# London's FinTech sector and the European Union

May 2016

# Important Notice

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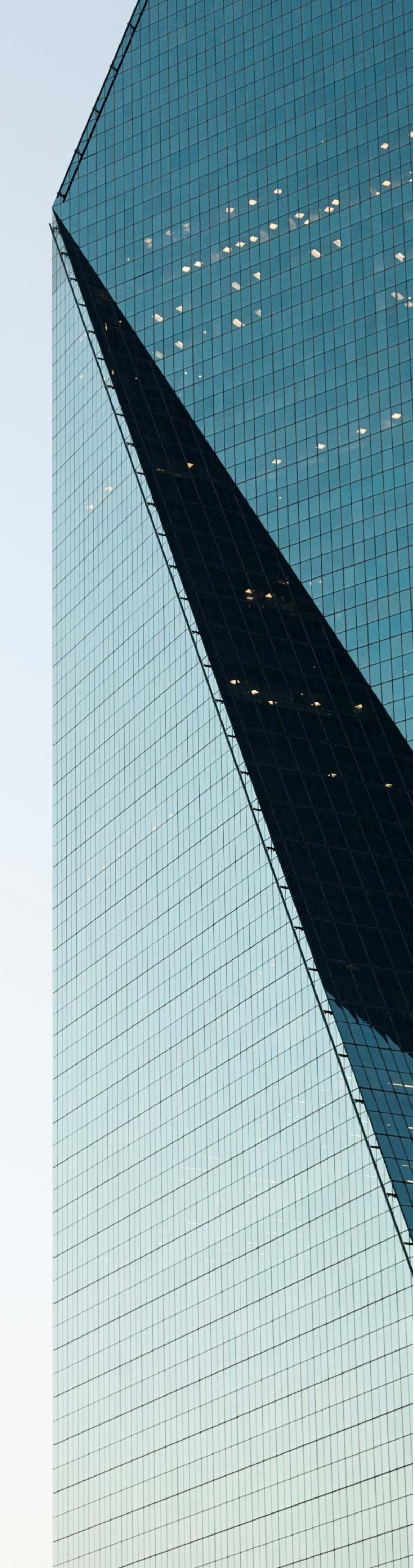

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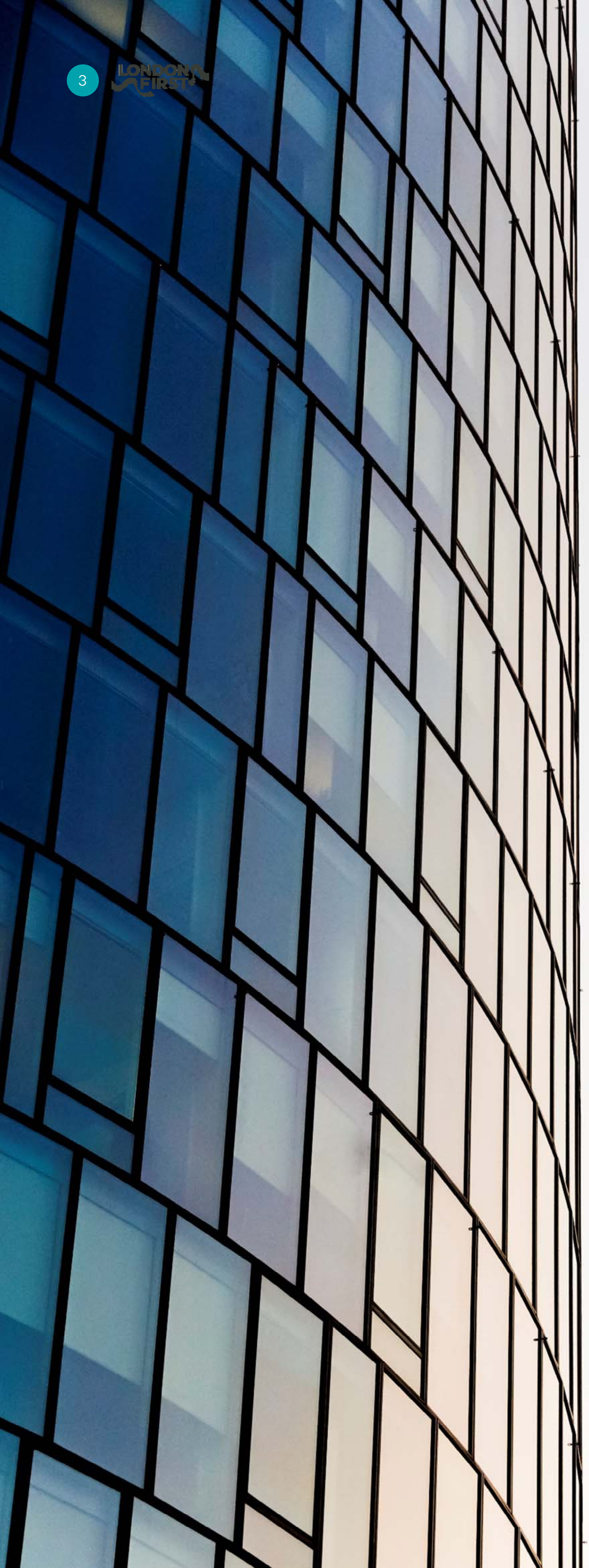


