Brexit

Macroeconomic implications

for the UK, the world economy & Greece

Eurobank Economic Research

April 2017

Key findings & summary of views

1. On 29 March 2017, British Prime Minister Theresa May activated the Article 50 of the Lisbon Treaty, setting in motion the process for the country's withdrawal from the EU. The Article sets out several negotiation phases that require the involvement of the European Commission, the Council of the European Union and the European Parliament.

2. Withdrawal negotiations should address a wide range of issues related to the UK withdrawal itself and a new association agreement between Britain and the EU. Brexit negotiations may create rifts and ambiguities for which no clear precedent exists. The Article 50 has never been tested as no country has ever withdrawn from the EU after the Lisbon Treaty came into effect.

3. Against this background it is questionable whether a comprehensive deal will be reached within the two-year period foreseen by the EU Treaty or more time will be needed for the two sides to conclude talks. A negotiation extension could be granted subject to the unanimous approval by the remaining 27 EU Member States.

4. The UK economy defied expectations for economic stagnation in the six months following the EU referendum. Nevertheless, after the activation of Article 50, the formal Brexit process may start to have a more visible effect on the real economy as domestic businesses and consumers will need to adjust their behavior to a long period of increased uncertainty over the terms of the UK withdrawal and a new association agreement between Britain and the EU.

5. Empirical studies suggest that by leaving the EU, the UK will face potential impacts through certain channels including, inter alia: (i) external trade with the EU and other economies; (ii) inward FDI flows; (iii) immigration and labor market; (iv) productivity effects via trade, migration and regulation; and (v) EU budget contribution.

6. The timing and the content of a new association agreement between Britain and the remaining EU members as well as the trade agreements that the UK will have to renegotiate outside the EU (so as to prevent its trade relationships with these countries defaulting to WTO rules) will determine, to a large extent, the medium- and long-term macroeconomic effects of Brexit on the UK, the remaining of the EU countries and the rest of the world.

7. There is currently a wide dispersion of views as regards both the potential direction and the size of such effects. Yet, as regards the UK economy, most studies predict a permanent output loss as a result of Brexit, though there are a few assessments that point to potential net gains.

8. The main economic arguments in favour of Brexit could be summarized as follows: (i) the UK will be freed from the obligation to contribute to the EU Budget, (ii) forfeiting the obligation to abide by the rules and regulations imposed by the Single Market would allow the UK to shed burdensome EU regulation that is understood to restrain domestic economic activity, and (iii) the UK will regain the flexibility to strike more favourable bi-lateral trade agreements with third (non-EU) countries by, for instance, reducing bi-lateral trade tariffs and other non-tariff barriers.

9. Although it is difficult to quantify the impact on the UK economy from the country's membership in the EU, most empirical studies point to an overall benefit stemming primarily from the passporting rights that the UK's financial services sector enjoy and secondarily from significant merchandise trade linkages between the two regions.

10. As regards the potential ramifications for the rest of Europe, it seems that Belgium, Cyprus, Ireland, Luxemburg, Malta and the Netherlands are among the EU-27 economies that are most vulnerable to Brexit risks. Among others, these economies have developed significant bidirectional migrant flows as well as strong trade and investment ties with the UK, especially if measured as a percentage of their respective GDP. Furthermore, some of them, due to their role as regional financial centers, have accumulated sizeable claims against UK financial institutions.

Key findings & summary of views

11. As regards the Central, Eastern and Southeastern European (CESEE) economies, Brexit is likely to be a net negative for the region from a macroeconomic and market sentiment standpoint. Yet, the overall impact is unlikely to amount to anything resembling a full-blown external shock. This is because the region's direct trade and FDI ties with the UK are modest, while there are no significant banking sector linkages. Given that the UK is among the largest contributors to EU budget, a renegotiation of the EU structural and cohesion funds allocation in 2014-2020 for the CESEE recipient economies appears to be one of the biggest concerns.

12. With respect to bilateral trade linkages with the UK, Greece's trade balance in services stood at a surplus of €2.7 bn (2015 data). The respective figure for the goods sector was a deficit of €153.4 mn. Overall, in 2015 the trade balance of goods and services between Greece and the UK was €2.5 bn (surplus) or 1.4% of GDP. Based on the average share in domestic GDP of total Greek exports to the UK over the past five year period, the first-round effect of a hypothetical 1 percent decline of the nominal growth of Greece's goods and services exports to the UK would reduce Greek nominal GDP growth by c. 0.03 percentage points (and vice versa).

13. In a similar vein, a hypothetical deterioration of the growth performance of the other EU economies triggered by Brexit could negatively affect Greece's trade flows. Ceteris paribus, the first-round effect of a 1% decrease in the growth rate of Greek exports of goods and services to the EU-27 could lead to a drop of Greece's nominal GDP growth rate by 0.15 percentage points (and vice versa).

14. Tourism and shipping constitute the two main sectors of the Greek economy that are likely to be affected by Brexit. The direct contribution of tourism to Greece's GDP and employment in 2016 is estimated at 7.5% and 11.5% respectively. The UK ranked second in terms of tourists arrivals and receipts. The main channels through which Brexit might affect the tourism sector in Greece include: (i) reduced real household incomes in the UK as a result of e.g. permanent output loses due to Brexit along with higher inflation and exchange rate depreciation, and (ii) changes in the various processes and costs of travel (e.g. reintroduction of visas for UK residents).

15. For the shipping sector, whose direct contribution to GDP was ca 3.5% in 2015, the main effect could come from reduced demand for shipping services in the event of a significant disruption in global trade caused by Brexit.

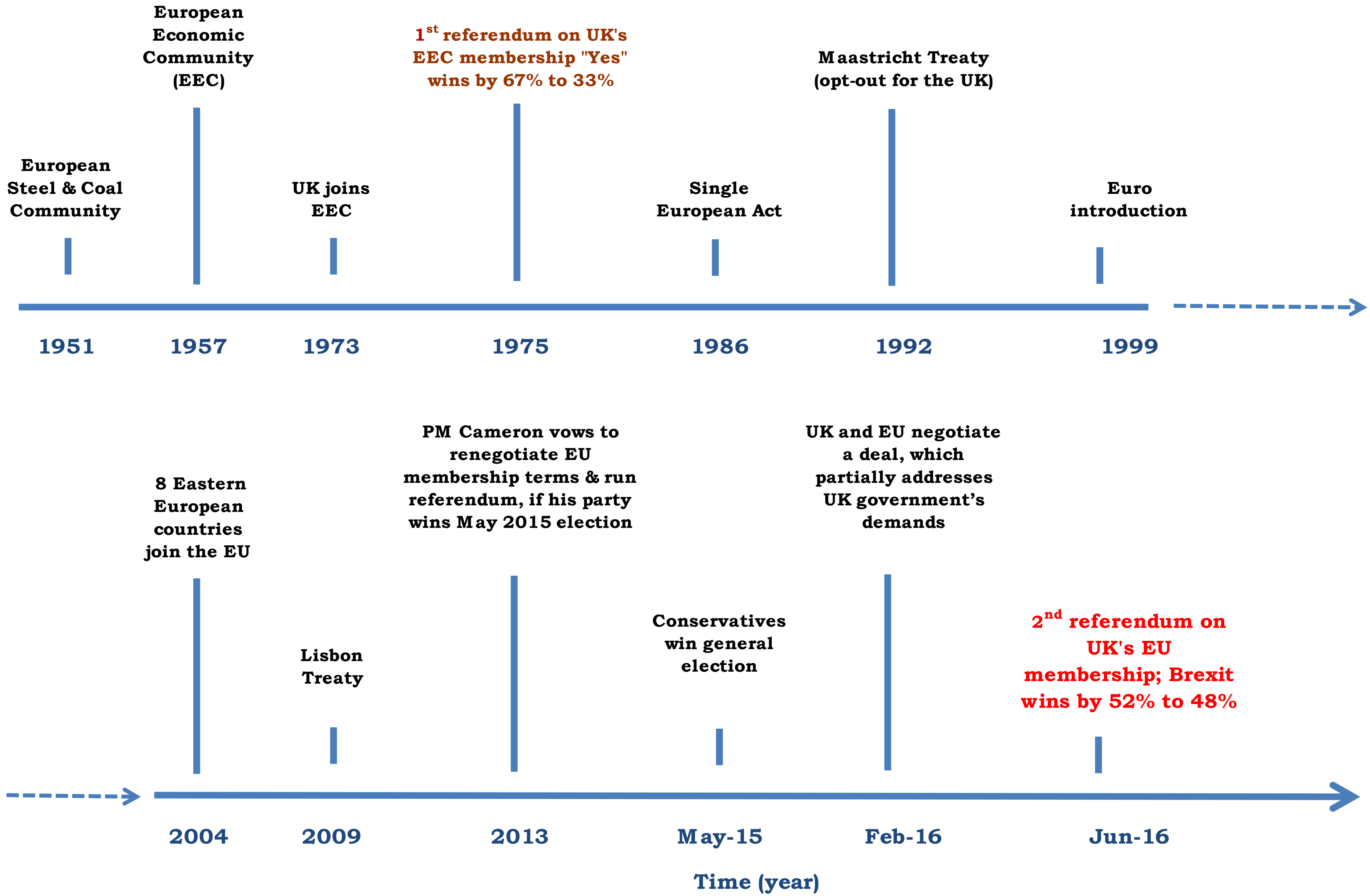
16. Brexit might have a negative impact on the size of the current EU Budget even if the final agreement requires some kind of contribution from the UK. There is thus a risk regarding the available funds for Greece (under EU's Common Agricultural Policy and cohesion policies), which currently stand at ca. €35bn for 2014-2020.

Section 1

UK's EU membership, the road to the referendum and the process of negotiating withdrawal & a new association agreement

UK's EU membership: partly in and partly out

Favoring single market and enlargement but opting-out from euro & Schengen



Source: HM Treasury (2016), EU Commission, Eurobank Economic Research

Brexit calls gain momentum after the outbreak of the euro area crisis

Daily Express the first mainstream national newspaper to support the case (Nov. 2010)


DAILY EXPRESS

THE WORLD'S GREATEST NEWSPAPER

express.co.uk

SATURDAY JANUARY 8, 2011 FREE

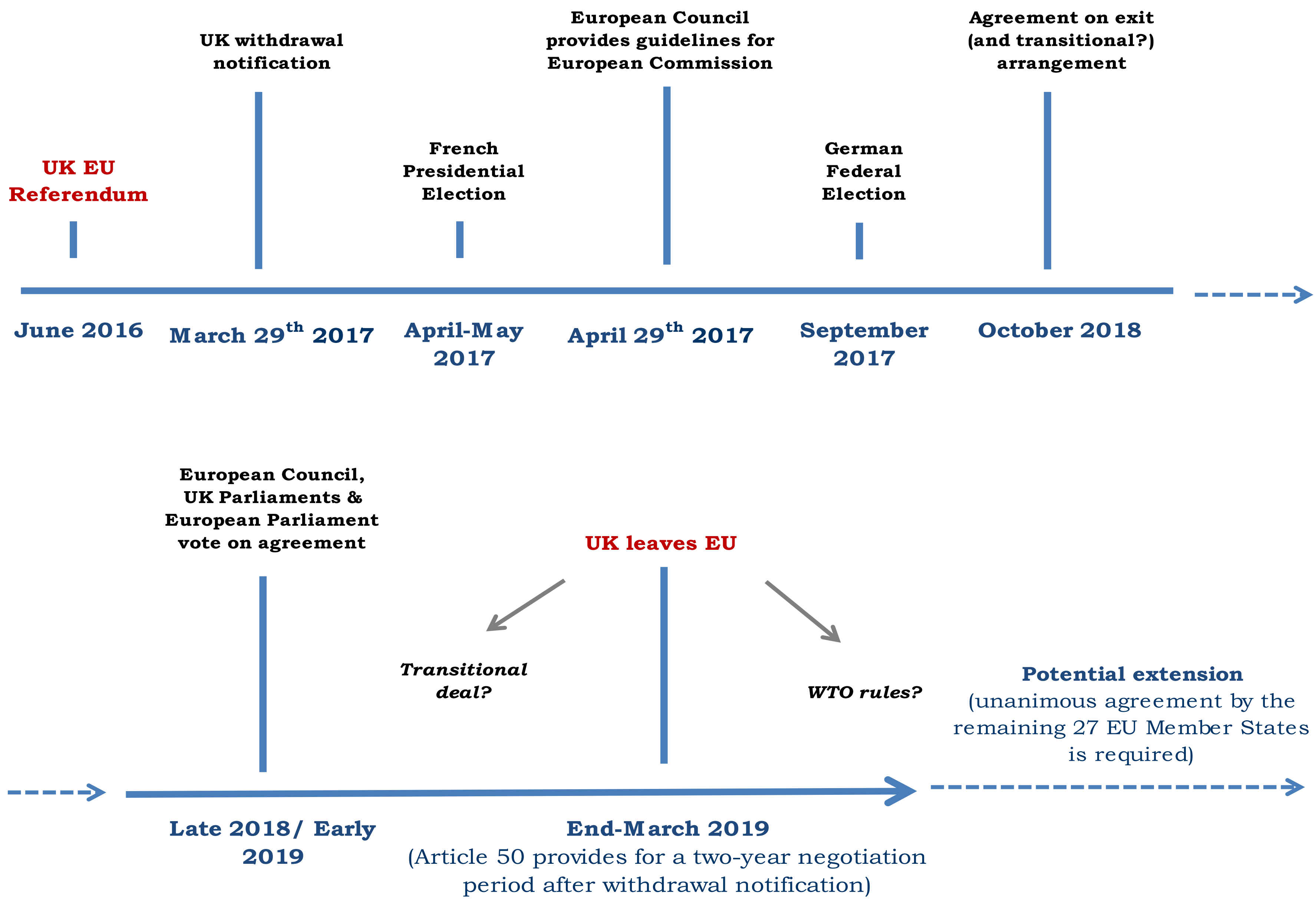
SPECIAL EDITION

GET BRITAIN OUT OF THE EU

Source: Daily Express

Negotiations may well take longer than 2 years

Unless the UK seeks no special access to the single market



Source: HM Treasury (2016), EU Commission, Eurobank Economic Research

Section 2

Upcoming negotiations on withdrawal &
future association agreement between Britain and EU

A tradeoff between independence and degree of access
to the Single Market

Process for negotiating UK's withdrawal from the EU

Article 50 of the Treaty of the European Union (TEU)

UK notifies European Council of its withdrawal intention

↓

The Council (minus the UK) agrees by consensus the guidelines for the Commission to negotiate withdrawal agreement

Article 50 does not clarify whether exit/new relationship talks should be conducted simultaneously or consecutively (matter of negotiation)

↓

Possible further stage

The European Commission submits recommendations to the European Council and the Council (minus the UK), by enhanced qualified majority voting, authorises the opening of negotiations & appoints negotiator

↓

European Commission undertakes exit negotiations

↓

European Parliament concents to the withdrawal agreement by a simple majority

UK MEPs may be allowed to vote

↓

European Council (minus the UK) agrees to withdrawal agreement by enhanced qualified majority

No single Member State could veto the deal; at least 20 out of 27 Member States, representing 65% of EU- 27 population should vote in favour

Source: HM Treasury (2016), Eurobank Economic Research

Process for negotiating a new association agreement between Britain and EU

Under the Treaty of the European Union (TEU)

European Commission submits recommendations to the European Council

↓

The Council agrees the opening of negotiations, and appoints negotiator/special committee

Voting procedure in the Council depends on what the envisaged agreement covers but a mixed agreement would likely need unanimity*

↓

European Commission undertakes the negotiation

In conjuction with negotiator/special committee

↓

European Parliament is either consulted on the new agreement or has to give its consent, by a simple majority

*Depending on what the agreement covers e.g. whether it is an agreement focused solely on trade or whether it is a mixed agreement**

↓

European Council consents to the new agreement

Voting procedure in the Council depends on what the agreement covers, but a mixed agreement would likely need unanimity*

↓

Individual Member States ratify the new agreement in accordance with their national procedures

*If it is a mixed agreement**

* Mixed agreement is an agreement covering a wide range of UK/EU cooperation issues beyond trade that contains elements of both EU competence and Member State competence

Source: HM Treasury, (2016), IMF (2016), House of Commons (2017), Eurobank Economic Research

Negotiations will need to address a wide range of issues related to: *the withdrawal itself and a new association agreement between Britain and EU*

- **Article 50 does not set out explicitly what issues need to be resolved**
- **Furthermore, there is no precedent to draw on**

- Settlement of UK's EU assets and liabilities ("Brexit bill")
- Status & entitlements of EU nationals in the UK (and vice versa)
- Terms of the relationship between Northern Ireland and the Republic of Ireland (*e.g.*, cross border co-operation and trade, withdrawal of structural funds)
- A comprehensive framework for UK-EU trade
- Financial services "passporting" arrangements
- UK's relationships with EU regulatory bodies and agencies
- The status of police and judicial cooperation
- The status of UK's participation in Common Foreign and Security Policy missions
- The location of former EU powers between UK and devolved governments

"Reaching an agreement on such a wide range of issues, with a large number of negotiating partners, each of who would seek to defend their interests, should be expected to be difficult and involve potentially unpalatable trade-offs".

