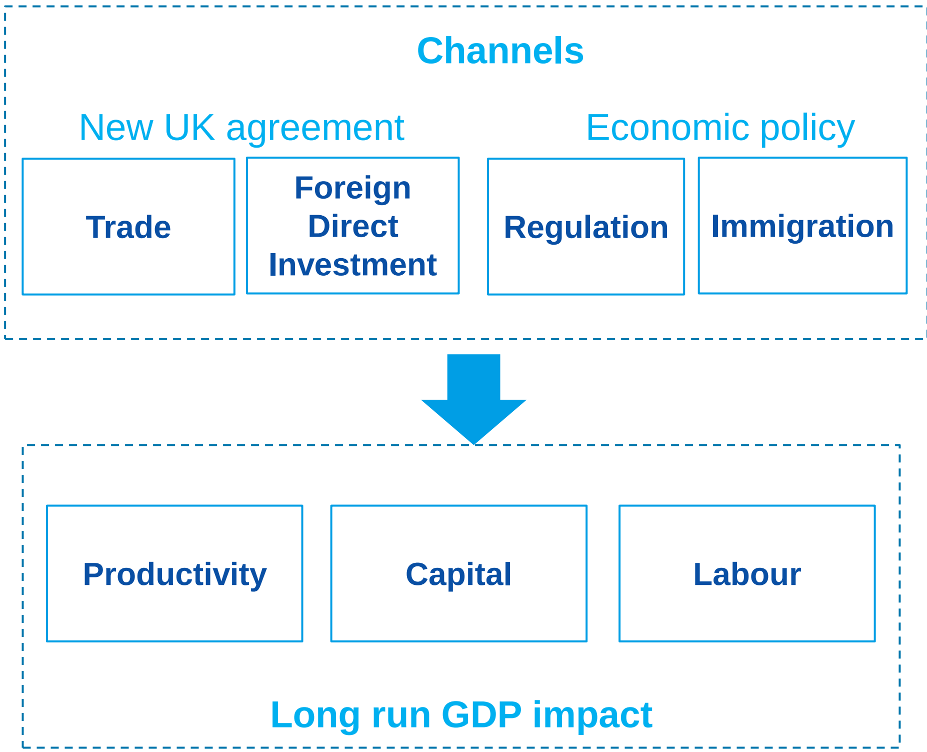
	EEA (Norway)	EFTA (Switzerland)	FTA	Customs Union (Turkey)	WTO
Political issues	✗	✗	✓	✓	✓
Economic issues	✓	✗	✗	✗	✗
	Does not address UK's demands	Favorable for UK / No attractive for EU	Possible, but depends on the deal	Does not address UK's demands	Probably worst case

This is why it is very difficult!

Source: BBVA Research

Annex: Description and implications of exit models

What is the long-term impact of Brexit for the UK? Clearly negative



The UK would be better off maintaining a preferential trading relationship with the EU

Lower trade and FDI hit productivity (already low) which feeds through into lower GDP and living standards

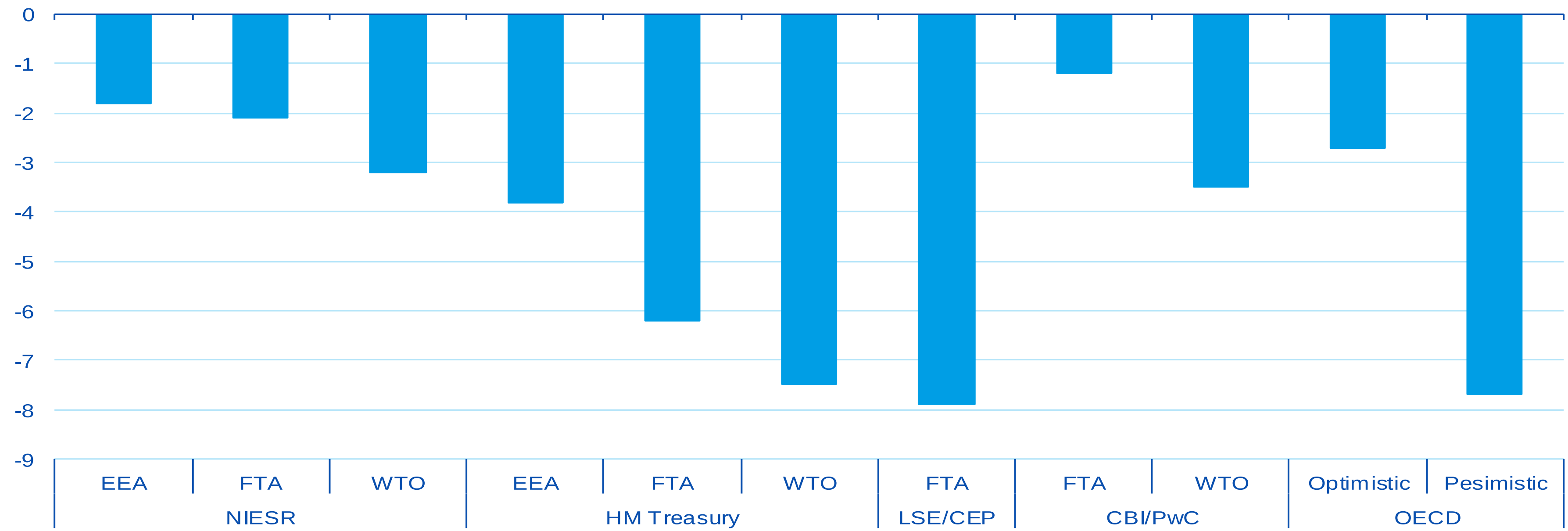
Potential gains from deregulation seem to be limited as the UK labour and product markets are amongst the most flexible in the OECD

Immigration is an important driver of employment and GDP growth, with positive contribution to public finances. Risk of populist politics

If government adopts a more liberal, pro-business policy response (especially, immigration), the level of GDP holds up better

What is the long-term impact of Brexit for the UK? Politically convenient agreements have higher economic costs

Cumulated GDP fall in 2030
(pp from baseline)