# Executive summary

## 'FinTech' is a £20bn industry created by technology-driven services that support the financial services sector.

UK FinTech has grown rapidly, helped by the leading position in financial services occupied by the UK (£133bn of gross value added, 'GVA'). The sector is especially important in London (£69bn of GVA), which is now the largest FinTech hub in the world by revenue and the second largest by employment. London's FinTech sector is highly productive - revenue per FinTech employee was £108,200 in the UK in 2015, greater than both New York (£98,200) and California (£63,500).[a]

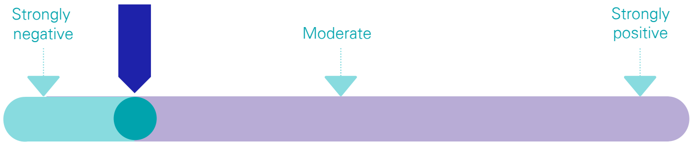
## London, is successful as a FinTech hub for four reasons:

- access to an international pool of talent which is in short supply globally;
- strong demand for its services driven by London's pre-eminent position in finance and by the willingness of UK consumers to embrace new technology;
- access to capital to fund start-ups, helped by UK tax policies which support entrepreneurship; and
- a supportive regulatory environment provided by a well-regarded and open-minded regulator.

To better understand the effect of the UK leaving the EU on this sector, with the help of KPMG we have spoken to some of the UK's top FinTech companies. This report summarises what they have told us, the strength of their sentiment regarding what they consider to be the fundamental reasons behind FinTech's success in London and what they consider the potential effect of the UK leaving the EU to be.

Based on these discussions, concerns were raised about potential challenges in hiring scarce technical talent from across the EU, on which the sector depends, even if international hiring could continue should the UK leave the EU:

**What is the FinTech sector's overall view of the UK withdrawing from the EU?**




> "The IT skills gap is global and coders from Eastern Europe will simply move to France or Germany who have similar skills problems rather than bother with the hassle and expense of visa applications"
>
> Eric Dodds, CMO Iron Yard[b]

The evidence suggests that an exit from the EU could result in slower growth of UK GDP (at least in the short-term) and increased turbulence in capital markets. This could affect sales and perhaps the Government's ability to continue to support entrepreneurial activity in the sector through tax incentives and special regulatory support.

Particular concerns were expressed around the potential changes to the regulatory environment, specifically passporting, whereby financial services that are approved by the UK financial regulator are accepted elsewhere in the Single Market. This ability to operate across the Single Market has contributed to London's success as a global centre for financial services. If passporting were lost or restricted, FinTech firms expressed concern as to the potential risk on their access to a market of 508 million consumers, with some saying that a vote to leave the EU could have 'knock-on' detrimental effects on the wider technology sector:

> "And think about the knock-on effects of harming the UK's tech scene - if financial technology firms are hurt, so are satellite firms like cyber-security and data management."
>
> Toby Triebel, CEO Spotcap[c]

a. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016
b. http://techcitynews.com/2015/06/30/brexit-will-only-widen-londons-tech-talent-gap-experts-warn/
c. https://www.finextra.com/blogposting/12420/will-a-brexit-kill-britains-fastest-growing-industry

# FinTech in London and the UK

## The significance of FinTech

FinTech is a term used to describe technology-driven services that support the financial services sector. It includes technological applications, ranging from financial institutions' back-office functions to numerous technological innovations in the financial sector.

Two types of FinTech companies:

### Traditional FinTech

are the companies which provide services to financial services companies supporting, maintaining or providing existing infrastructure[1] (e.g. SunGard, FirstData).

### Emergent FinTech

are 'disrupters' who apply new business models to compete with incumbents to provide services direct to consumers using existing infrastructure or creating their own (e.g. TransferWise, Zopa).

> "The UK Government is committed to supporting the development of the UK's FinTech sector."
>
> Harriet Baldwin, Economic Secretary to the Treasury[2]

— FinTech is a significant sector in the UK with London as its hub.