HM Government, February 2016 (The process for withdrawing from the European Union)

Source: HM Treasury, (2016), Eurobank Economic Research

Existing trade arrangements with the EU

A tradeoff between access to the single market and independence

Low independence — **High market access**

	Ability to ignore EU rules	Fiscal contribution to EU	Independent immigration policy	Independence to negotiate trade deals with non-EU countries	Ability to influence EU rules	Access to Single Market	Passporting
EU membership	Very limited	Yes	No	No	Yes	Full	Full
European Economic Area (EEA) Norway, Iceland, Liechtenstein	Limited	Yes	No	Yes	Limited	High	High
European Free Trade Association (EFTA) Switzerland	Partial	Yes	No	Yes	No	Medium	No
New UK-EU Free Trade Agreement (FTA)	?	?	Yes	Yes	No	?	?
WTO rules	Yes	No	Yes	Yes	No	No	No

High independence — **Low market access**

Source: OECD (2016), IMF (2016) CER (2016), Eurobank Economic Research

Section 3

The economic effects of Brexit

Transmission channels through which it may affect the UK and the world economy

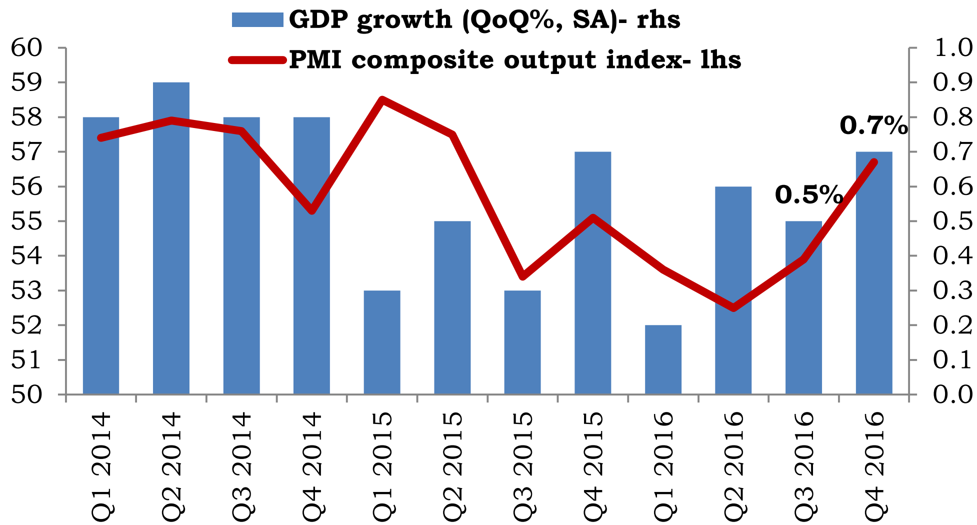
	Purported benefits from EU membership	Purported benefits from Brexit
Trade	Access to Single Market has boosted UK's output EU trade agreements with non-EU partners more beneficial for the UK than those conducted by the UK itself	Ability to unilaterally cut import duties & establish trade agreements with more prosperous countries/regions UK could quickly negotiate a trade agreement with the EU, on better terms
Investment	Access to Single Market has rendered UK an FDI magnet Brexit could force some firms to relocate to other EU countries to maintain full access to the Single Market	Removal of burdensome EU regulation could boost UK's business investment
Immigration	Immigration has increased UK's labor force and thus, potential GDP growth and fiscal revenue	Tougher restrictions on the inward flow of EU migrants could improve employment prospects and secure higher wages for Britons
Productivity	EU membership has boosted UK firms' productivity (benefits from external trade) Limited scope for further deregulation; important regulation (e.g. financial and environmental) would likely be retained after UK leaves the EU	Freedom from EU regulation would increase productivity UK's financial sector would benefit from removal of burdensome EU regulation
Fiscal	Significant concessions on contributions to the EU budget and migrant benefits have already been granted to the UK Contributions to the EU budget is the price to pay for access to the Single Market	UK will save from not having to contribute to the EU budget and from not paying benefits to foreigners

Source: IMF (2016), CER (2016), Eurobank Economic Research

The immediate period following the UK's EU referendum

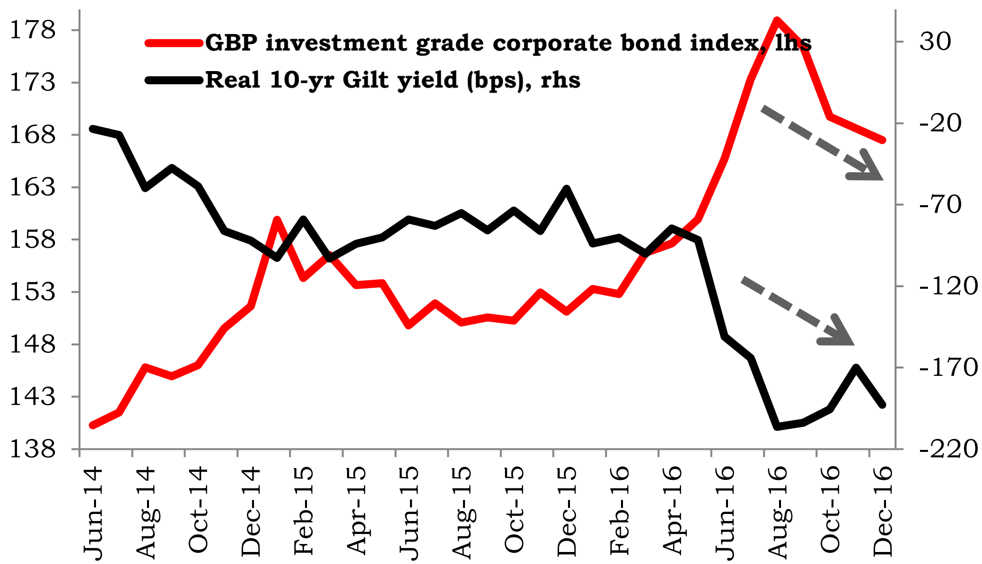
Expectations for economic stagnation in H2-16 proved overly pessimistic…

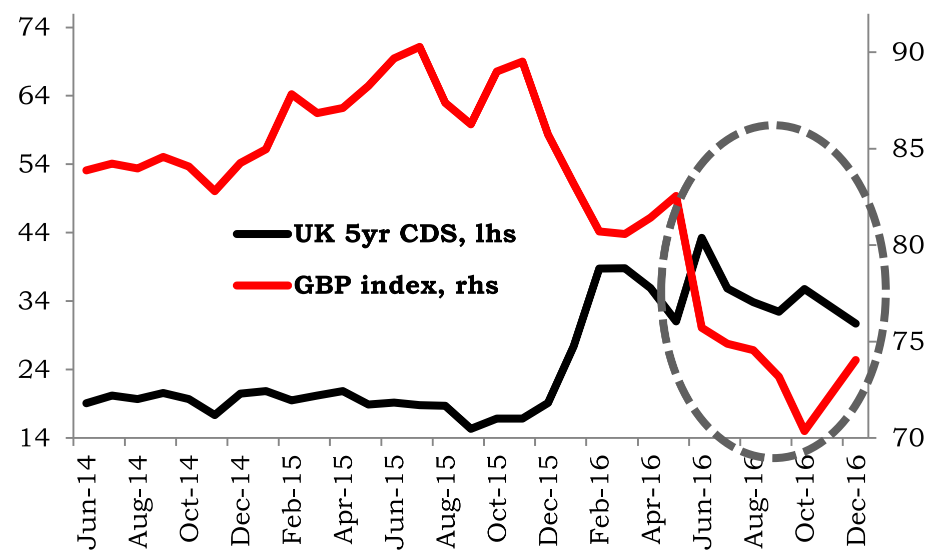
Economy remarkably resilient to Brexit uncertainty in H2 2016



- **The UK economy has defied stagnation expectations in the immediate aftermath of the EU referendum**
  - ✓ BoE's swift policy response
  - ✓ Postponement of Article 50 activation to 2017
  - ✓ Reduced political uncertainty
  - ✓ GBP's post-referendum depreciation

Easier financial conditions & weaker sterling helped to absorb post-referendum uncertainty



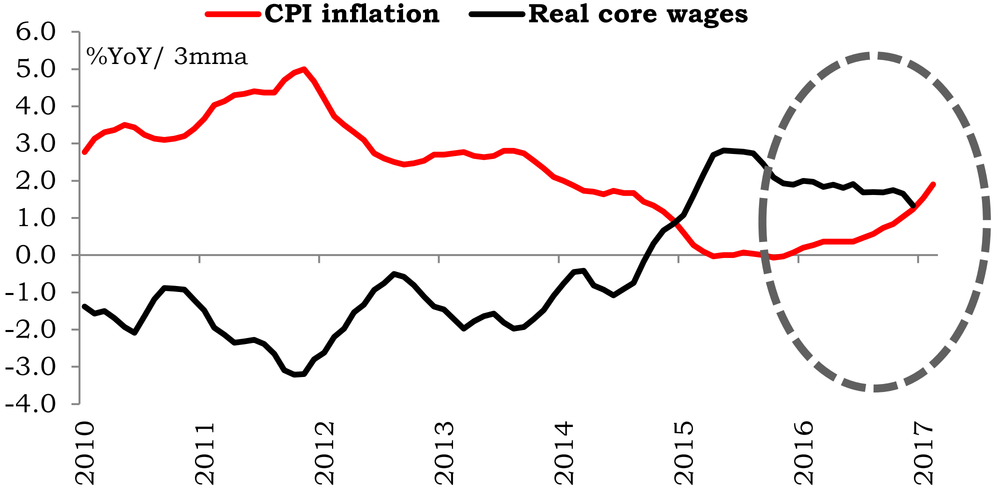


Source: Bloomberg, Eurobank Economic Research

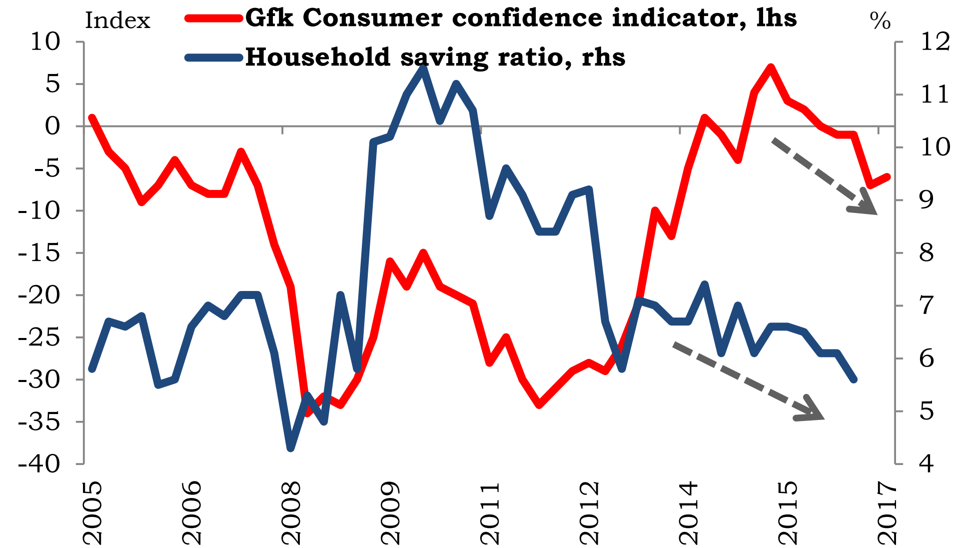
The immediate period following the UK's EU referendum

…but Brexit impact may become increasingly visible after Article 50's activation

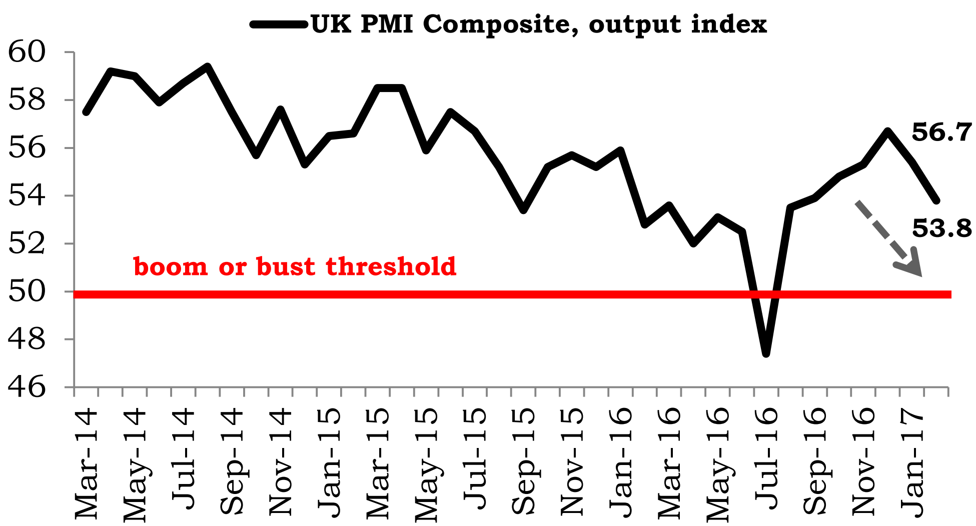
Sterling depreciation has boosted inflation, undermining real wage growth



Consumer confidence negatively affected by slowing real wage growth; saving rate close to record lows



UK PMI: has post-EU referendum rebound come to an end?



- **Brexit impact may become more visible following Article 50's activation**
  - ✓ Behavior of UK businesses & consumers will need to adjust to a prolonged period of increased uncertainty over the terms of the UK withdrawal and the new association agreement between Britain and the EU

Source: OECD, Bloomberg, Eurobank Economic Research

Most studies predict a permanent UK output loss due to Brexit

Direct and indirect effects of reduced trade with the EU; lower labor productivity

Source	Brexit effect on the UK economy
Bertelsmann Stiftung (2015)	-3.0% to -0.6% of per capita GDP (static estimate) -14.0% to -0.2% of per capita GDP (dynamic estimate)
Dhingra et al. (2016a, 2016b)	-2.6% to -1.3% on incomes (static long-run trade effects) -9.5% to -6.3% on incomes (dynamic long-run trade effects)
HM Government (2016c, 2016d)	-6.0% to -3.6% of GDP (short-run) -9.5% to -3.4% of GDP (long-run)
Mansfield (2014)	**-2.6% to +1.1% of GDP** **+0.1% of GDP (most likely scenario)**
NIESR (Baker et al., 2016, Ebell and Warren, 2016)	-2.3% of GDP (short-run) -7.8% to -1.8% of GDP (long-run)
OECD (2016)	-3.3% of GDP (medium-term, up to 2020) -7.7% to -2.7% of GDP (long-run, up to 2030)
Open Europe (2015)	-2.2% to +1.6% of GDP (Politically realistic range: -0.8% to +0.6% of GDP)
Ottaviano et al. (2014)	-1.1 to -3.1% of GDP
Oxford Economics (2016)	-3.9% to -0.1% of GDP (long-run)
PwC (2016)	-5.5% to -3.0% of GDP (medium-term) -3.5% to -1.2% of GDP (long-term)
Minford (2016)	**+4.0% of GDP**

Source: IMF (2016), Eurobank Economic Research

The effect of Brexit on selected & export oriented sectors of the UK

Eurobank

Sectors likely to be affected by Brexit sum up to ca 31.1% of GVA in UK (2014 data)

Manufacturing Sector

- *Manufacturing Sector (excluding Construction but including Aerospace, Automobiles, Pharmaceutical & Energy) accounts* ***for 10.2% of GVA*** *in UK (EU-28: 15.5%).*
- ***Short term risks****: Uncertainty over the terms of Brexit may have a negative effect on the sector (e.g. postpone investment decisions and FDI)*
- ***Longer term risks****: Imposition of tariffs, decreased R&D spending, lower FDI and a trade agreement less efficient than the current EU-28 or EEA arrangements may adversely affect the sector*

Agro Sector

- *Agro Sector accounts* ***for only 0.8% of GVA*** *in UK (EU-28: 1.5%)*
- ***Short term risks****: EU CAP subsidies a secondary issue but still important for those that receive them*
- ***Longer term risks****: Impositions of tariffs may have a negative effect on domestic (via imports) & exported goods*

Financial & Insurance Sector

- *Financial & Insurance Sector accounts* ***for 7.5% of GVA*** *in UK (EU-28: 5.4%)*
- ***Short term risks****: Uncertainty over the terms of Brexit may have a negative effect on the UK's financial sector (e.g. increased funding costs for UK banks)*
- ***Longer term risks****: Financial passport if abolished may hurt the sector's activities in EU-27*

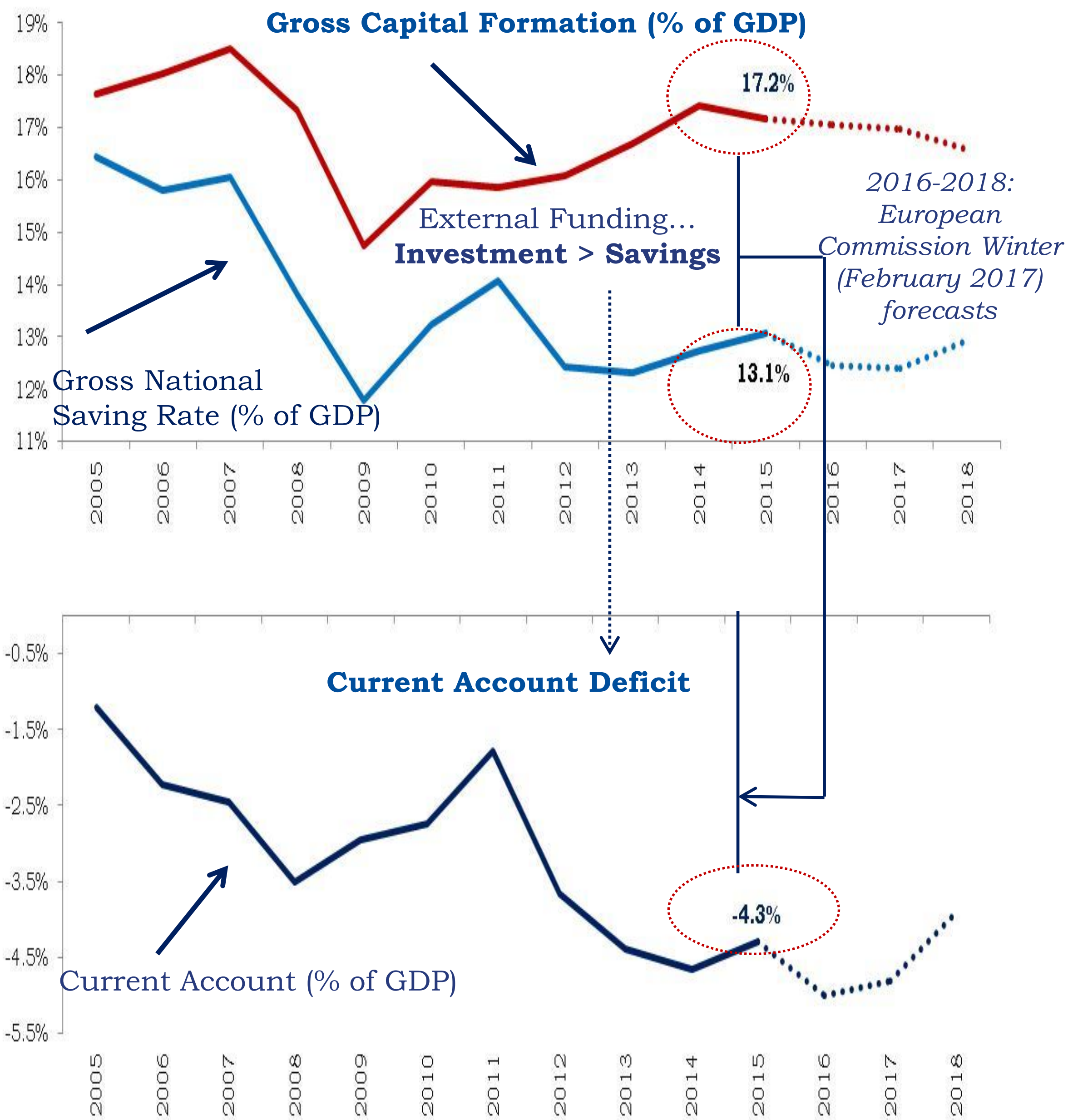
Real Estate

- *Real estate accounts* ***for 12.6% of GVA*** *in UK (EU-28: 11.6%)*
- ***Short term risks****: Uncertainty might cause a sudden stop in real estate related flows*
- ***Longer term risks:*** *Deflation of commercial real estate prices as a result of the firms relocation*

Source: Eurostat, IMF, Eurobank Economic Research

UK's large CA deficit requires substantial inflows for its financing

Or else, a slowdown in domestic demand (investments), an increase of national savings and/or a permanent exchange rate depreciation to restore external equilibrium