Source: NIESR, HM Treasury, LSE/CEP, CBI/PwC and OECD

Assumptions

No productivity losses

Productivity losses

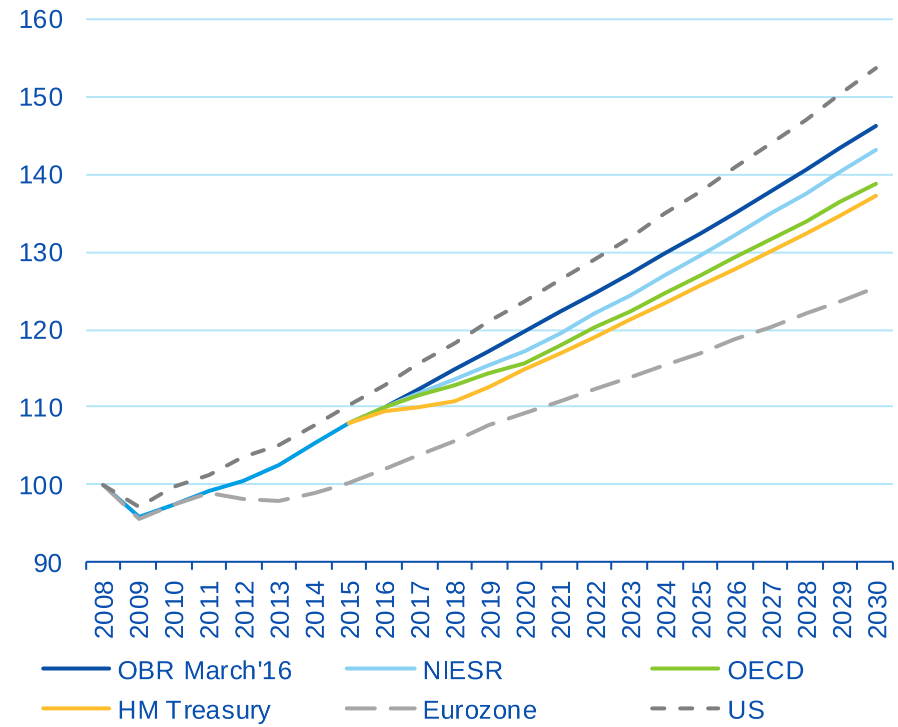
More comprehensive

No change in migration; No deregulation

Productivity losses from lower trade and FDI; Change in migration; Productivity gains from deregulation; Lower Budget contribution

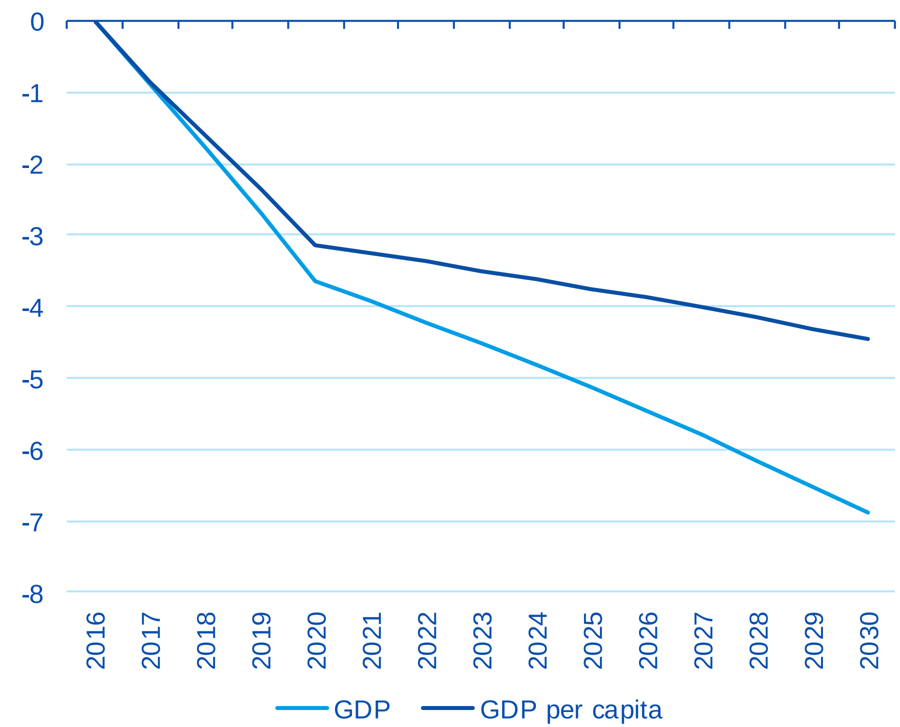
What is the long-term impact of Brexit for the UK? Negative but not catastrophic, especially in per capita terms

GDP level
(2008=100)



Source: BBVA Research from NIESR, HM Treasury, LSE/CEP, CBI/PwC and OECD

Cumulated GDP and per capita GDP fall
((pp from baseline)



Source: BBVA Research from OECD

What about the passport rights for the financial sector? They could be lost (except with a "Norway" style deal)

- The **Passport** for banks and financial firms **allows firms** authorized by any Member State (MS) to **establish branches or provide cross-border financial services** in other MS

No passport implies:

- Firms in UK would need to **establish subsidiaries in EU** increasing **funding costs**
- **Exports of financial services to the EU might fall*** - There would also be an indirect effect associated with lower exports, e.g. reduction in legal advice services
- **Migration of financial firms away from the UK** (spread over time)
- **Central Counterparties (CCP)** trading Euro-denominated products **are likely to reallocate**
- Negative effects might be **partially mitigated** in the short term by the equivalence of the **third countries regime -** Grants access to the EU market for non-EU firms, if the home country has an **equivalent regime** (see annex for further explanation)

* Capital Economics (2015) estimates this reduction to 0,55% of GDP (nearly half of current levels)

Annex: Alternatives to the passport

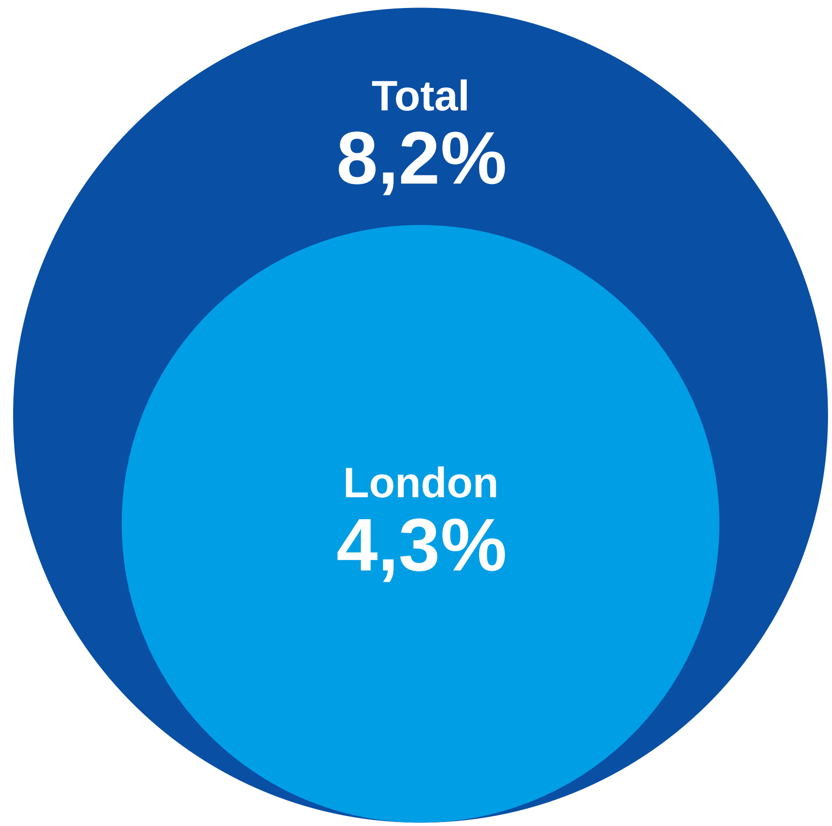
Could London keep its financial hub status? It should remain an important but "diminished" financial center

Strengths	• Skilled labour, **critical mass of knowledge** on financial services, accounting and law • Language, legal system and **convenient time-zone** • Its importance predates the single market
Weakness (Brexit case)	• **Little room to reduce regulation** after Brexit (see annex for further explanations) • Important number of **foreign firms** based in UK would **consider their options out*** • **Reallocation of CCPs** activities on Euro-denominated trades* • Negative message to the market – Equivalence status depends on EU assessment*

London status as financial centre would be damaged, losing part of their businesses

But it would remain an important financial hub due to intrinsic strengths

Financial Sector
(% of GVA in 2014)



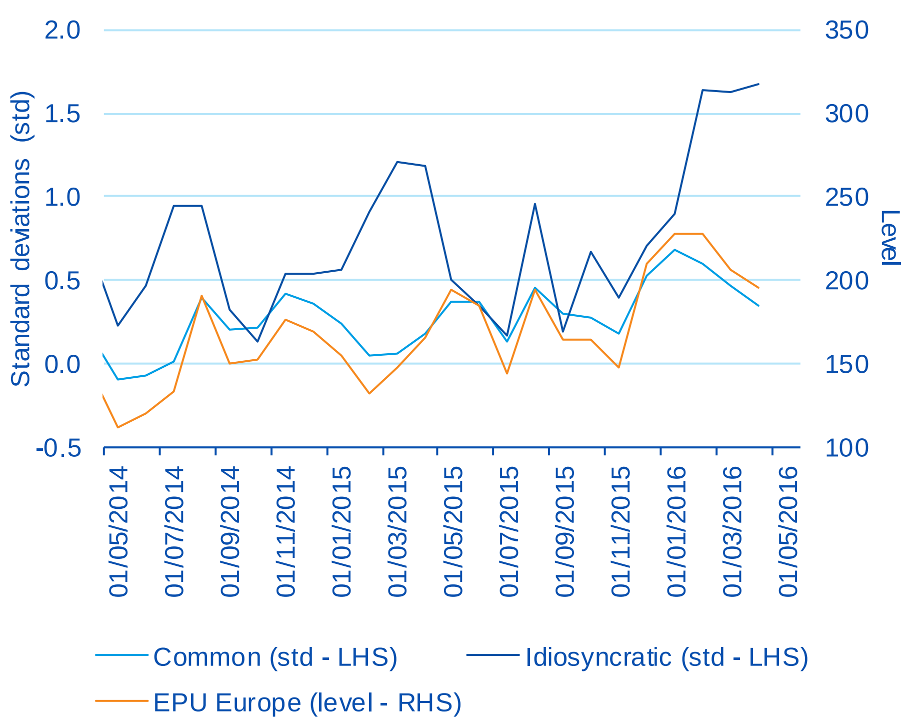
* Assuming no Passport rights in the final agreement

Source: ONS

Annex: The importance of the financial sector

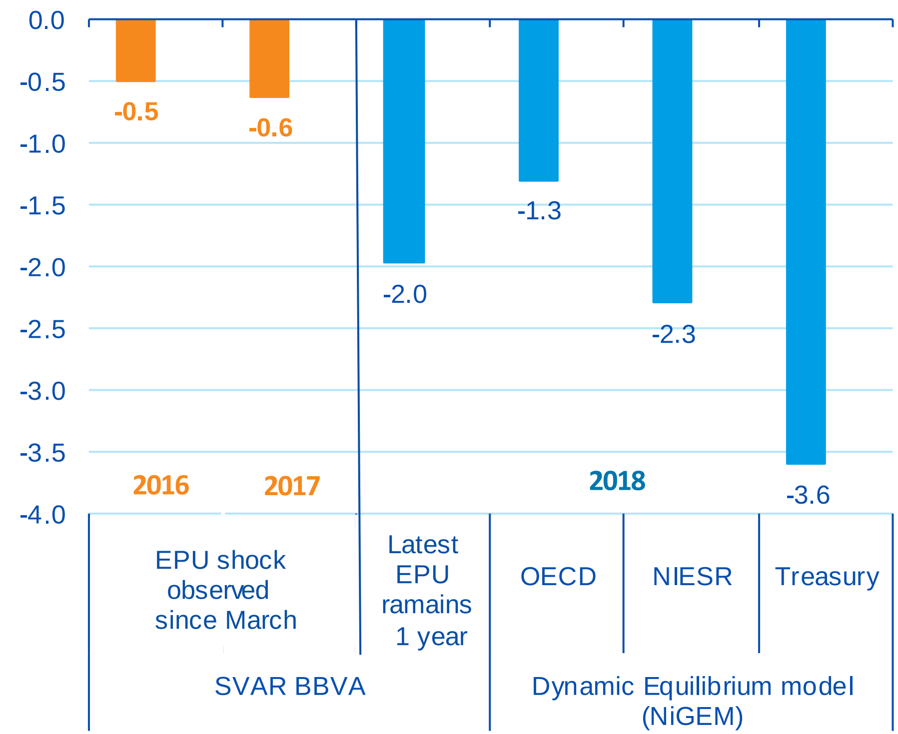
Has uncertainty about Brexit already affected growth? Yes, with potential to have a further impact on GDP