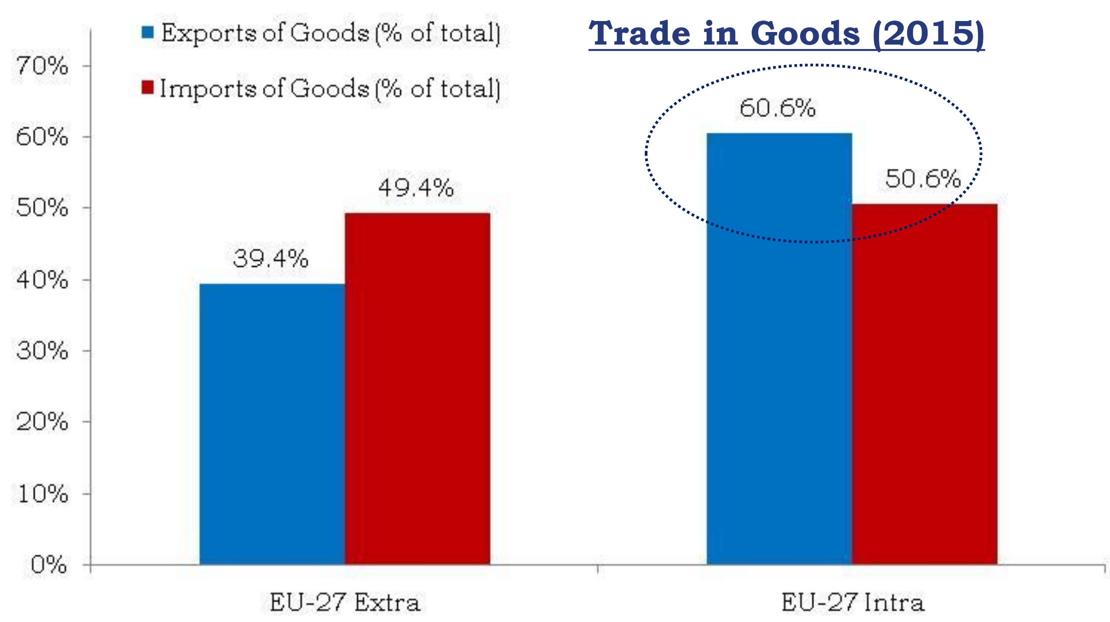


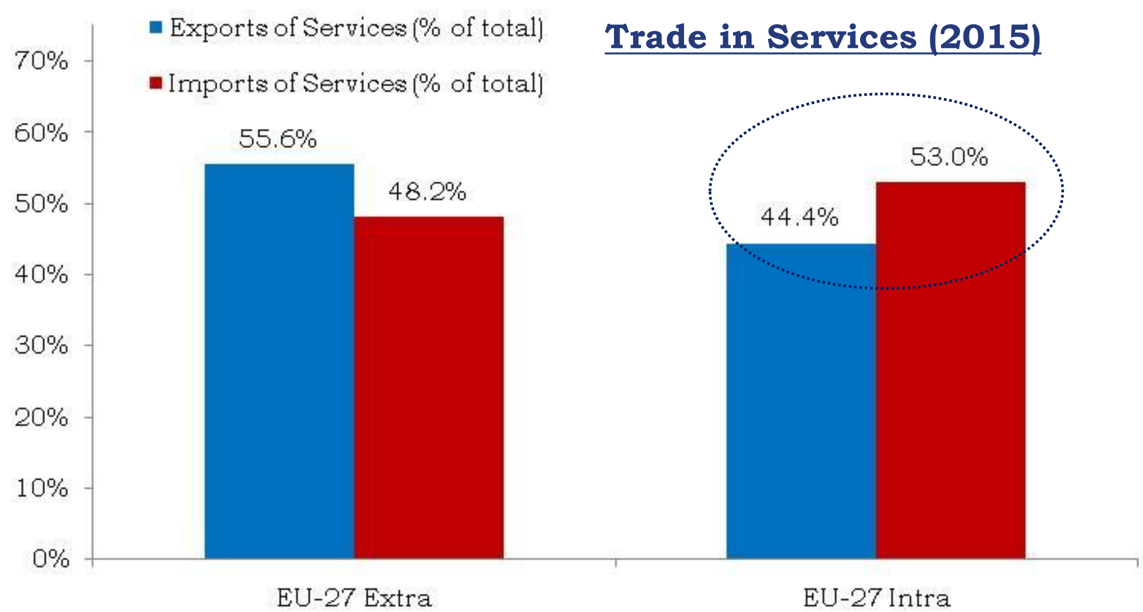
- The UK's current account deficit has increased substantially in recent years; it stood at 4.4% of GDP in 2016, not far from a multi-year peak of 4.7% of GDP recorded in 2014
- Persistently high external deficits would be difficult to sustain in an environment of reduced inward direct and other investment in the post-Brexit era (potential downside risks for the sterling)
- Moreover, refinancing of government debt (~90% of GDP) could potentially come under pressure in case of significant sentiment deterioration caused by a delay to reach an agreement, especially taking into account that a large part of it (c. 25%) is currently held by foreign investors

Source: European Commission – AMECO Database (February 2017), Eurobank Research

External Trade

The UK has traditionally had strong trade linkages with the rest of the EU





- The EU-27 is the UK's largest trading partner in goods and services

- If the UK were to leave the EU without first securing a new trade arrangement, its trade relations would be governed by WTO rules

- Under such a scenario, the UK would be free to reduce import tariffs currently imposed under the EU customs union's terms

- However, besides higher administrative costs for UK firms, export tariffs and non-tariff barriers for UK exports to the EU would increase. Exports to the EU would have to be subject to the EU's Most Favoured Nation (MFN) tariff regime compared to the zero tariff policy currently applied due to the UK's EU membership

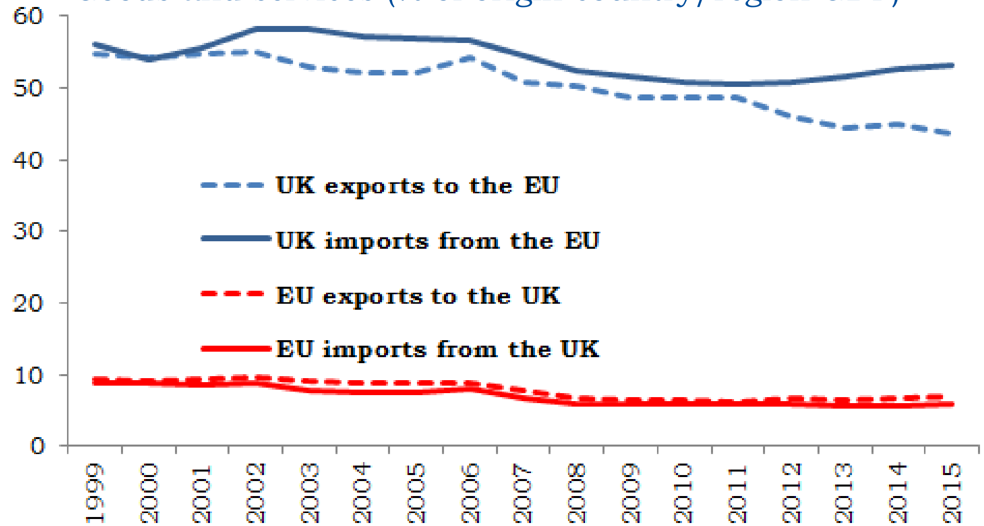
Source: Eurostat, Eurobank Research

External Trade

The EU is much more important for the UK economy than the UK for the EU

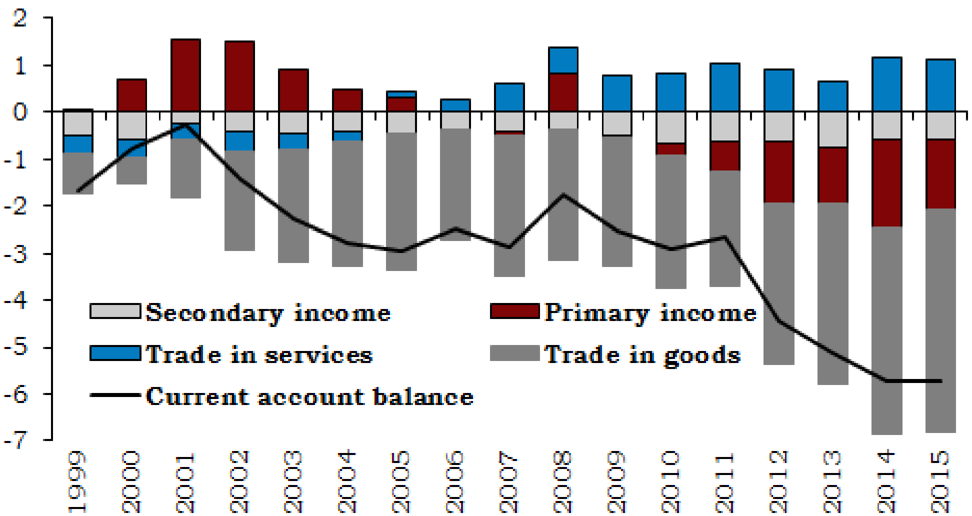
Export & Import market shares between the UK and the EU

Goods and services (% of origin country/region GDP)



UK Current account balance with the EU

(% of GDP)



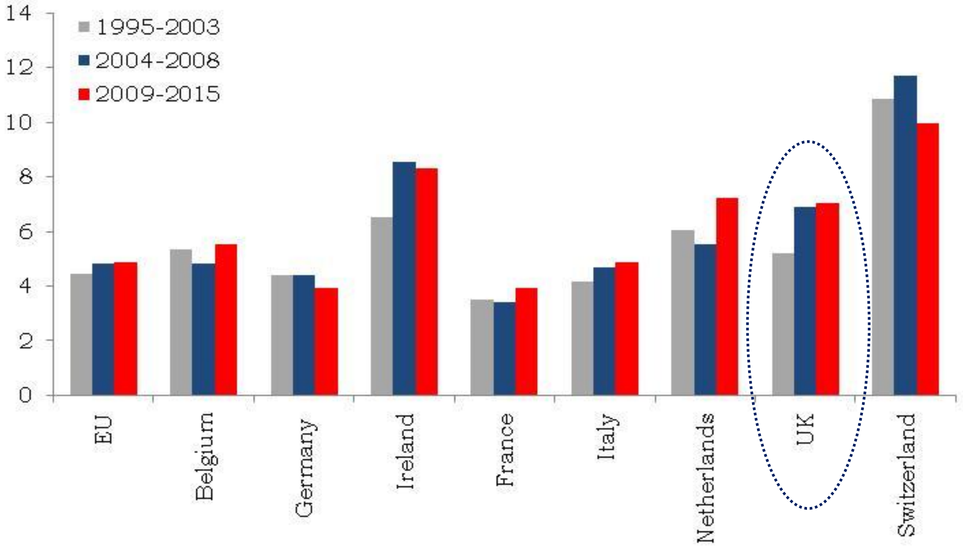
- While the total value of the UK's exports to the EU-27 represents 13% of the UK's GDP, the value of exports from EU-27 to the UK accounts for just 3.0% of EU-27 GDP
- The UK runs a current account deficit with the rest of the EU, but a current account surplus with non-EU countries
- The UK's current account deficit with the EU is mostly in goods trade, while it runs a surplus in services and particularly in financial services
- Empirical studies suggest that losing full single market access, the UK will likely experience a fall in trade income; however, there is no conclusive evidence as regards the potential degree of deterioration
- A key issue is whether the UK will be able to seal a bespoke agreement with the EU. Whether it will manage to rapidly come to new trade arrangements with non-EU economies is also important especially as the UK may not be able to ensure continuity of existing trade agreements that have been negotiated by the EU
- The content of these arrangements compared to those under its EU membership, is also crucial

Source: Office for National Statistics, OECD, IMF, Eurostat, Eurobank Economic Research

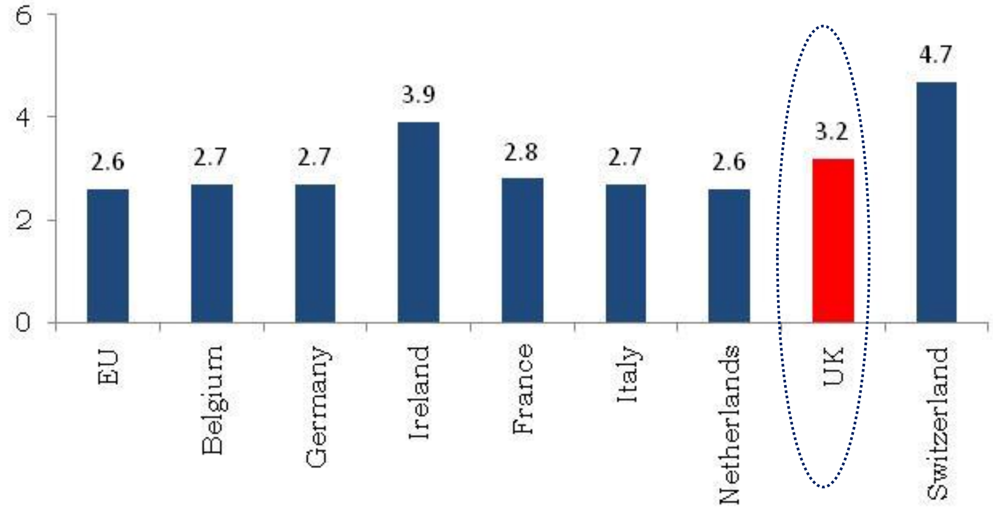
Financial sector: a key component of the UK economy

Highly susceptible to loss of access to the single market (passporting)

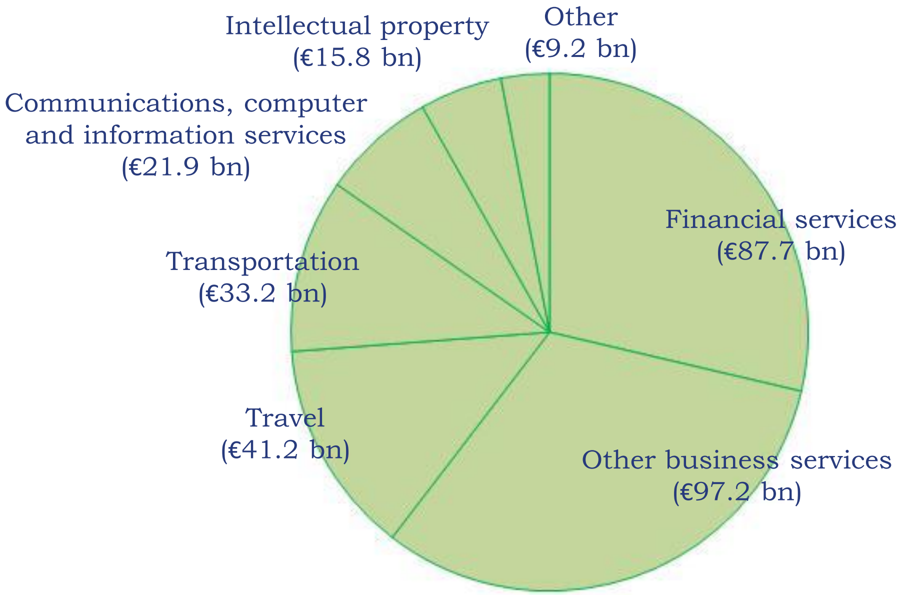
Financial & Insurance Activities
(share of total gross value added, %)



Employees in Financial & Insurance Activities
(share of total employment, %)



UK Services Exports by category, 2015



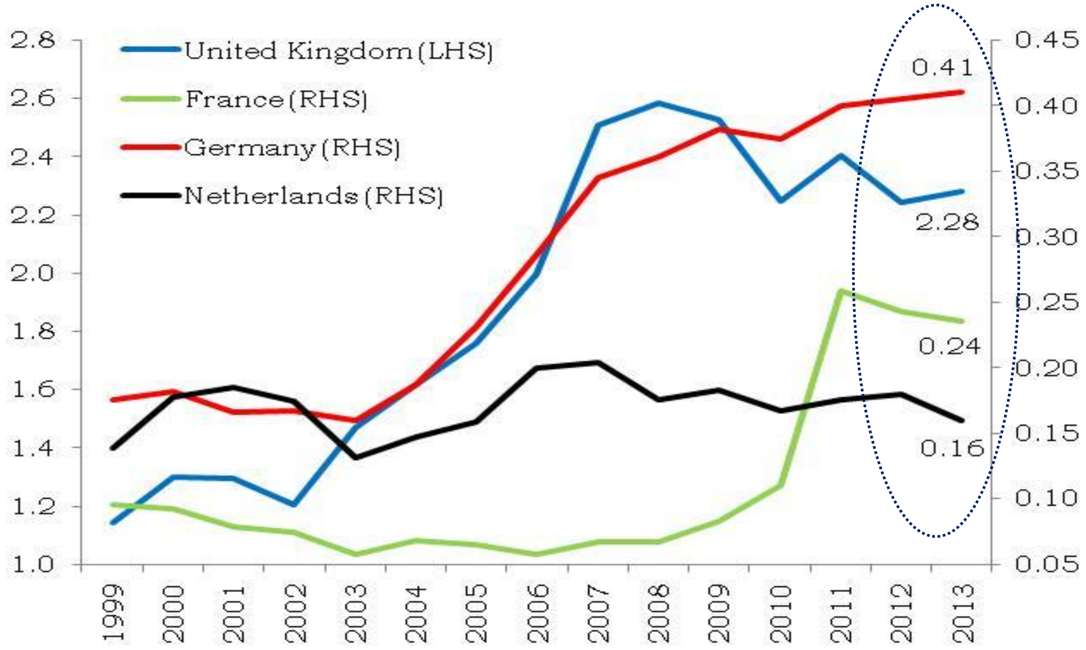
- The UK financial sector generates about 8% of national income, c. 50 percent above the EU average
- The UK economy employs proportionally more people in the financial sector than other major EU economies
- UK financial and insurance services account for over a quarter of the UK's total services exports

Source: IMF, Office for National Statistics, Eurostat, Bloomberg, Eurobank Economic Research

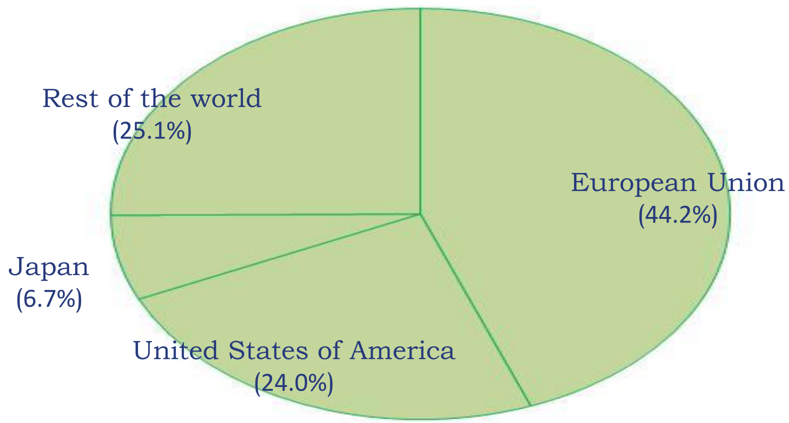
Financial services: a key component of the UK economy