Economic policy uncertainty
(EPU)



Source: BBVA Research from Economic Uncertainty Index

Effect of EPU shock on GDP level
(pp from baseline)

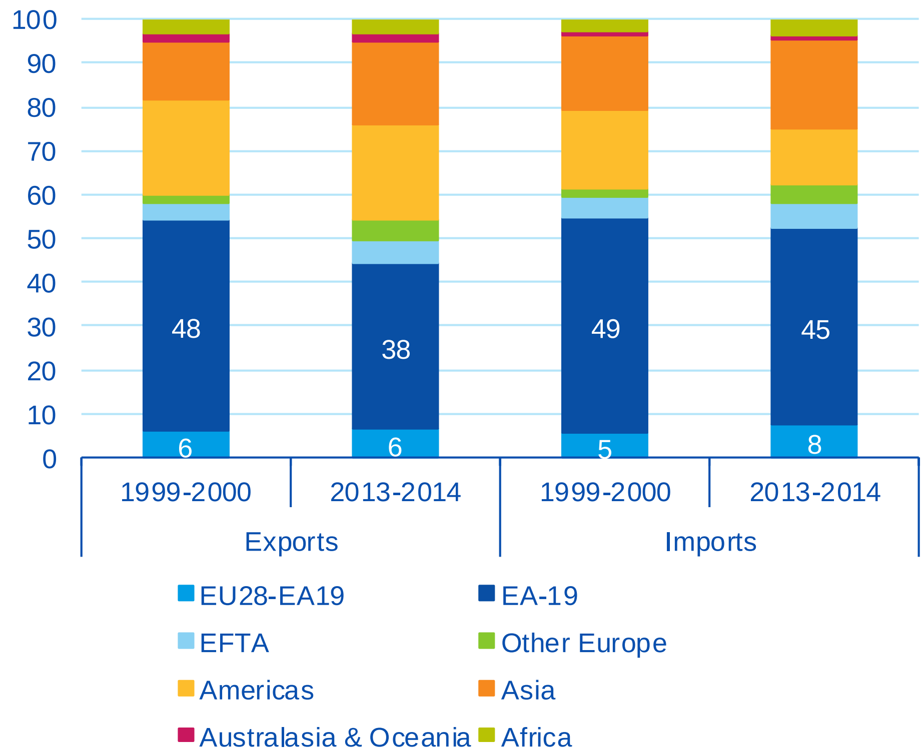


Note: OECD, NIESR and Treasury assumption in the annex
Source: BBVA Research and different studies

Annex: Uncertainty and short-term impact

How strong is the UK exposure to EU and capital flows? Very high; this is a vulnerability factor

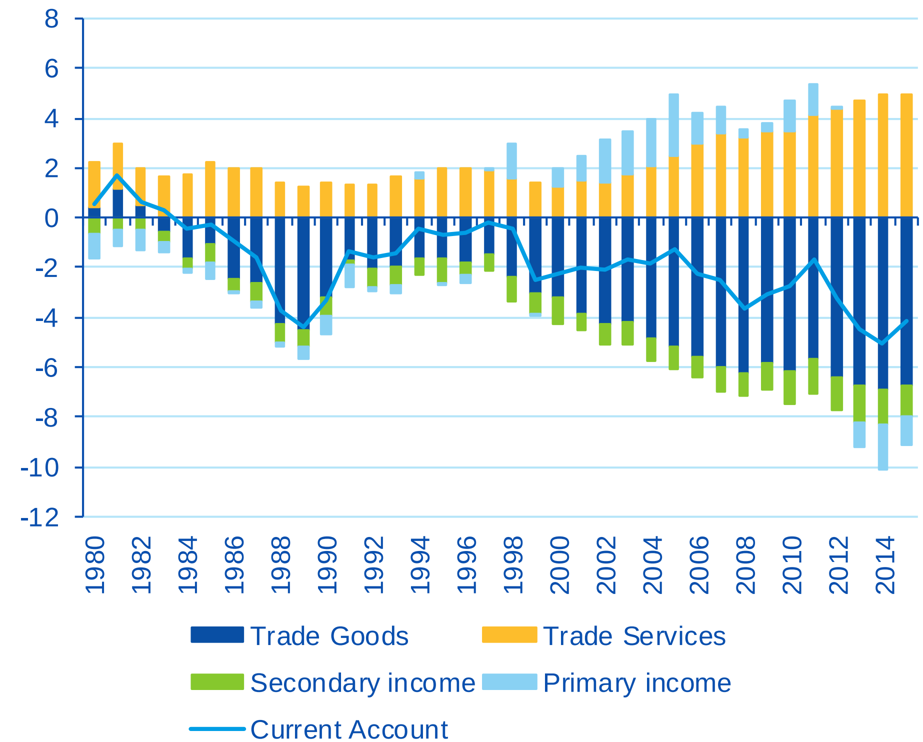
UK exports share by region



Source: ONS and BBVA Research

UK current account balance

(% GDP)



Source: ONS and BBVA Research

Annex: Foreign investment composition

How will the Bank of England deal with Brexit? Favouring monetary easing unless inflation rises or capital flows out

BoE*

Whatever necessary to maintain monetary and financial stability

ECB**

Whatever necessary to limit financial contagion

More likely

Remain on hold

Swap lines

More likely

Likely

- **Rate cuts if currency stabilizes**
- **Credit easing measures and QE**

Less likely

- **Tightening** (if sharp depreciation occurs)
- **Direct purchases of corporate debt**

- **Further rate cuts**
- **QE extension and further TLTROsII**

Eventual coordination of central banks

*** Mr Carney on Brexit:** *"I certainly think that would increase the risk of recession". "will do everything in our power to discharge our responsibility to achieve monetary stability and financial stability". "Official interest rates might go up or down depending on the inflationary effects on spending, the exchange rate and investment."*

**** Mr Draghi on Brexit:** He said that *it has already had some impact on the markets, but he does not see it as a risk for Eurozone recovery. "The ECB is ready for all contingencies."*

What will be the effects on the EU? The key is the political contagion, though a positive reaction is eventually expected

Economic effects

Long-run: limited impact, mainly driven by lower trade, but also by the loss of Britain's pro-market influence; differences across countries

Short-run: more uncertainty effect due to potential contagion, although it is not supported by fundamentals and should not be a disruptive event

Potential positive impact on financial system in the long term at the expense of the City

Political outcomes

Risks of **further centripetal moves** (demands for opt-outs or exit) in other EU countries, mostly in Eastern Europe and Nordics

In the short run, core countries could react with **limited plans** of further integration on less controversial issues (external borders, immigration, security), but **signaling the way towards a more integrated Europe. The European Council needs to play an important role**

From 2018 onwards (after French and German elections in the Fall of 2017) **Europe's integration project could be re-launched towards a multi-speed EU**

Which EU country is most exposed to Brexit? Differences across countries

Netherlands	**Very strong trade** (7.6% of GDP), **investment** (27.6%) and bank exposure to the UK (3% over total assets). **Closely aligned in many EU policy debates** (less regulation, more liberal markets, and opening up external trade). Increasing dissatifaction with the EU
Ireland	**Most deeply integrated** with the UK (trade (11.8%), investment (7.5%) **bank exposure to the UK (8% over total assets)**, supply channels, migration, language, culture). **Similar approaches to economic policy**
Sweden	**Closely aligned in policy debates. Significant eurosceptic strain**
Belgium	**Strong trade** (6.8%), investment (4.9%) and bank exposure to the UK (4% over total assets). **Strong strain of euroscepticism**
Germany	Trade (2.8%), investment (2.4%) and bank exposure to the UK (2% over total assets).. Often but not always aligned in EU policy debates, but **the UK acts as a counter-weight to France, allowing Germany to act as the decisive swing voter**. Challenges for foreign policy
Spain	Trade (2.5%), **especially tourism, investment** (6%) and **bank exposure to the UK (14% over total assets).** Around 800000 britons live in Spain
France	Trade (2%), investment (4.3%) and bank exposure to the UK (3% over total assets). **Deep ideological divisions with the UK.**
Italy	Trade (1.4%), investment (0.6%) and bank exposure to the UK (1% over total assets). **Risks are mostly indirect** (relationship between large countries, deterioration support to Europe)

RESEARCH

June

2016

Annex

Description of exit models

	Brief description	Opinion
EEA – Norway style	EEA membership ensures full access to the single market, but UK must adopt EU standards and regulations (with little influence on them). Still entails substantial contributions to the EU budget. Unable to impose immigration restrictions.	It would not address UK's main demands.
EFTA – Swiss style bilateral agreements	A set of bilateral accords, granting access to the single market in specific sectors. UK has to follow regulation in the sectors covered. It is allowed to negotiate FTAs separately. On immigration, the final setting depends on negotiations.	Might be favourable for UK - EU might not be interested.
Custom Union - Turkey style	No internal tariff barriers. UK has to adopt EU product market regulation. Not all sectors are covered (incomplete access - e.g. financial sector). UK has to follow EU external tariffs to third markets. No influence on them.	It would not address UK's main demands.
FTA	UK-EU relationship ruled by a FTA. Tariff barriers are unlikely, but the UK would likely have to comply with EU standards and regulation. UK is free to apply FTA with third countries.	Might address UK's concerns, but will depend ultimately on the final agreement.
WTO	UK would not need to follow EU standards and regulation, but it will be completely out of the single market. It would face the EU's common external tariff. Gains in migration policy and freedom to trade with rest of the world.	Probably worst case scenario for UK.

Implications of different exit models

Colours indicate attractiveness from a UK policy perspective	**EEA** (Norway)	**EFTA** (Switzerland)	**FTA**	**Customs Union** (Turkey)	**WTO**
Migration controls	✗	?	✓	✓	✓
EU budget contribution	✗	✗	✓	✓	✓
Compliance with EU rules	✗	?	?	?	✓
Free to negotiate with third countries	✗	✓	✓	✗	✓
Passporting rights	✓	✗	✗	✗	✗
Direct access to Single Market	✓	✗	✗	✗	✗
Tariffs	✓	✓	✓	✓	✗
Dynamic agreement	✓	✓	✗	✓	✗
Influence	✗	✗	✗	✗	✗
	No address UK's demands	Favourable for UK / No attractive for EU	Possible, but depends on the deal	No address UK's demands	Probably worst case

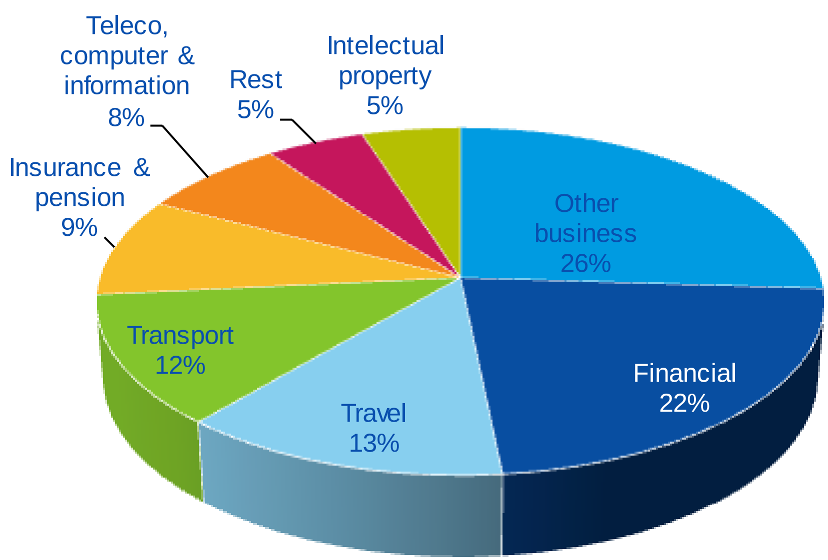
Source: BBVA Research

Return

What would be the consequences on trade? A reduction, and the need of new trade agreements