Highly susceptible to loss of access to the single market (passporting)

Overall trade in financial services (% of GDP)



UK: Share of Financial Services Exports, 2015 (%)



- UK trade in financial services as a percentage of GDP has risen significantly since early 90s, much faster than in other major EU economies. The largest share of financial services exports goes to the EU, accounting for nearly half of total financial services exports

- The UK's financial sector has grown considerably in recent years owing much to EU passporting rights provided to UK-based financial services companies due to the country's EU membership. Under this scheme, such firms are authorized to offer services or set up branches in any other EU state across borders without the obligation to meet the different regulatory requirements of each individual country where they want to set up business

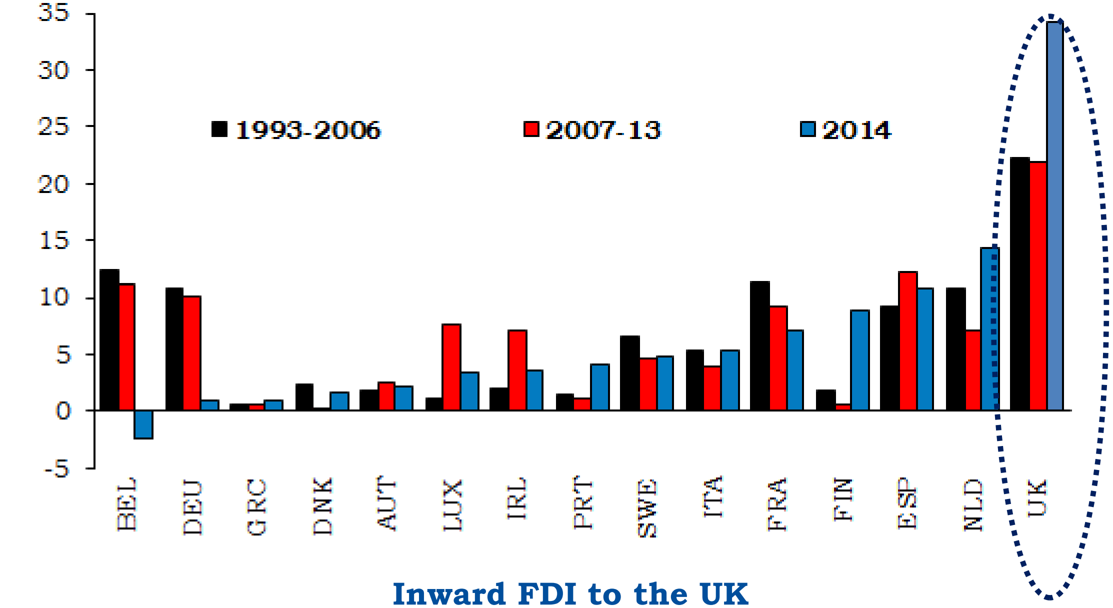
- Consequently, the UK exit from the EU and loss of the EU passport could adversely affect the financial sector. Amid concerns over higher costs, regulatory uncertainty and reduced market access to the EU internal market, a number of UK firms may decide to relocate elsewhere in the EU in order to retain passporting rights and full access to the single market

Source: OECD, Eurostat, Office for National Statistics, Eurobank Economic Research

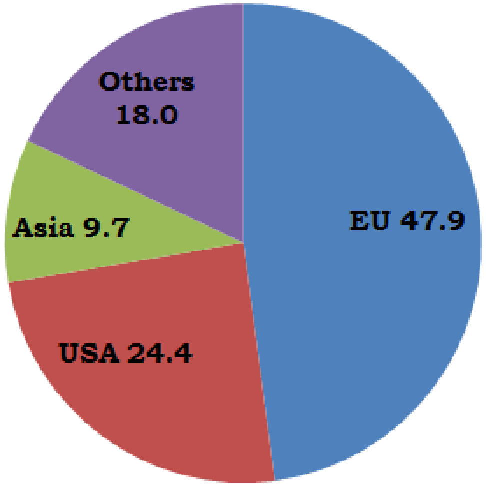
The UK economy is highly dependent on inward FDI

Much of this comes from other EU countries

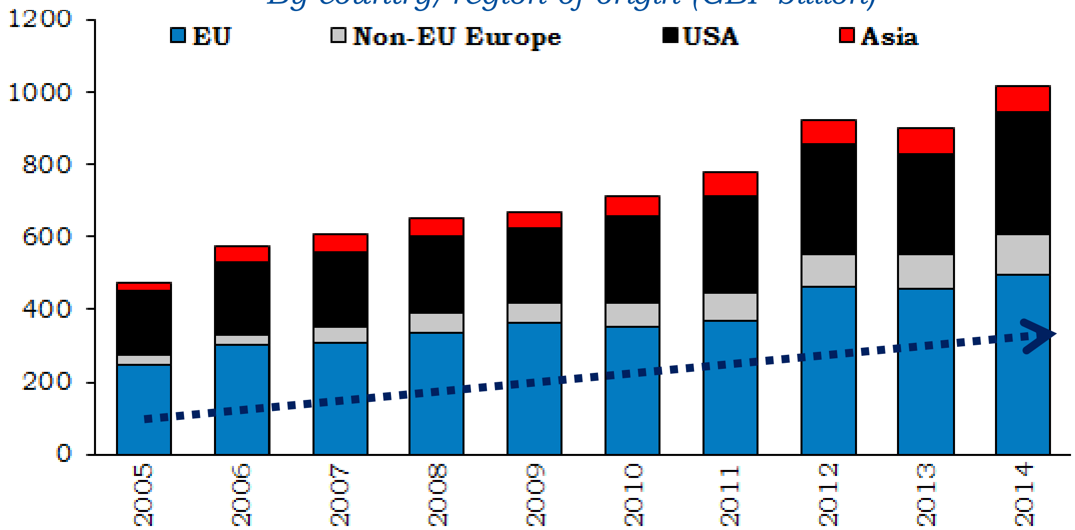
Share in FDI inflows to the EU-15
(annual average %)



Share in FDI inflows to the UK
2015 annual average %



Inward FDI to the UK
By country/region of origin (GBP billion)



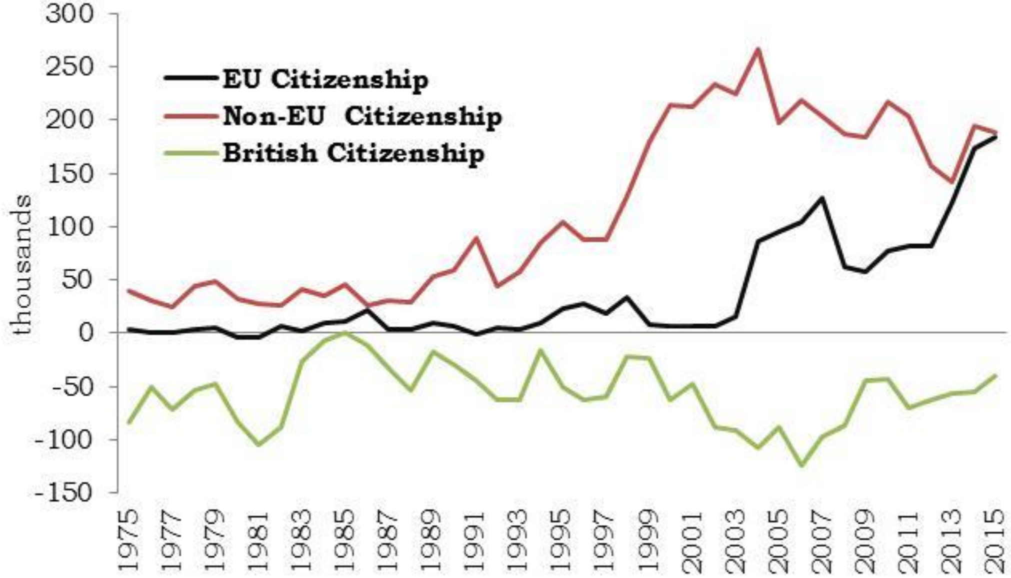
- ❑The UK accounts for the largest share of EU total FDI inflows partially owing to the country's role as a gateway to the EU internal market
- ❑The total stock of FDI in the UK exceeds 1 trillion GBP, representing around 57% of the country's GDP. Almost 50% of it comes from the rest of the EU
- ❑If access to the single market were lost, the UK might become a less attractive destination for FDI inflows, with negative repercussions for investment, export capacity and productivity

Source: OECD, Eurostat, Office for National Statistics, Eurobank Economic Research

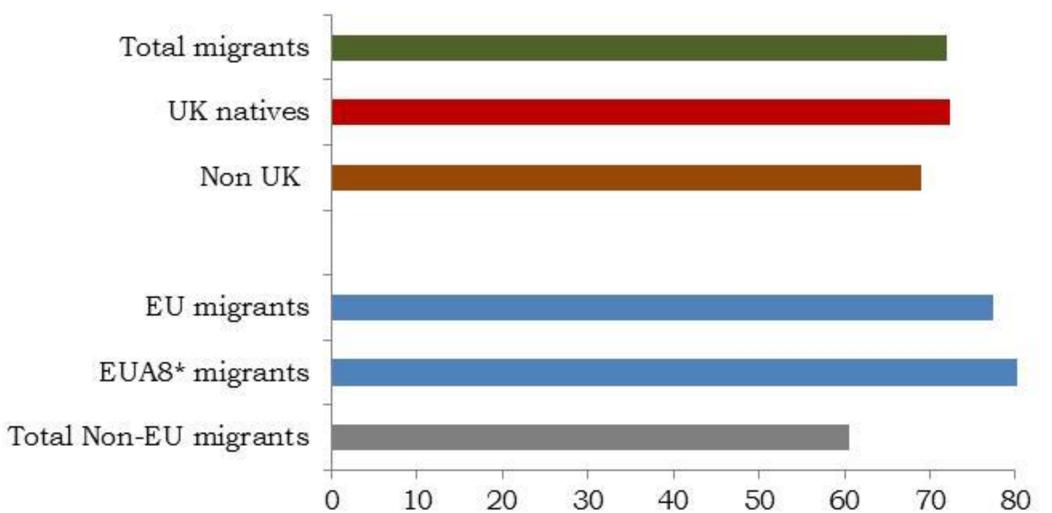
EU immigration to the UK

Increased number of EU migrants with higher employment rates than UK natives

Long-term international net migration by citizenship



Employment rates by country of birth (people aged 16 to 64) (***average employment rate 2000-2015***)



- The number of EU migrants to the UK has increased considerably in recent years, accounting to nearly half of net migration flows

- EU migrants tend to have higher employment rates than UK natives and almost all other migrant groups, with the majority of them coming from countries with high unemployment rates

- A body of research suggests that EU migrants make a net positive contribution to the UK budget on the grounds that they tend to be on average younger than UK natives, claiming less unemployment benefits and making less use of public health services than the average Briton

- Empirical analyses on the UK labour market do not provide conclusive evidence that EU migrants have caused job losses and lower average wages for UK natives

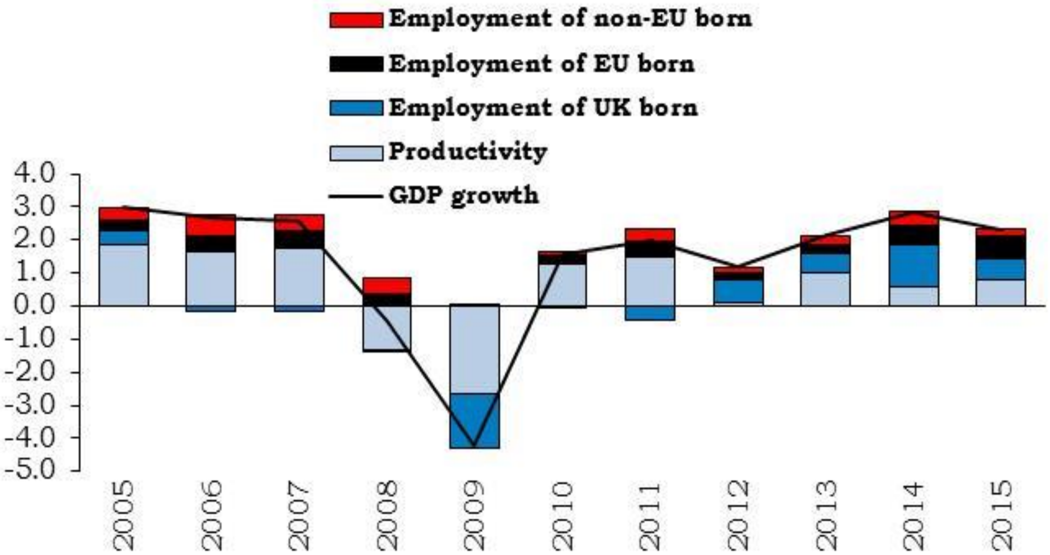
*Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia.

Source: Office for National Statistics, IMF, Eurobank Economic Research

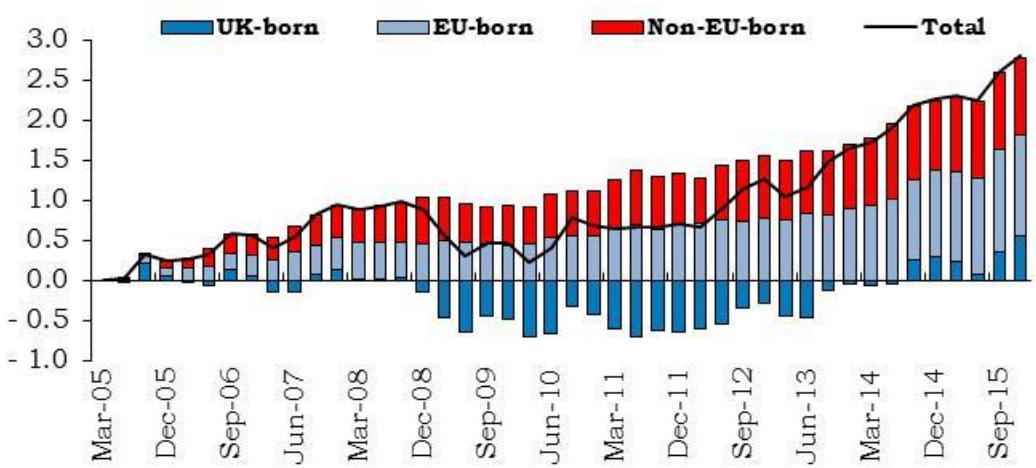
EU immigration to the UK

Considerable contribution to UK output & productivity

Real GDP growth – contributions (in pps)



Change in total employment by country of birth – contributions (in pps)



- Empirical analysis suggests that EU migrants are on average more skilled and better educated than UK natives, making considerable contribution to UK GDP and productivity growth

- EU migrants have assisted UK firms to allocate workers to jobs for which they are a better match, enabling them to operate more efficiently and less costly

- After Brexit, likely imposition of more restrictive migration policies, could lead to a reduction of net migration. Any potential impact on the UK economy will be subject to the types of restrictions that may be applied (e.g. a highly skilled migrant programme for EU workers, as is currently the case for non-EU nationals)

- UK's withdrawal from the EU implies that the deal the UK government reached with EU leaders at the February 2016 EU Council meeting envisaging inter alia, a so-called 'emergency brake' on in-work benefits for EU workers and reduced child benefits for EU migrants, will not be implemented

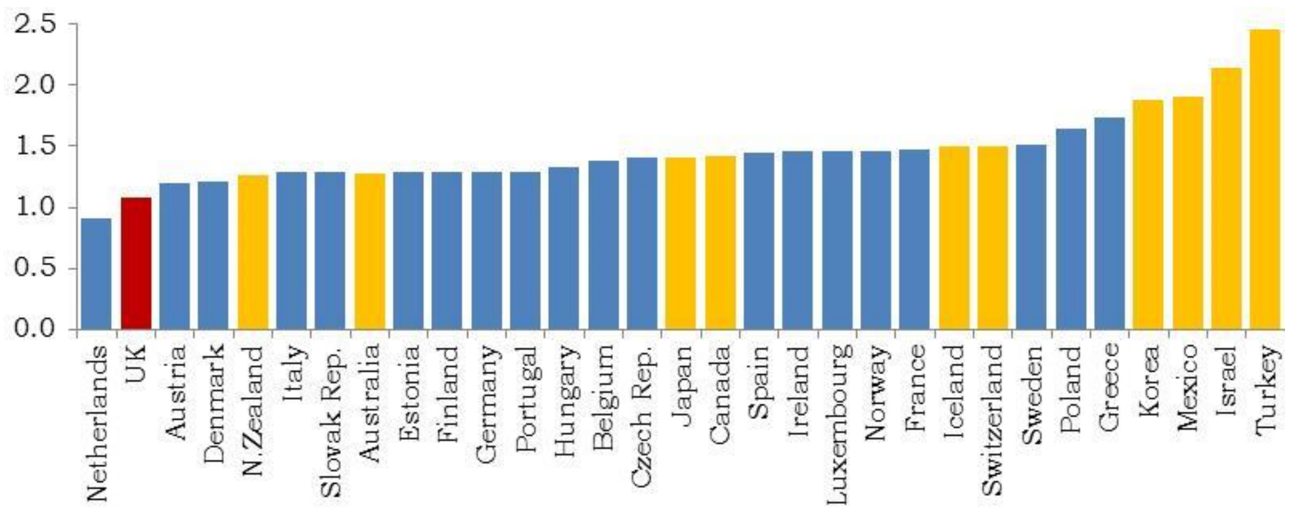
Source: OECD, Office for National Statistics, Eurobank Economic Research

UK is already among the least regulated markets in the developed world

How much room for additional gains from '"de-Europeanising Britain"?

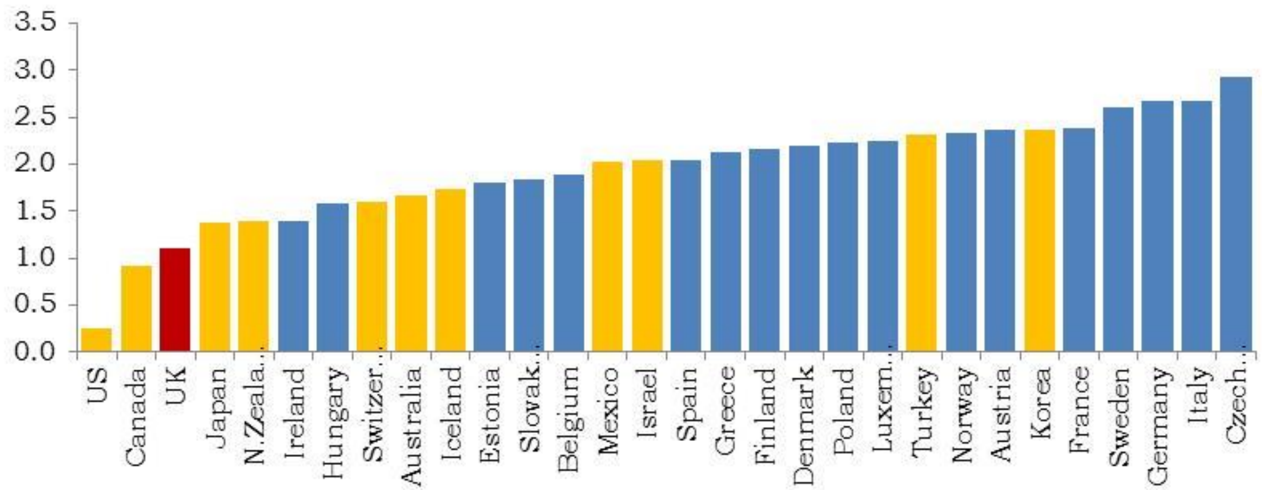
OECD Product Market Regulation Indices Comparison, 2013

Blue colour denotes EU countries, yellow colour denotes non-EU countries



OECD Strictness of Employment Protection- individual dismissals (regular contracts), 2013

Blue colour denotes EU countries, yellow colour denotes non-EU countries



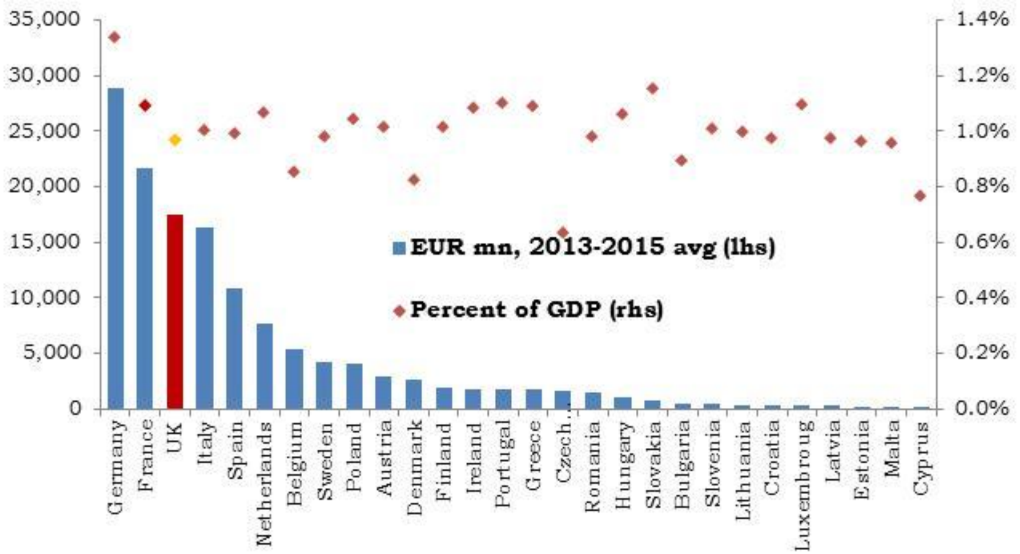
- OECD's comparative indicators for product & labour market regulation suggest that EU membership does not constrain deregulation
- UK ranks 2nd among the EU in terms of product market liberalization and has lower employment protection than other major European economies
- On the other hand, the UK scores relatively poorly in domestically-controlled regulations (e.g. planning regulations and other restrictions on housing construction; licensing and permits systems) that are not required by the EU (IMF, 2016)
- Doubts exist as to the extent of additional gains that may be generated by 'de-Europeanising Britain', especially as many regulations now imposed at the EU level would need to be replaced by domestic equivalents

Source: OECD (2016), IMF (2016)

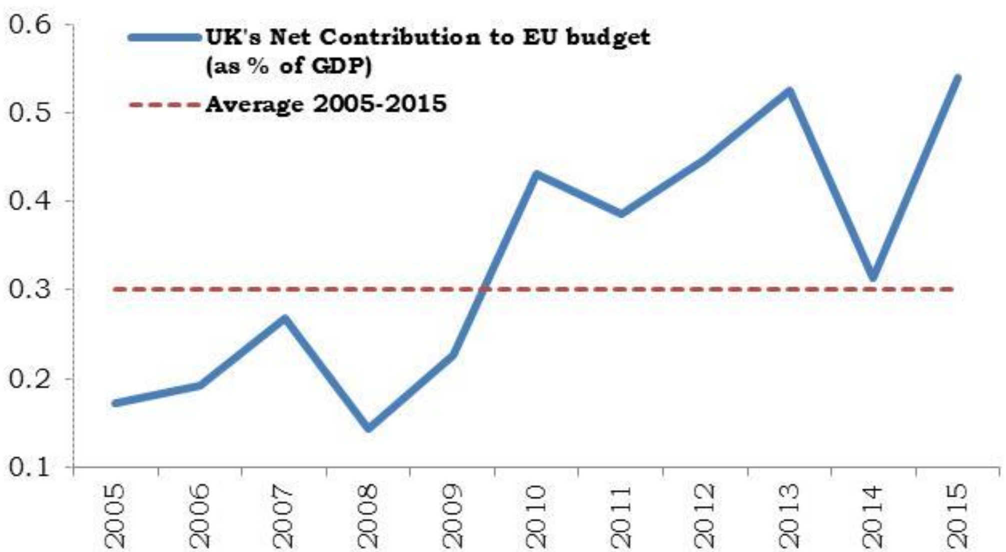
UK's gross contribution to the EU budget among the lowest as % of GDP

How large might the gains from Brexit be?

Nominal gross contribution to the EU budget



UK is a net contributor to the EU budget



- UK makes one of the largest *nominal gross contributions* to the EU budget, as it is one of the largest European economies. However, as % of GDP its contribution is among the lowest in the EU
- Furthermore, UK's contribution is partially offset by inflows from the EU budget under various spending programs (e.g. for R&D and scientific research) and the UK rebate
- UK's net contribution to the EU Budget has averaged c. €6.0bn per annum (c. 0.3%-of-GDP) in 2005-2015, lower than a number of major EU economies
- If the UK were to retain some access to the single market it would find it difficult to avoid payments to the EU budget (e.g. the Norwegian and Swiss models of association come with fiscal costs)
- Furthermore, it would also probably have to make up by itself for the shortfall created by discontinued EU structural funding and CAP subsidies

Source: European Commission, IMF, Eurobank Economic Research

Section 4

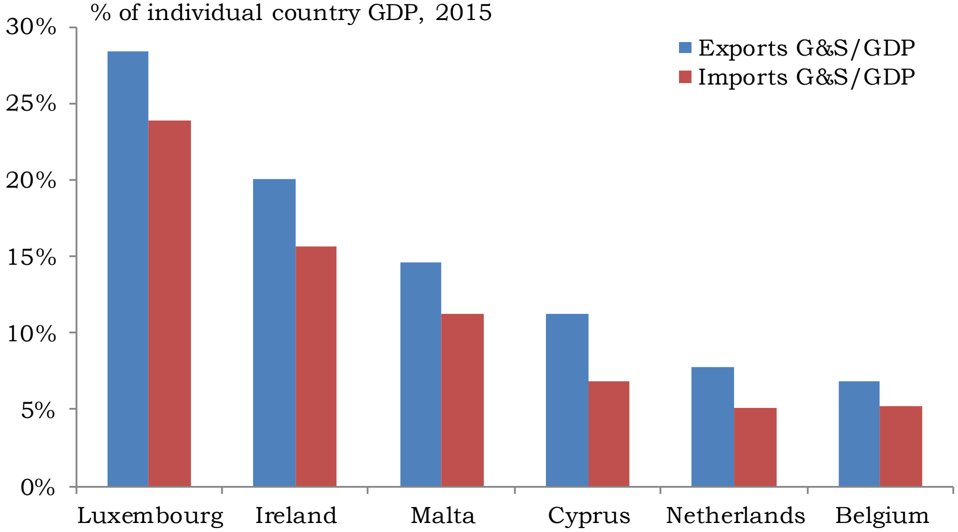
The economics of Brexit

Potential implications for the EU-27 and the CESEE region

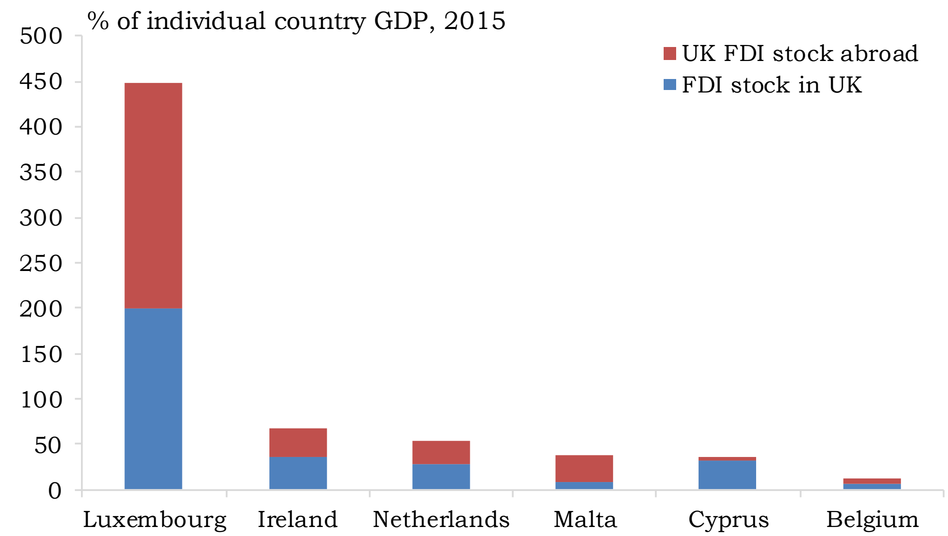
Brexit: implications for the EU-27

Luxemburg, Ireland, Malta, Cyprus, the Netherlands and Belgium are relatively more susceptible to Brexit risks

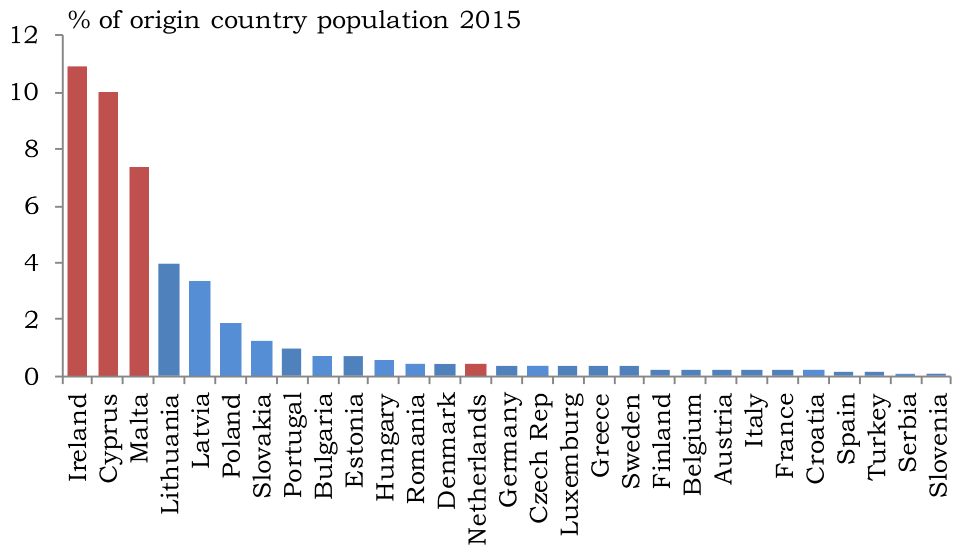
High direct trade ties with UK



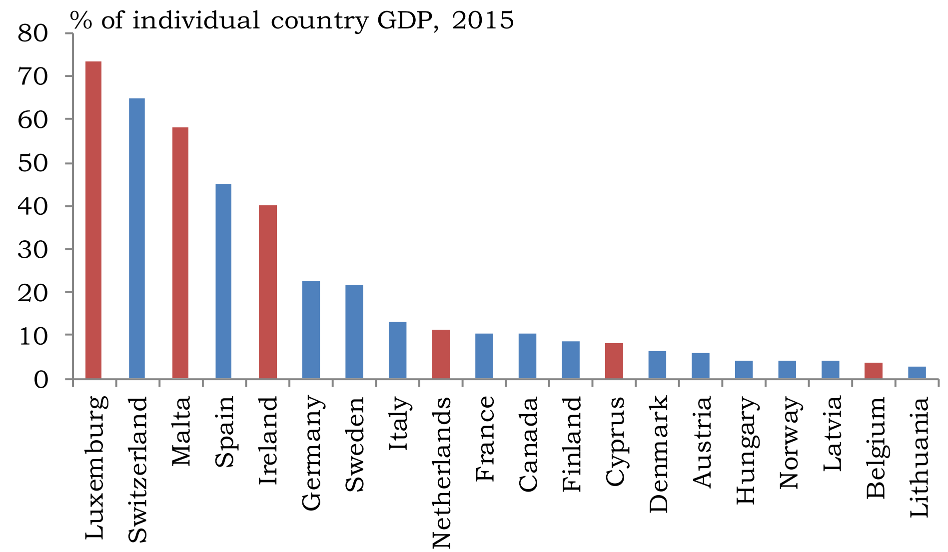
High FDI exposure



Migrants in the UK



Financial Sector Claims (ultimate risk basis)

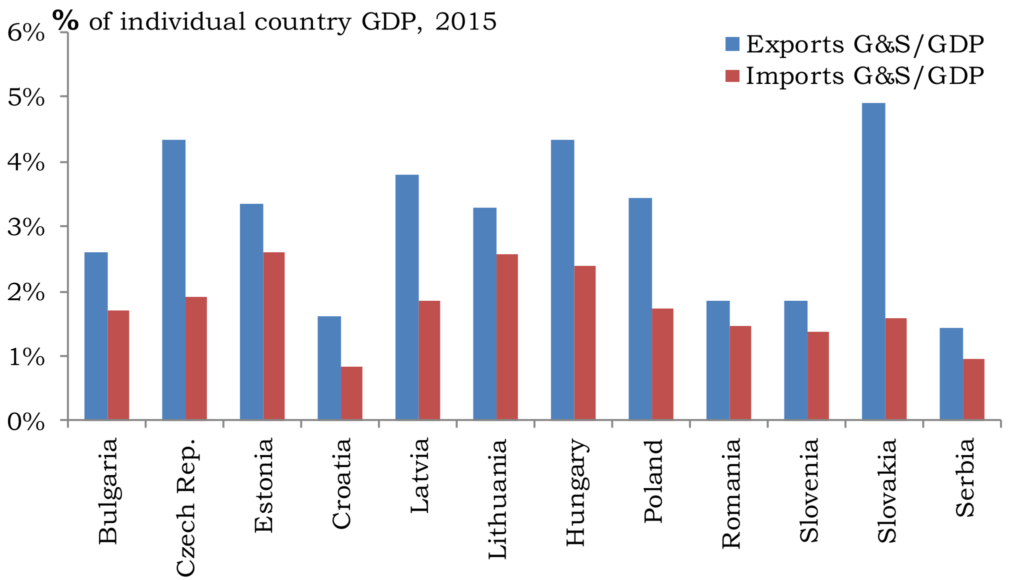


Source: BIS, European Commission, Eurostat, ONS, S&P, UN, Eurobank Economic Research

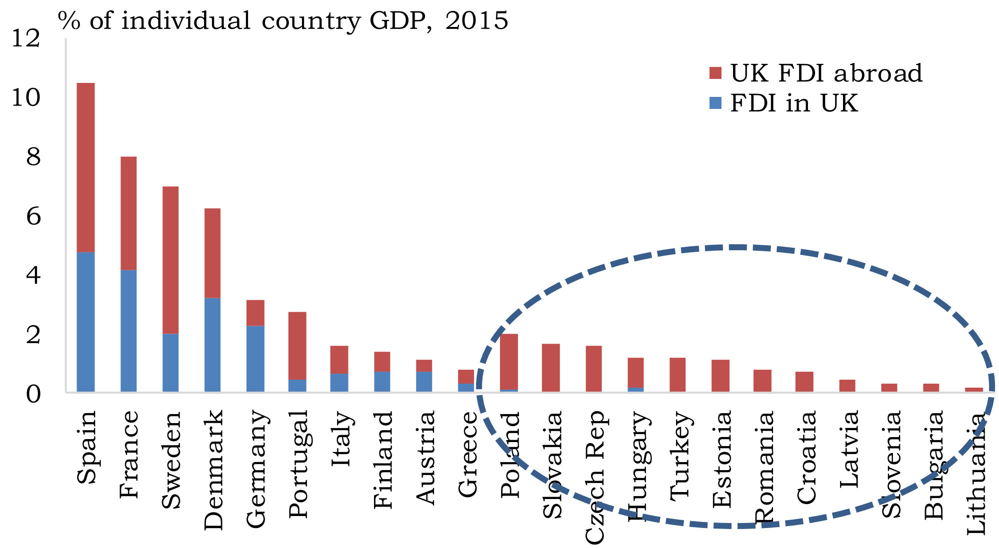
Brexit: implications for the CESEE region

Net negative for growth short-term but not anything resembling a catastrophic event

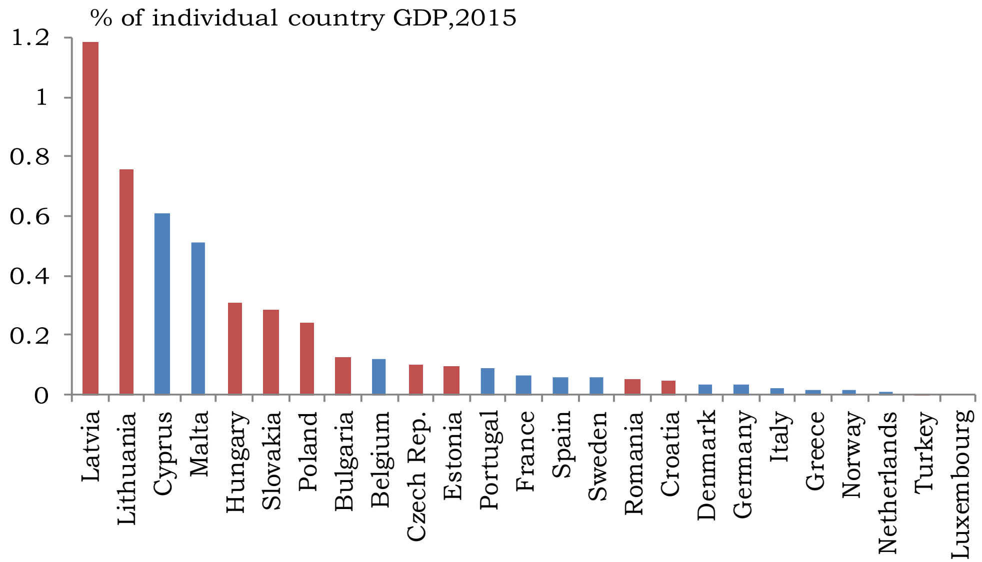
Modest regional direct trade ties with UK