Exports of services 2014

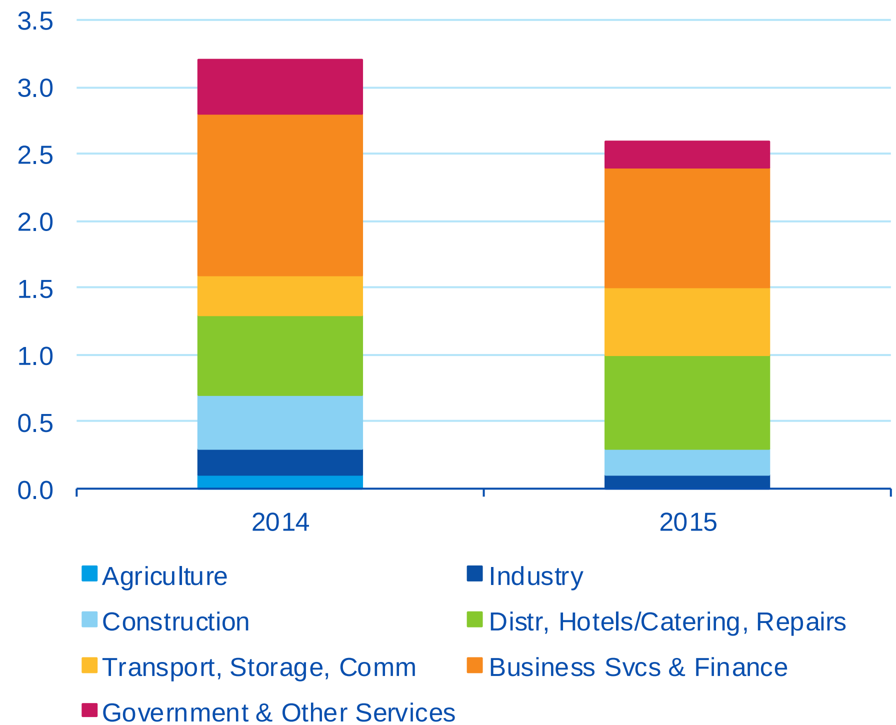
(%)



Source: ONS and BBVA Research

Contribution to GVA

(pp)



Source: ONS and BBVA Research

Return

The importance of the Financial sector and the EU for UK

Financial Sector 7% GDP

4% Employment

Financial Services Exports

2,71% GDP

Trade Surplus with EU

0,91% GDP

EU capital market activities in UK

80% of tot.

FX trade for € in UK

40% of tot.

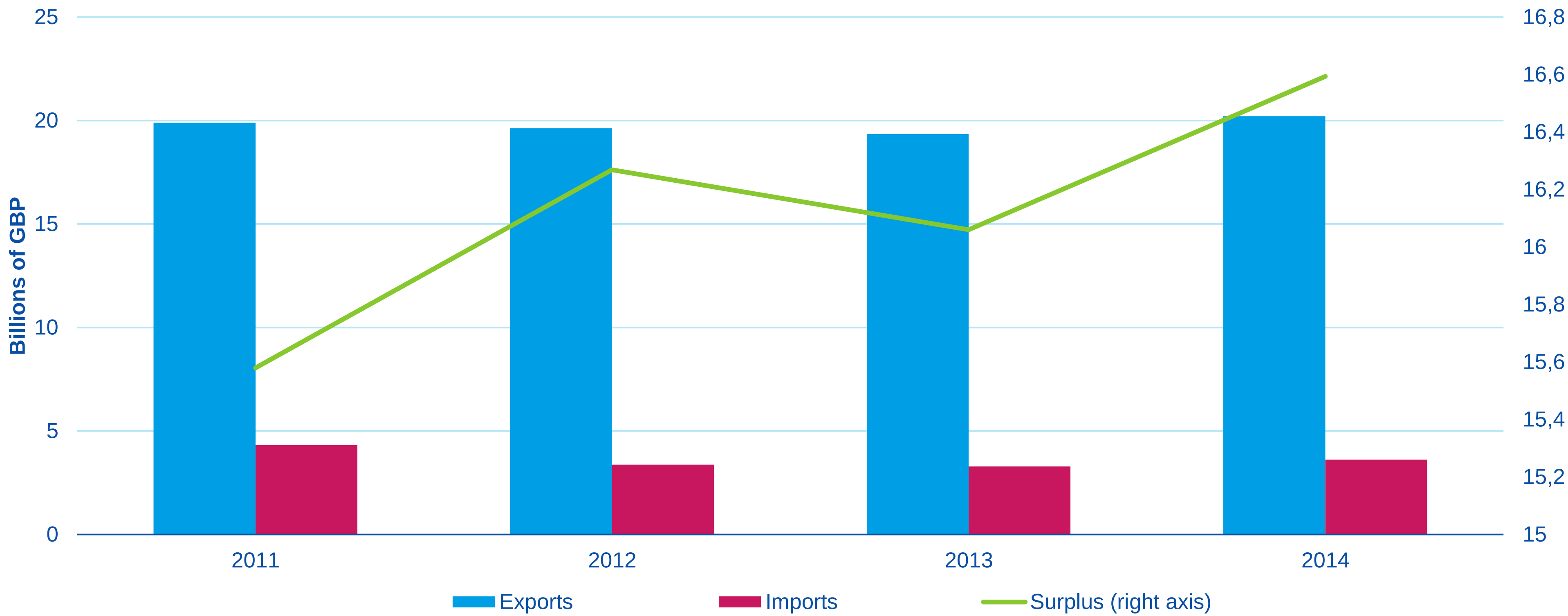
UK financial service exports to EU

40% of tot.