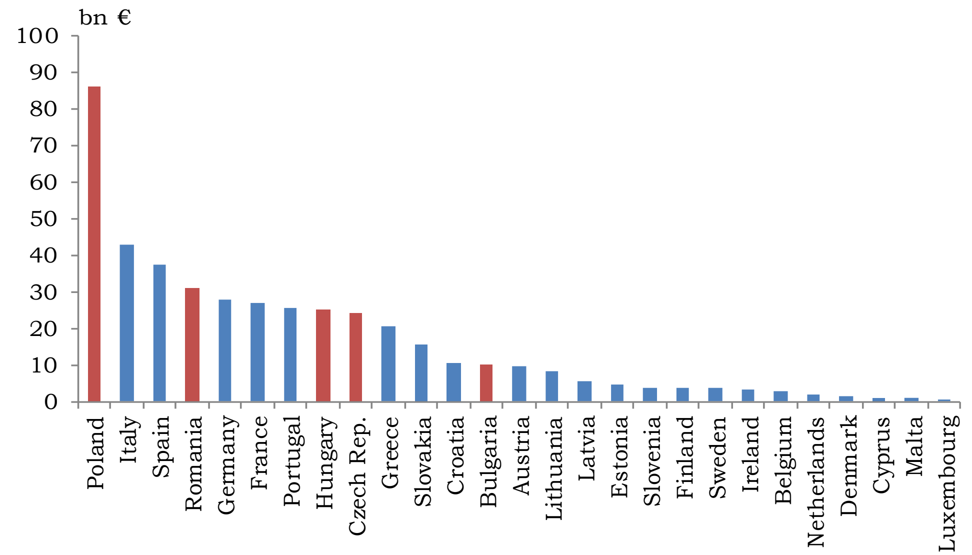
Low regional FDI exposure



Remittances inflows from UK



EU funds 2014-20: CESEE may receive less than planned



Source: European Commission, Eurostat, ONS, Eurobank Economic Research

Section 5

The economics of Brexit

Potential implications for the Greek economy

Brexit: implications for Greece

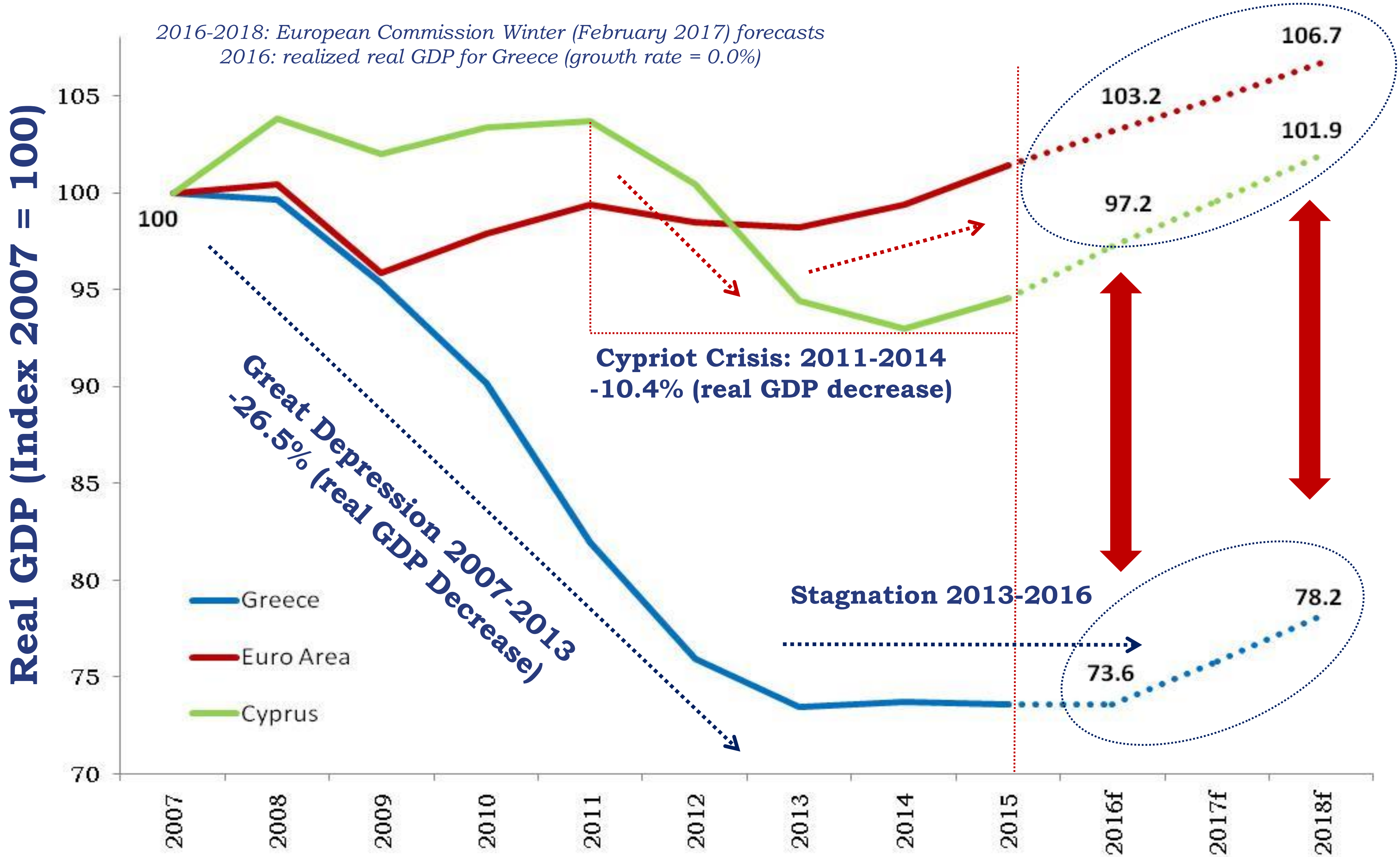
Transmission channels of Brexit negative effects to the Greek economy

Potential transmission channels	
Trade in Goods & Services *(2015 data)*	1) Trade in goods registers a deficit of €-0.2 bn UK accounts for 4.2% (€1.1bn) of total Greek exports of goods UK accounts for 2.9% (€1.3bn) of total Greek imports of goods 2) Trade in services registers a surplus of €2.8 bn mainly as a result of tourism & shipping revenue UK accounts for 16.4% (€4.6bn) of total Greek exports of services (tourism & shipping revenues) UK accounts for 17.3% (€1.9bn) of total Greek imports of services Total balance at surplus of €2.5 bn or 1.4% of GDP 3) Indirect effect through trade with other EU countries A possible deterioration of the growth performance of the other EU economies triggered by Brexit could negatively affect Greece's trade flows. E.g., ceteris paribus, a 1% decrease in the growth rate of Greek exports of goods and services to other EU countries could lead to a drop of Greece's nominal GDP growth rate by 0.15 percentage points (*Eurobank Research*)
Tourism	1) Direct contribution of tourism to Greek GDP & total employment at 7.5% & 11.5% respectively in 2016 2) UK ranks second in terms of tourists arrivals and receipts in Greece (2.9mn persons & €1.9bn respectively in 2016) 3) Tourism revenue sensitive to changes in processes and costs of travel (i.e. Visas for UK residents instead of free movement, transaction costs from changes in aviation regulation, etc) and the €/£ exchange rate movements both in the transitional period and the post-Brexit period
Shipping indusrty	1) Disruption of global trade due to Brexit may result in reduced demand for shipping services 2) Potential downgrading of London's status as a shipping hub may imply significant costs for Greek shipping companies that might decide to relocate 3) Greece could benefit but lacks the infrastructure for attracting shipping companies that plan to relocate
EU structural & agricultural funds	Ca. €35bn available for Greece via the EU Budget 2014-2020 (European Structural and Cohesion Funds plus Common Agricultural Policy funds). Brexit might have a negative impact on the size of the current EU Budget even if the final agreement requires a contribution from the UK. Consequently, available funds for Greece may be reduced

Source: ELSTAT, European Commission, World Travel & Tourism Council, Eurobank Economic Research

Greece 2007-2016

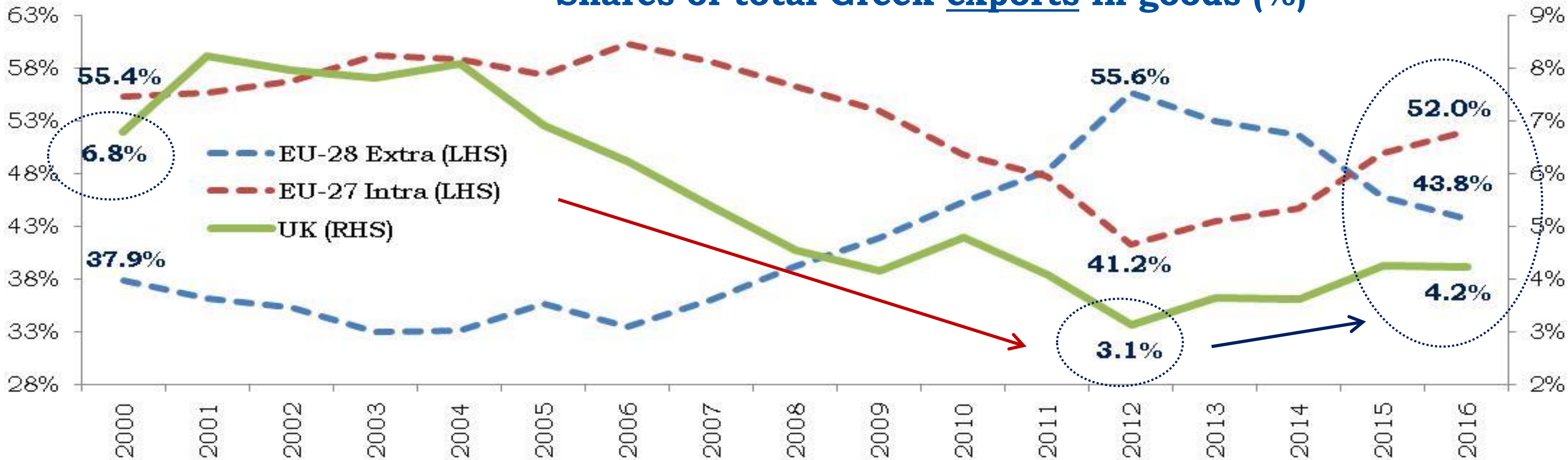
From a "Great depression" to a "Great stagnation"?

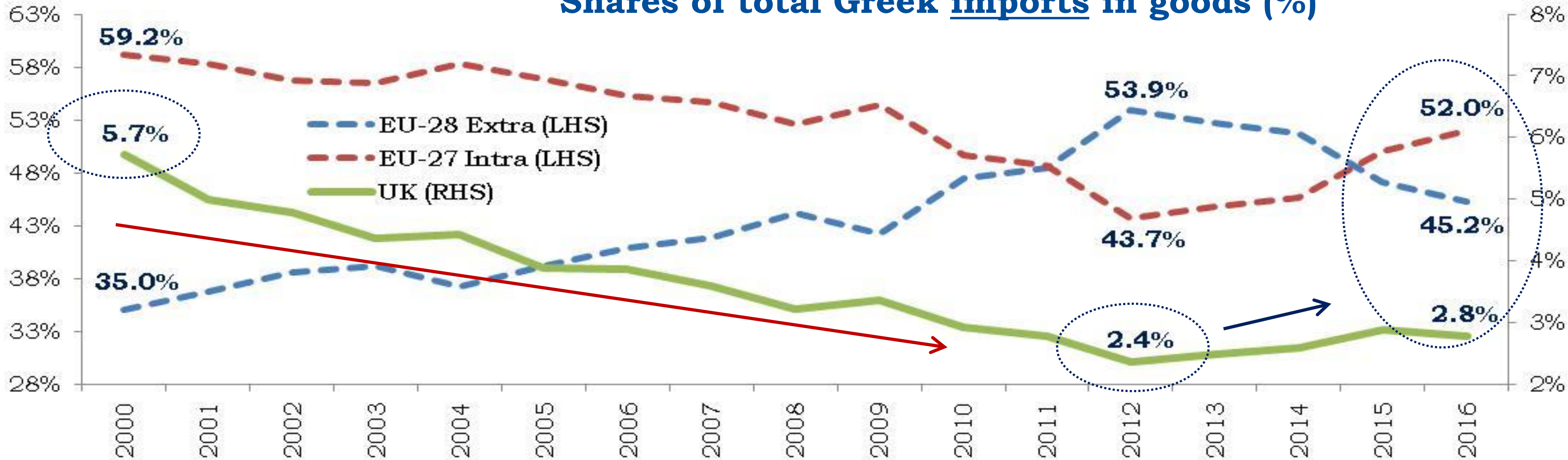


Source: European Commission – AMECO Database (February 2017), Eurobank Economic Research

Brexit: impact on Greece

Relatively low direct merchandise trade linages with the UK

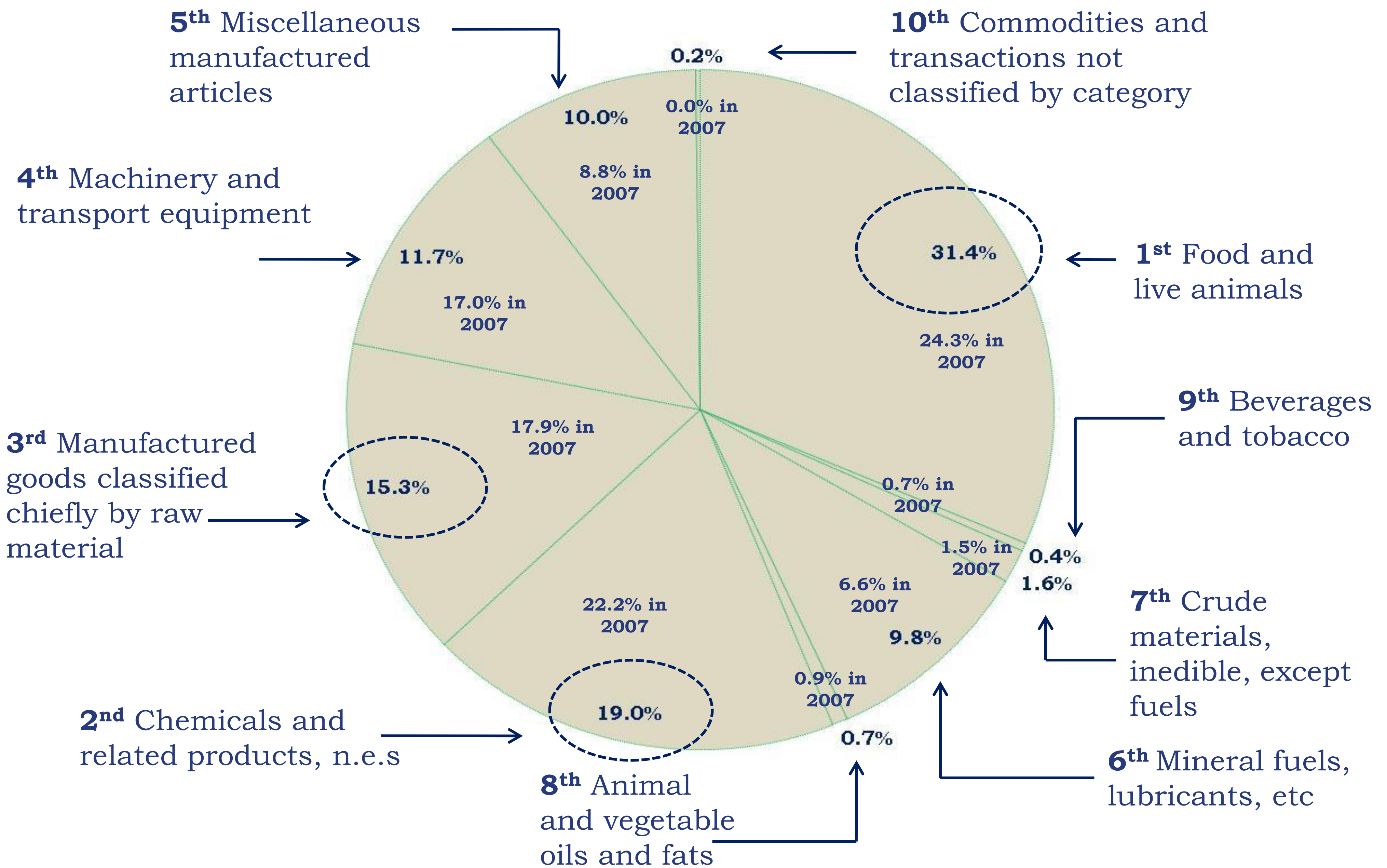




Source: Eurostat, Eurobank Research

What kind of goods does Greece export to the UK (2016)?

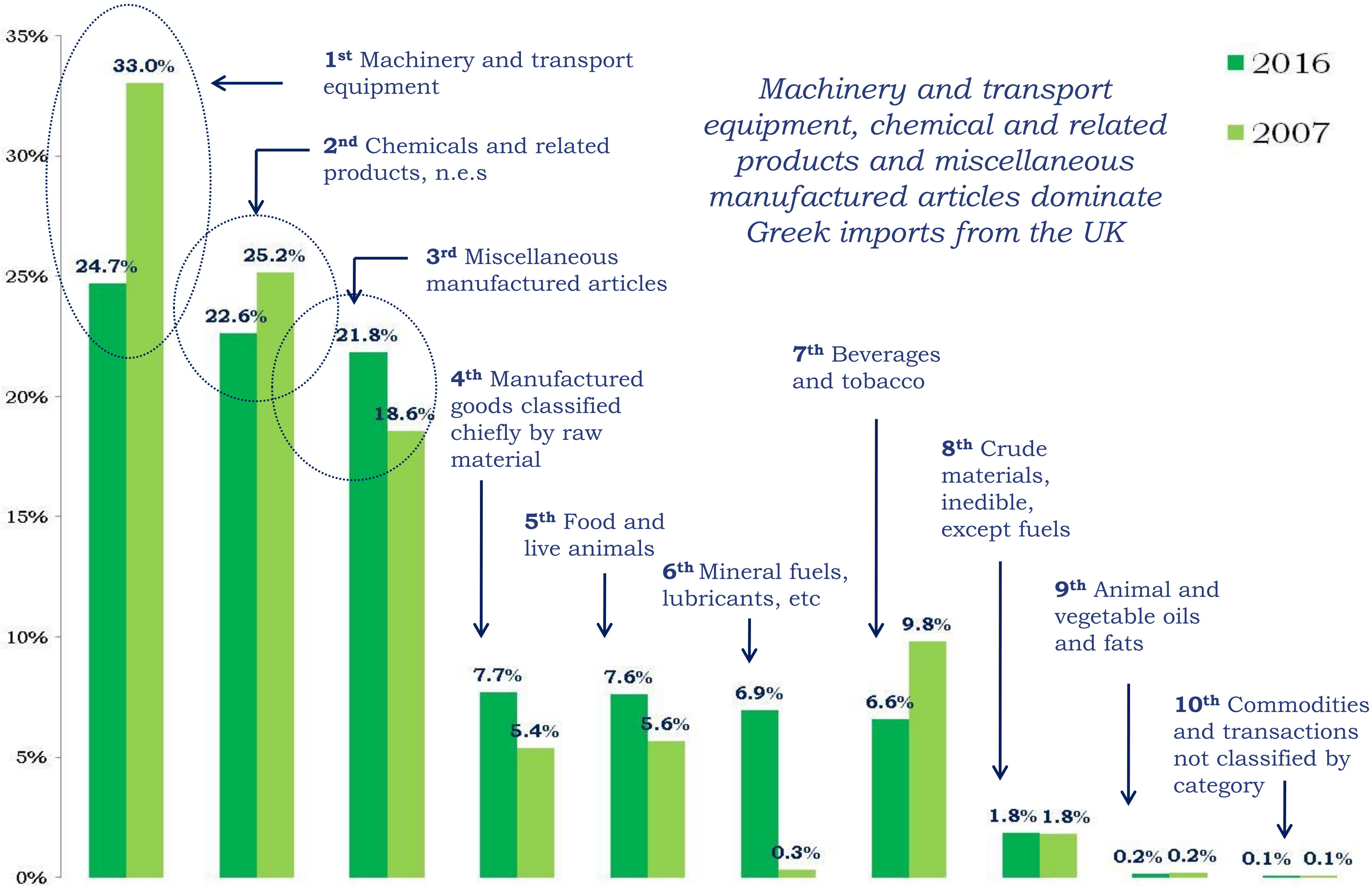
Shares of total goods exports to the UK (€1.1bn) - Food & live animals dominate



Source: Eurostat, Eurobank Economic Research

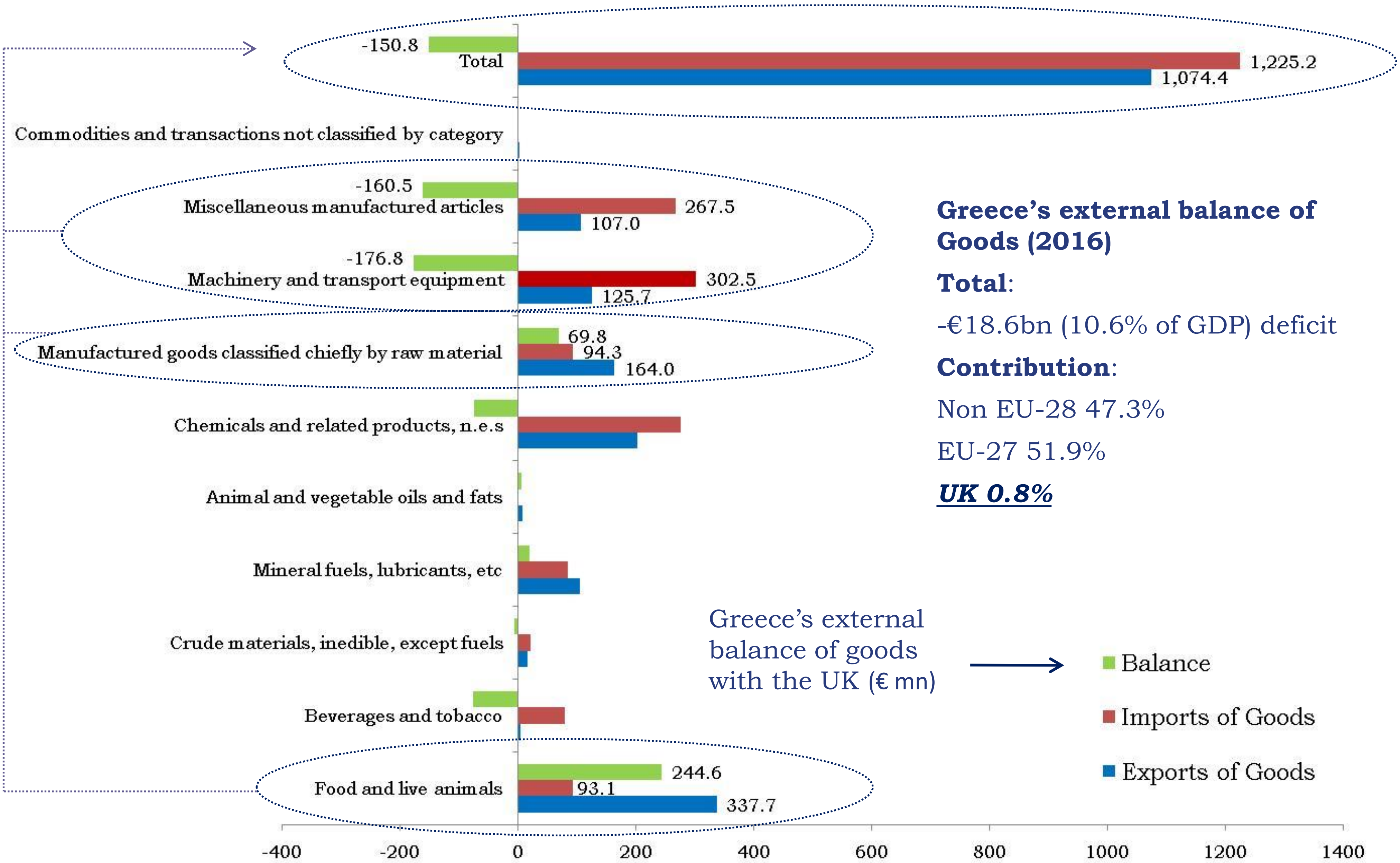
What kind of goods does Greece import from the UK (2016)?

Shares of total imports from the UK (€2.1bn)



Source: Eurostat, Eurobank Economic Research

UK's contribution to the Greek external balance of goods
Marginally negative



Greece's external balance of Goods (2016)

Total:

-€18.6bn (10.6% of GDP) deficit

Contribution:

Non EU-28 47.3%

EU-27 51.9%

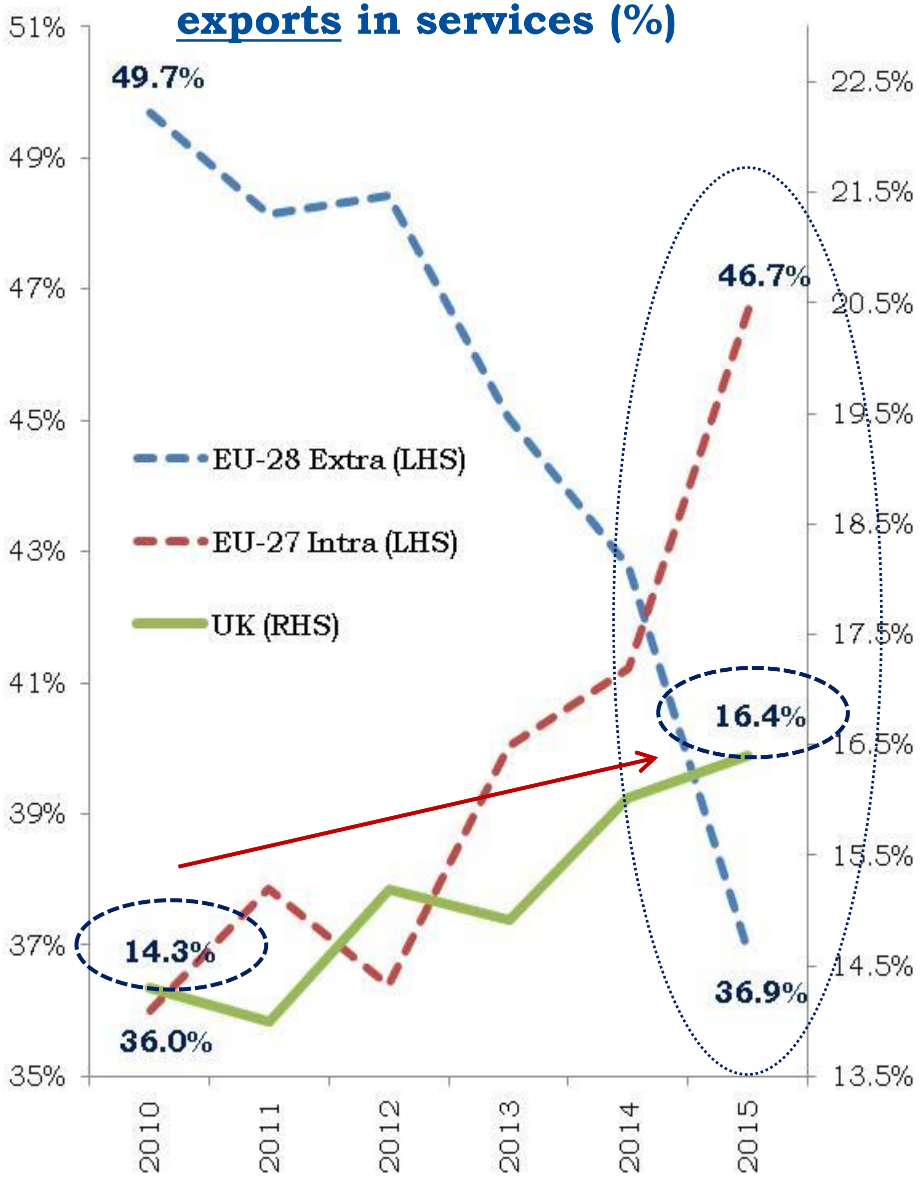
UK 0.8%

Source: Eurostat, Eurobank Research

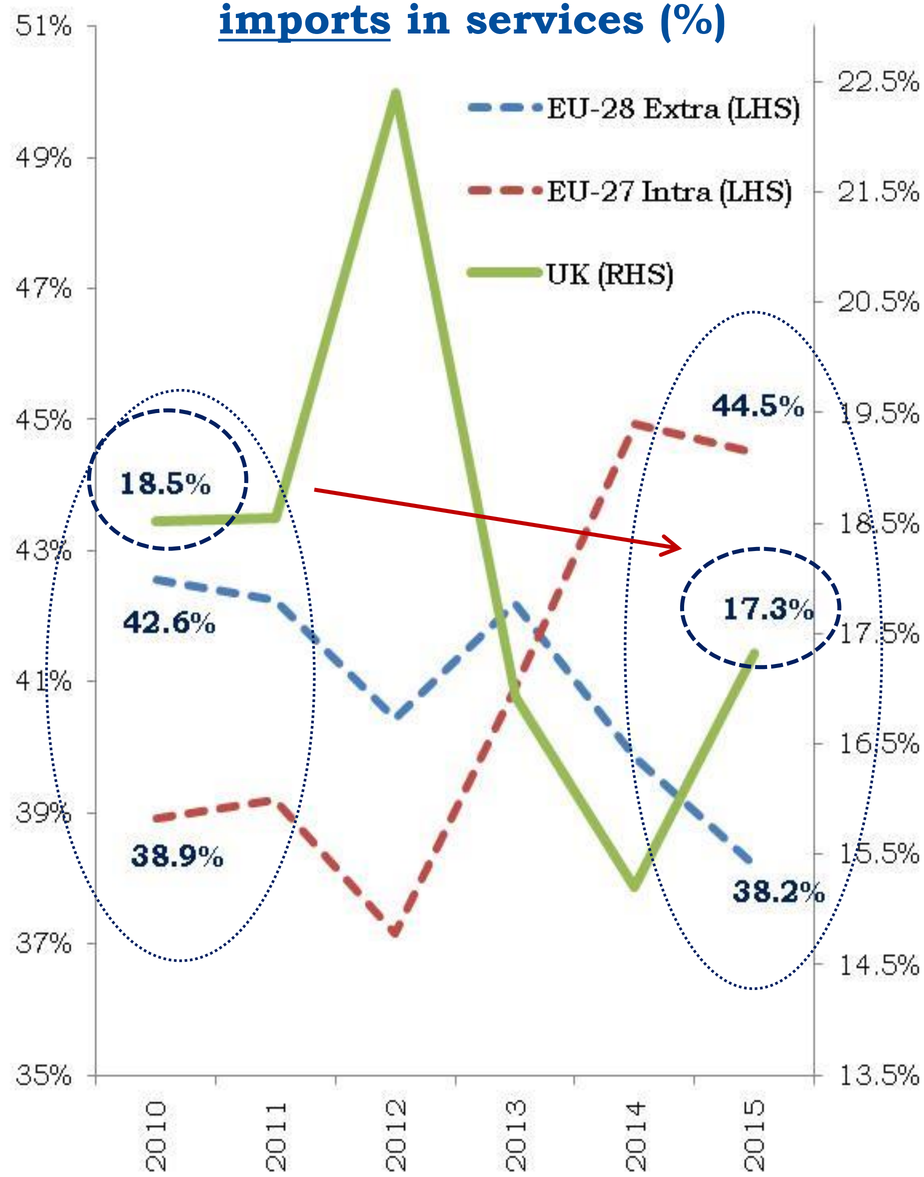
Relatively strong trade ties between Greece and the UK in services

Mainly, travel and transportation services

Shares of total Greek exports in services (%)



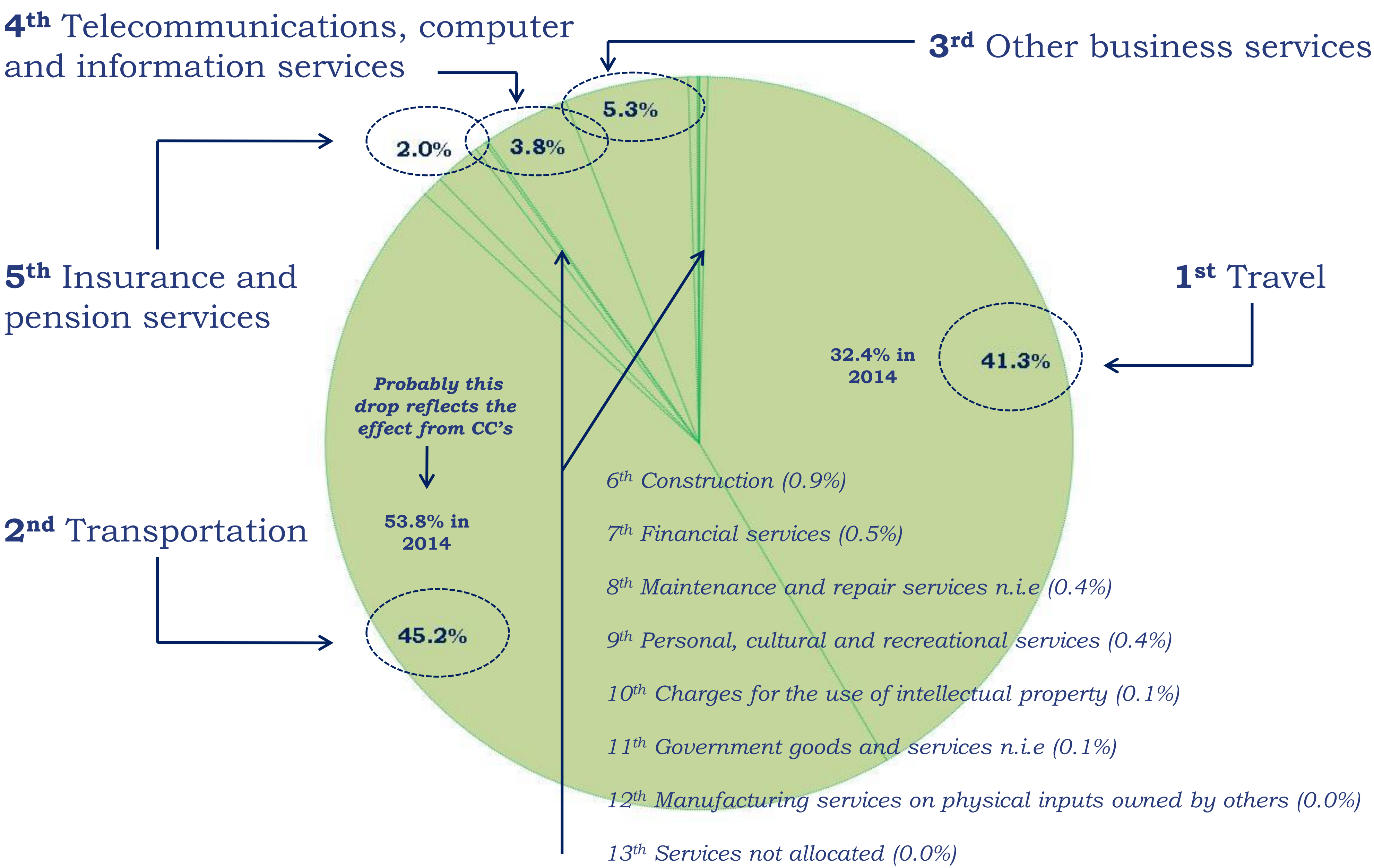
Shares of total Greek imports in services (%)



Source: Eurostat, Eurobank Economic Research

What kind of services does Greece export to the UK (2015)?

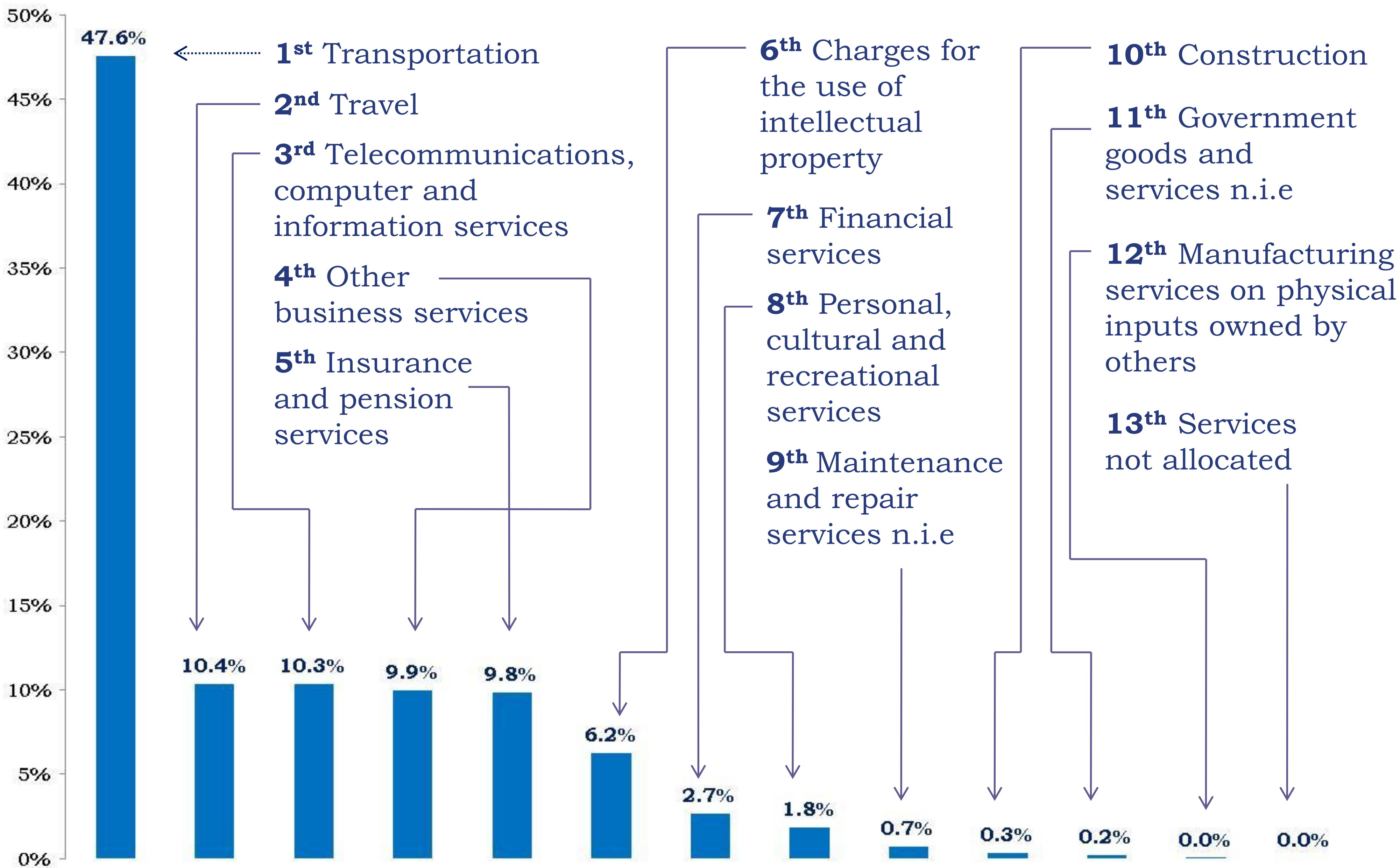
Shares of total services exports to the UK (€4.6bn) – Travel & transportation dominate



Source: Eurostat, Eurobank Economic Research

What kind of services does Greece import from the UK (2015)?