Source: OECD, IIF and Capital Economics

The importance of the financial sector and the EU for UK

UK-EU financial services trade



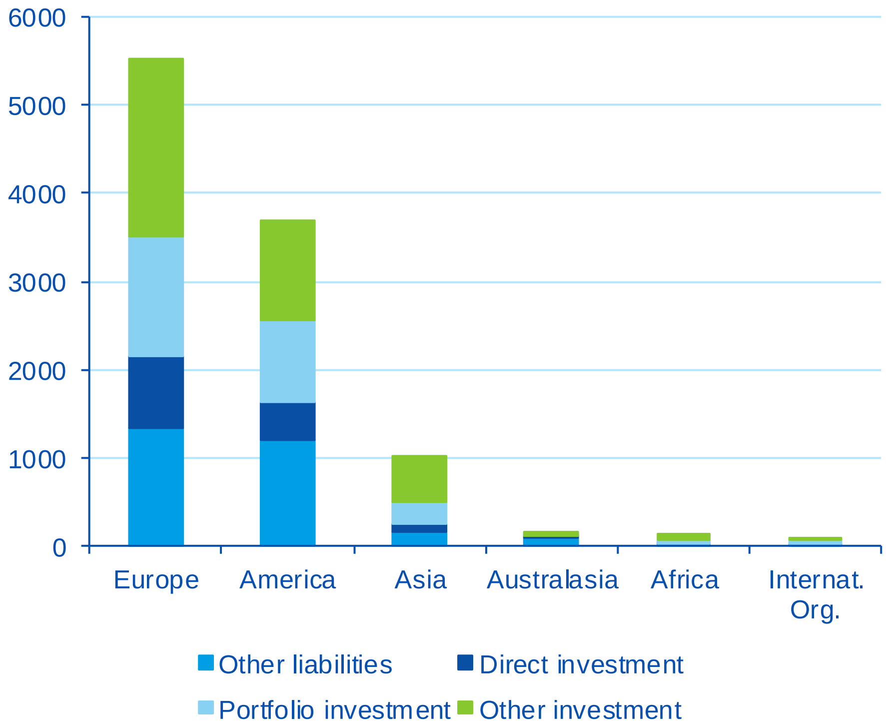
Losing the passport might lead to a reduction in financial services exports to the EU to about £ 10 billion (0,55% of GDP)

Source: BBVA Research using data from Capital Economics & The Banker

Return

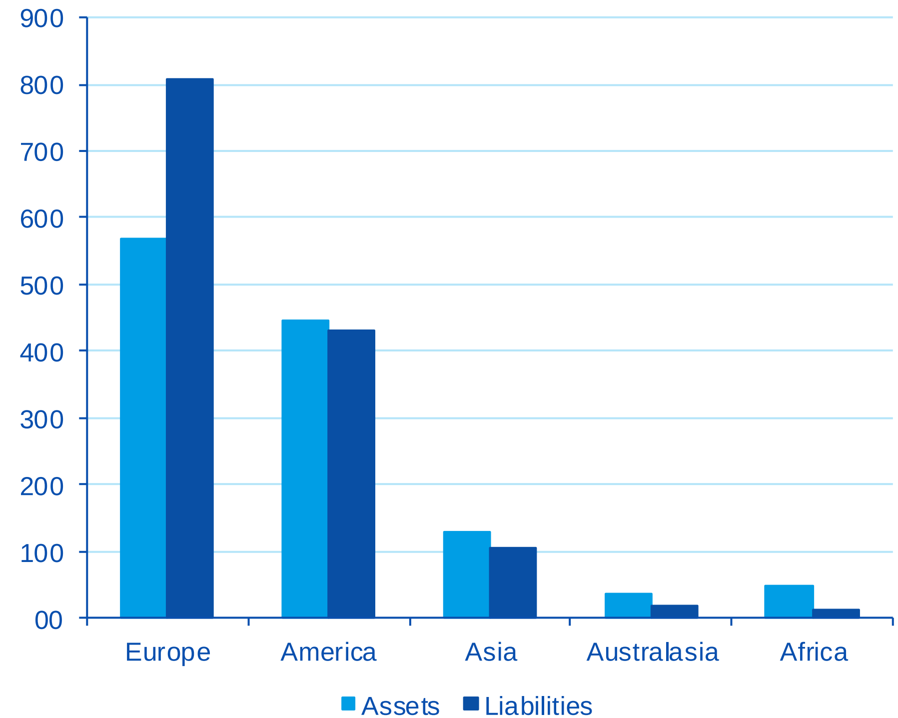
What is the foreign investment composition in the UK? Increasing exposure to EU due to crisis

UK Investment exposure by areas
(GBP bn, end-2014)



Source: ONS and BBVA Research

UK direct investment by areas
(GBP bn, end-2014)



Source: ONS and BBVA Research

Return

Which is the relative importance of the Passport for the UK? Significant consequences

£1,5 trillion assets of US banks located in UK to do business with both, EU and UK - 90% of US banks' staff in the EU is located in the UK *

"If we can't passport out of London, we'll have to set up different operations in Europe" – Dimon, JP Morgan

51% of all EU MiFID firms are located in the UK

2079 UK firms have applied for the MiFID passport (closest follower Cyprus with 148)

Source: IIF, The Financial Times and EBA
* Unclear the proportion of those resources devoted to operations with the EU (outside UK), but suggestive of the importance of the Passport

Is there any alternative to the Passport for the UK? Third country regimes, but not for the long run

- **Grants access to the EU market for non-EU firms**, mitigating the adverse consequences of losing the Passport
- “It leads to considering certain services / products / activities of third countries’ firms as acceptable for the various regulatory purposes in the EU”
- **Condition**: home country has an **EQUIVALENT** regime - The UK would have to demonstrate that its **regulatory framework is equivalent to that of the EU** for each individual directive
- **The Commission** (with technical assistance of EBA, ESMA or EOIPA) **assesses the equivalence**, and makes a formal decision via a Delegated Act (**European Parliament or Council might object**)