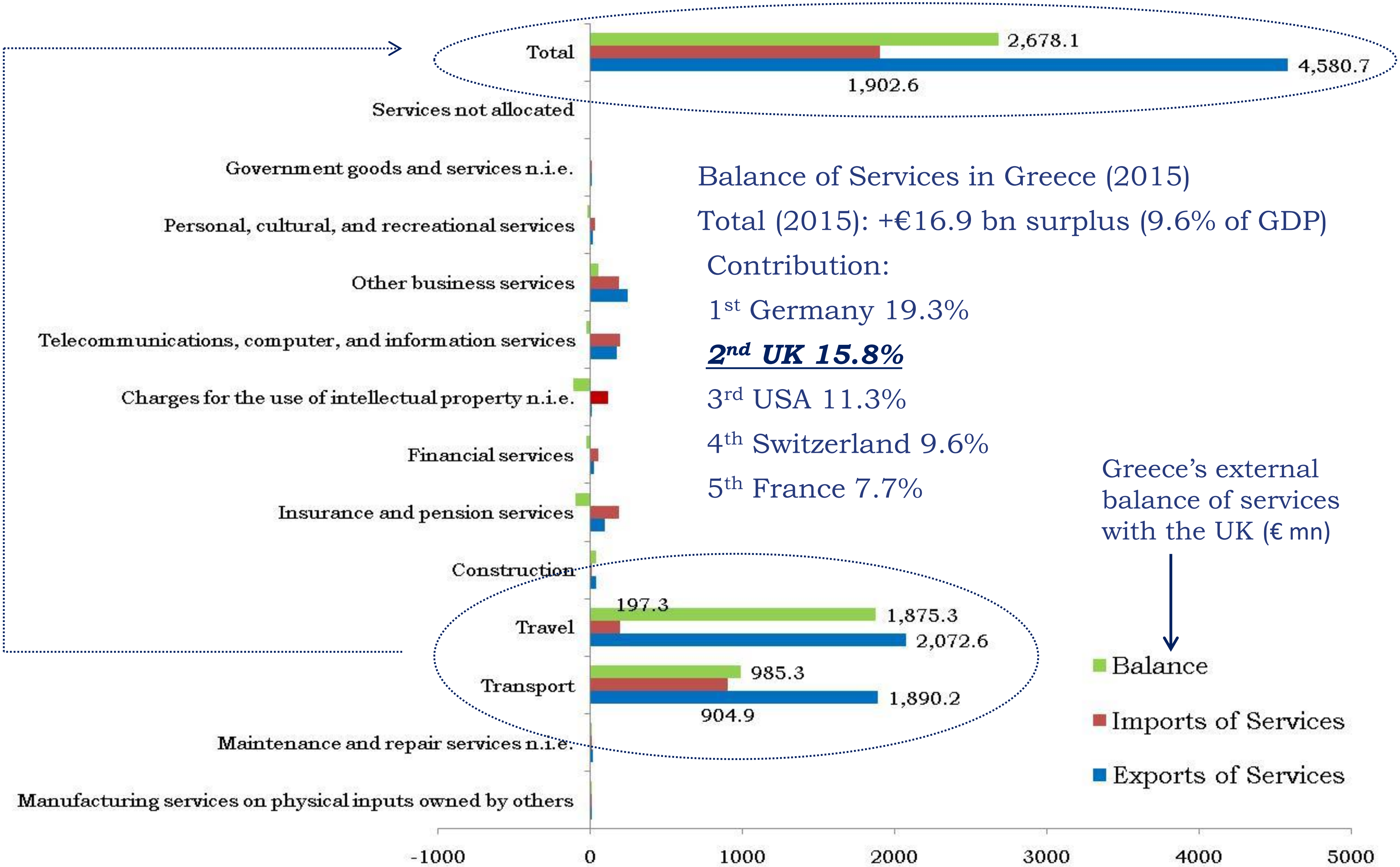
Shares of total imports of services from the UK (€1.9bn) – Transportation dominates



Source: Eurostat, Eurobank Economic Research

UK has a significant positive contribution to Greece's external balance of services

Travel and transportation services dominate



Balance of Services in Greece (2015)

Total (2015): +€16.9 bn surplus (9.6% of GDP)

Contribution:

1st Germany 19.3%

2nd UK 15.8%

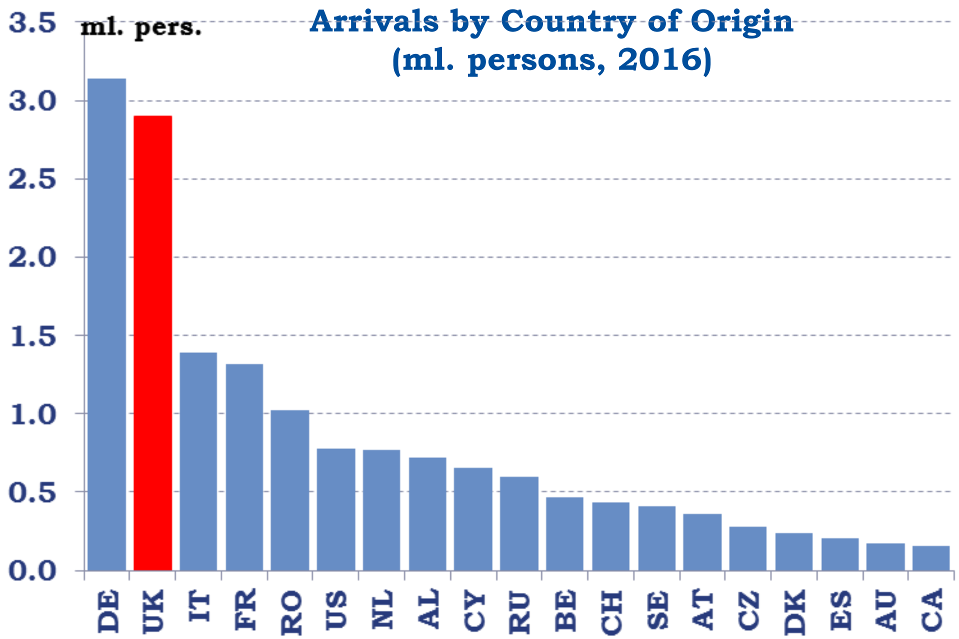
3rd USA 11.3%

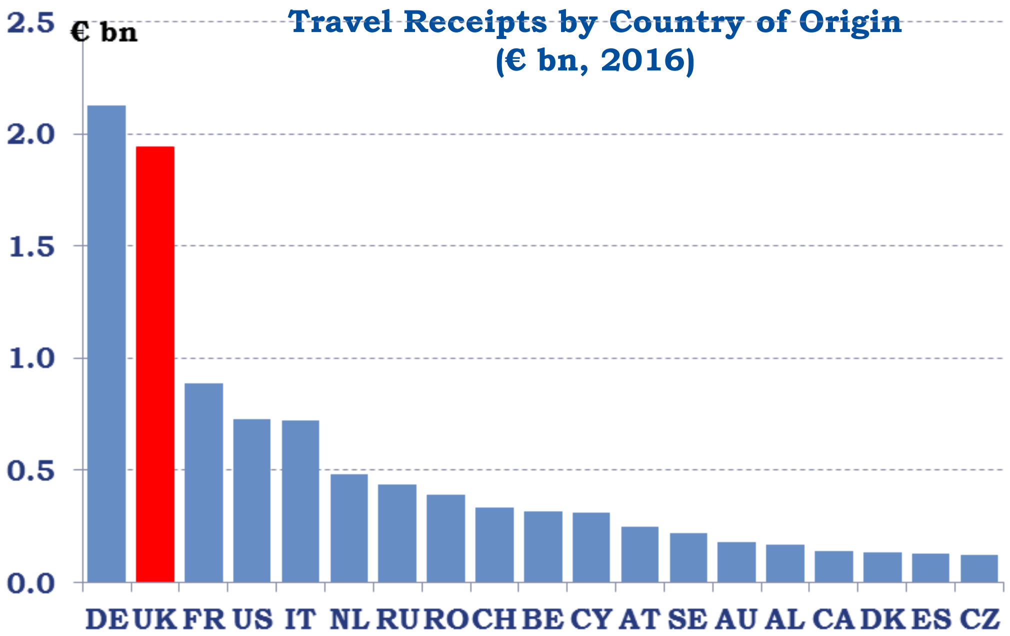
4th Switzerland 9.6%

5th France 7.7%

Brexit and the Greek tourism sector

A source of potential risk for Greece





- **2016 direct contribution of tourism sector to Greek GDP & total employment at 7.5% & 11.5% respectively**
- **UK ranks second in terms of tourists arrivals and receipts in Greece (2.9mn persons & €1.9bn respectively in 2016)**
- **Brexit represents a potential downside risk for the Greek tourism sector, depending on, inter alia:**
  - **Final agreement on visas**

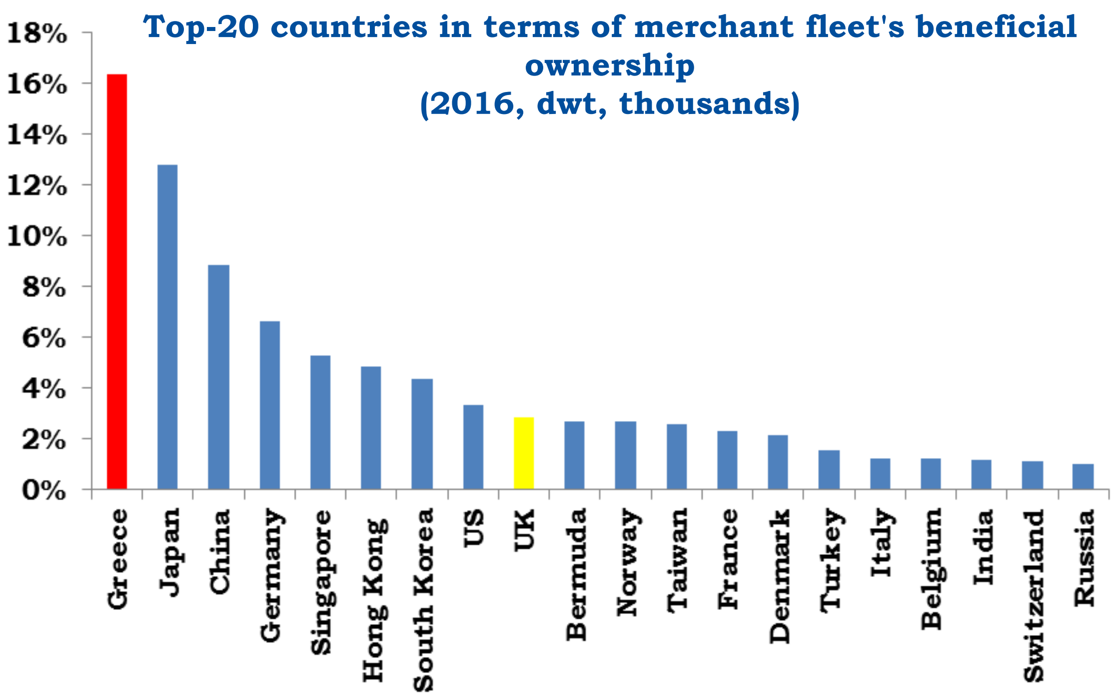
    Visa-free travel needs to continue so as to prevent adverse effects on tourist inflows from the UK
  - ***UK's participation in the European Single Aviation Market (ESAM)***

    Suspension could increase transaction costs for UK-based carriers, with negative effects on the cost of traveling abroad and thus on Greek tourism
  - ***The €/£ exchange rate movements*** *both in the transitional period and the post-Brexit period. For example, a post-Brexit depreciation of the pound sterling against the euro will likely make the Greek tourism product more expensive for UK residents*

Source: Bank of Greece, World Travel & Tourism Council, Eurobank Economic Research

Brexit and the Greek shipping sector

Market turbulence but not major worries in the medium term



Greek Merchant Fleet by Flag of Registration (2016)	
Greece	22.37%
Marshall Islands	19.35%
Liberia	19.28%
Malta	16.50%
Panama	7.67%
Bahamas	5.81%
Cyprus	5.68%
Isle of Man	1.32%
Singapore	0.96%
Hong Kong	0.46%
Bermuda	0.38%
Italy	0.11%
Norway	0.04%
Denmark	0.03%
UK	0.03%
Indonesia	0.01%

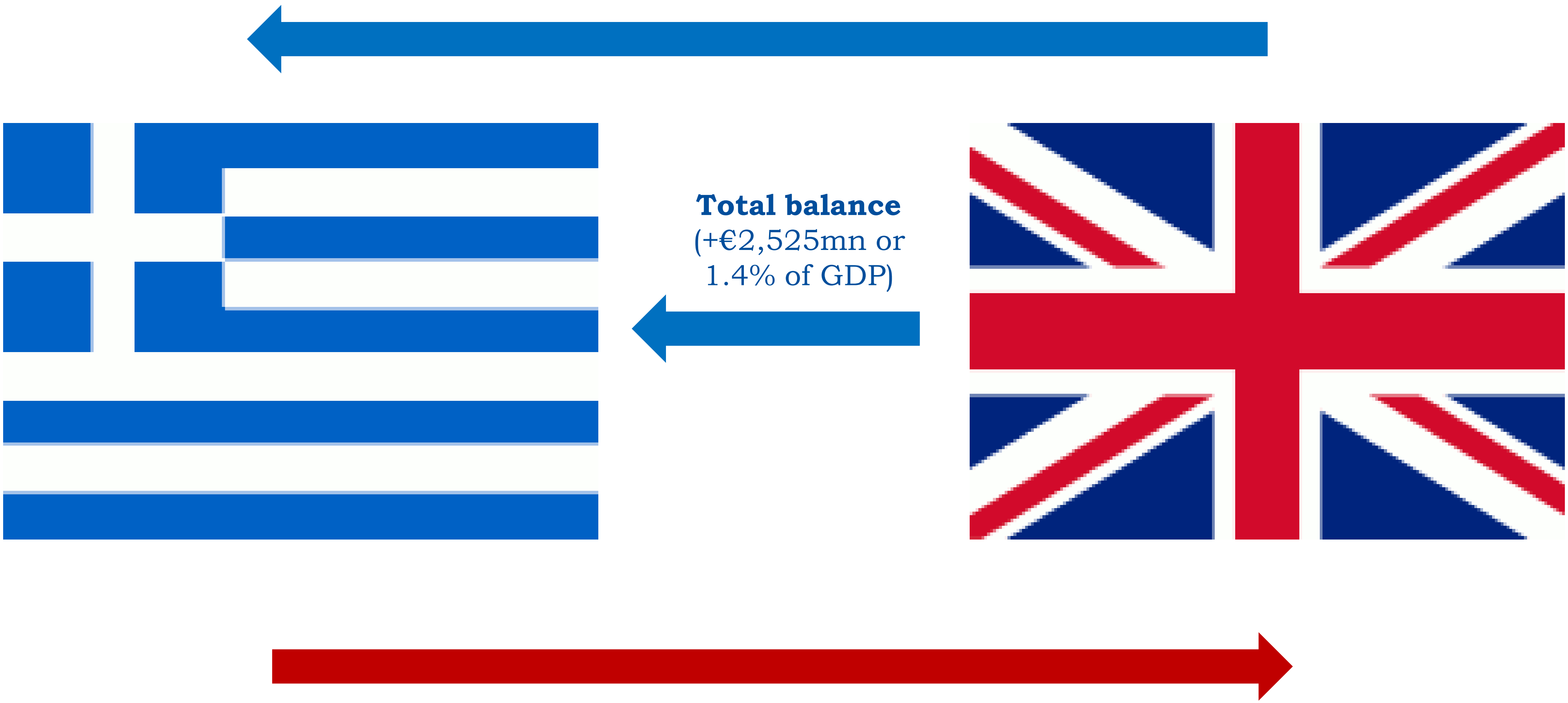
- **Shipping sector contributed directly 3.5% to Greek GDP in 2015. Total direct and indirect contribution estimated above 6.1% (FEIR (2013))**
- **Greece ranks 1st in the world at 16.4% in terms of merchant fleet beneficial ownership while the UK ranks 9th with 2.9% of the world's fleet beneficial ownership (dwt, 2016, UNCTAD)**
- **No direct effect from Brexit on Greek merchant fleet since just 0.03% is under UK flag. Indirect effects include:**
  - The disruption of global trade due to Brexit may result in reduced demand for shipping services
  - The potential downgrading of London's status as a shipping hub may imply significant costs for Greek shipping companies that might decide to relocate
- **Greece still lacks the infrastructure for attracting significant number of shipping companies that plan to relocate**

Source: ELSTAT, UNCTAD, Eurobank Research

Greece's overall external trade balance in goods & services with the UK
Based on FY-2015 data

Greece's external balance of services with the UK (2015)

(surplus +€2,678 mn)



Greece's external balance of goods with the UK (2015)

(deficit -€153.4 mn)

Source: Eurostat, Eurobank Research

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Contributors
Dr. Platon Monokrousos, *Group Chief Economist*
Anna Dimitriadou, Ioannis Gkionis, Stylianos Gogos, Olga Kosma, Paraskevi Petropoulou, Theodoros Stamatiou