But this system has some drawbacks

- **Does not cover all services** provided by the Passport (i.e. those provided by CRD - deposit taking, lending, financial leasing, payment services…)
- The **UK framework would have to mirror any change in the EU** regulatory landscape without any saying on it
- Equivalence should not imply an additional burden in the short run, **but it would not be a long term solution**

How would Central Counterparties (CCPs) react to Brexit? They might need to reallocate after Brexit

- In March 2015, the General Court of the European Union annulled the ECB's policy framework requiring CCPs to be located in the Eurozone (in favour of UK)
- In case of Brexit this would be difficult to justify:
  - "For this reason, an exit scenario would necessary mean in my view that the **euro-area authorities could no longer tolerate** that such a high proportion of **financial activities involving their currency would take place abroad**" - Christian Noyer, London, March 2016

- **Deutsche Börse and the London Stock Exchange merger** would link their clearing houses (Eurex and LHC) - The **holding company** is originally **planned to be located in London**
- Even though the groups claim that in case of Brexit the deal is still on, they are giving their shareholders the opportunity to **decide on the merge after the Referendum**
- If Brexit, **German shareholders might vote against** or demand to restructure the deal

Survey of studies on the impact of Brexit in the near term

Assumptions, calibration and short-term impact

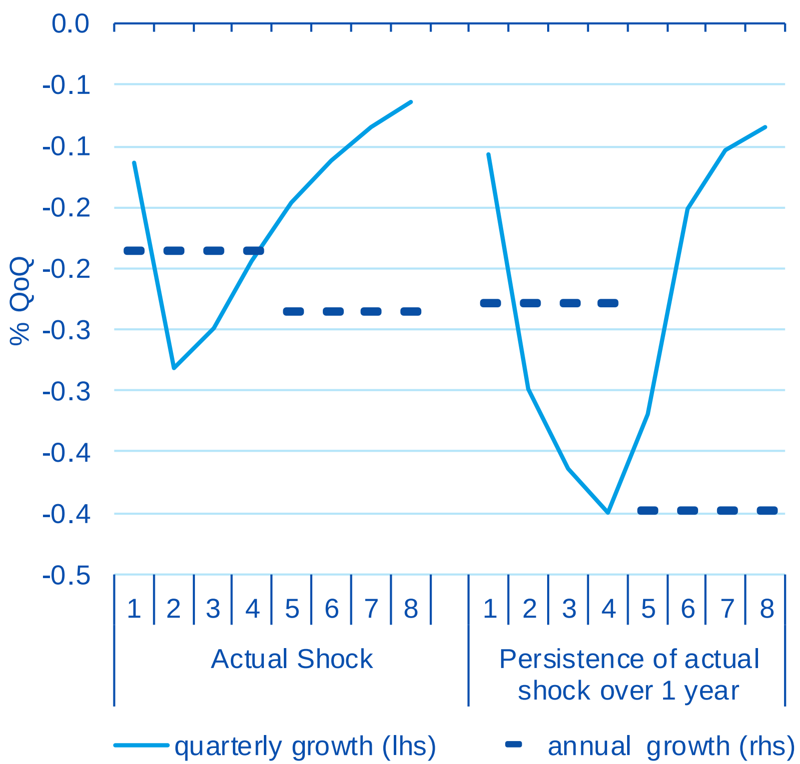
	Shocks	Magnitude	Calibration method	GDP impact
NIESR	Uncetainty	3Q16 three times level of baseline previous quater	Probability of a vote to leave the EU as implied by betting markets data was around 1/3	2.3% lower in 2018 compared to the baseline case where the UK remains in the EU
	Exchange risk premia	Sterling depreciates by around 12% in 3Q16	Shoked by 2/3 of the magnitude observed in 2008	
	Corporate and housheold borrowing spreads	Raised by 50bp for 6 quarters	Academic literature and historical data	
	Equity risk premia	Raised by 50bp for 6 quarters	Academic literature and historical data	
	Government debt term premia	Raised by 100bp for 4 quarters	Academic literature and historical data	
	Long-run effects (Transition)		Shocks on trade volumes and FDI	
OECD	Exchange risk premia	10% depeciation of sterling in mid-2016	-	1.3% lower in 2018 (3.3% in 2020) compared to the baseline case where the UK remains in the EU
	Corporate and housheold borrowing spreads	Raised by 100bp over 2H16-2017	Estimated equation lining corporate bond spreads, the Economic Policy Uncertainty Index and stock market volatility. EPUI and stock market volatility both shocked by two standard deviations to calibrate the corporta bond spread shock	
	Investment and equity risk premia	Raised by 50bp in 1H16, 150bp in 2H16-2017, and 100bp in 2018	Broadly reflects corporate bond spreads above	
	Government debt term premia	Raised by 20bp in 1H16 and then 50bp over the rest of the simulation period	-	
	Saving rate	Increased by just over 1& in 2H16	-	
	Long-run effects (Transition)	Shocks on trade volumes, net inmigration and productivity		
HM Tresury	Uncetainty	One standard deviation	Estimate a VAR to calibrate shocks on private consumption and business investment within NIGEM following a one standard deviation shock to uncertainty	3.6% lower compared to the baseline case where the UK remains in the EU
	Exchange risk premia	Yes	Calibrate to produce a 12% sterling depreciation on impact	
	Corporate borrowing spread	130bp	1 standard deviation based on historical data	
	Household borrowing spread	70bp	1 standard deviation based on historical data	
	Equity risk premia	120bp	1 standard deviation based on historical data	
	Government debt term premia	40bp	1/2 standard deviation based on historical data	
	Long-run effects (Transition)		Shocks on trade volumes, productivity and FDI	

Source: NIESR and BBVA Research

Economic policy uncertainty shocks: effects over GDP

UK GDP response to a political uncertainty shock

(pp, quarters after shock)



Source: BBVA Research from Economic Uncertainty Index

A SVAR model identified with sign restrictions has been estimated

The identified shock simultaneously and negatively affect the development of the idiosyncratic components of all three variables that enters in the model (EPU, spread and industrial confidence)

Therefore, our SVAR model identifies a shock of economic policy uncertainty, but also it impacts on financial variables

Other studies consider not only uncertainty, but also financial shocks and a transitional effect to a new steady state

Return

BBVA | RESEARCH

June
2016

The Economic Consequences of Brexit