— Emergent FinTech has grown by capitalising on increased connectivity, an openness to new products and a willingness by customers, both individuals and financial services firms, to switch away from incumbents.

> "I want the UK to lead the world in developing FinTech"
>
> George Osborne, Chancellor of the Exchequer[3]

— London and the UK is a global leader and hub for FinTech.

— The UK's large financial services sector is a significant driver of the FinTech sector's success.

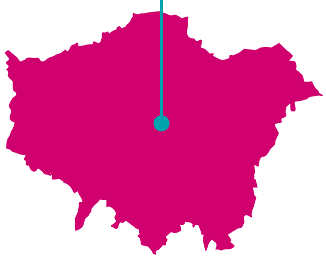
— The scale of this activity represents a significant potential growth opportunity for both traditional and emergent FinTech in London and the UK.

— The Government is strongly in favour of expanding the FinTech sector in the UK and London.

The UK's financial services sector generated £133 billion in GVA in 2014.[4]

Of which over 50% (£69 billion) was generated in London.[5]

£69 billion
of gross value added in 2014



The FinTech sector in the UK generated £20 billion in revenue in 2014.[6]

1. Financial infrastructure refers to the set of institutions that enable effective operation of financial intermediaries (for example, payment systems).
2. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
3. https://www.gov.uk/government/speeches/chancellor-on-developing-fintech.
4. ONS – Regional Gross Value Added, February 2016.
5. ONS – Regional Gross Value Added, February 2016.
6. EY – Landscaping UK FinTech, 2014.

## The FinTech sector consists of a range of microsectors[7]:

**Payments**

£10 billion

(infrastructure £8.1 billion and online £1.9 billion).

**Financial software**

£4.2 billion

(financial services software £4 billion and accounting £0.2 billion).

**Financial services data and analytics**

£3.8 billion

(credit reference £1 billion, capital markets £2.2 billion and insurance £0.6 billion).

**Platforms**

£2 billion

(P2P lending <£50 million, trading £0.8 billion, personal wealth £0.7 billion and aggregators £0.5 billion).

FinTech in the UK is growing fast. Emergent FinTech revenues grew by 83% between 2014 and 2015 (from £3.6 billion[8] to £6.6 billion).

The Emergent FinTech sector employed some 61,000 in 2014, of which around 72% were based in London.[9]

The UK Emergent FinTech sector attracted £524 million in investment in 2015. Between 2008 and 2013, investment in UK (and Ireland) FinTech increased eightfold.[10]

### Table 1: Emergent FinTech revenues[11]

The UK has the largest Emergent FinTech sector by revenues in the world.

| Location | £bn |
|---|---|
| UK | 6.6 |
| New York | 5.6 |
| California | 4.7 |
| Germany | 1.8 |
| Australia | 0.7 |
| Hong Kong | 0.6 |
| Singapore | 0.6 |

### Table 2: FinTech employment[12]

The UK has the second largest FinTech sector by employees in the world.

| Location | People |
|---|---|
| California | 74,000 |
| UK | 61,000 |
| New York | 57,000 |
| Germany | 13,000 |
| Australia | 10,000 |
| Hong Kong | 8,000 |
| Singapore | 7,000 |

### Table 3: FinTech investment[13]

The UK has the third largest FinTech sector by investment in the world.

| Location | £mn |
|---|---|
| California | 3,600 |
| New York | 1,400 |
| UK | 524 |
| Germany | 388 |
| Australia | 198 |
| Hong Kong | 46 |
| Singapore | 44 |

7. EY – Landscaping UK FinTech, 2014.
8. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
9. South Mountain Economics – London: Digital City on the Rise, June 2014 https://www.mikebloomberg.com/content/uploads/sites/10/2015/06/London-Digital-City-On-The-Rise.pdf
10. UKTI - FinTech The UK's unique environment for growth, 2014
11. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
12. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
13. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.

## London the hub of FinTech

— London is a global capital of FinTech and is the hub of the UK's FinTech sector.

London had an estimated 44,000 FinTech workers in 2014

(compared to c.43,000 in New York City and 11,000 in San Francisco-Silicon Valley).[14]

— Studies and evidence from London-based FinTech companies indicate that London is a particularly attractive market for FinTech companies.

**Reasons for this include:**

— London's position as a world-leading financial services centre;

— the deep and diverse talent pool across a range of skills and services offered by a global metropolis with c.252,000 digital employees and c.358,000 financial services employees;[1516]

— access to capital, with a record $3.6 billion in venture capital funding for the UK tech sector in 2015;[17]

— support for entrepreneurs through a number of start-up accelerators, such as Level39 which has around 130 members, which provide seed funding, mentoring and training;[18]

— knowledge spillovers gained from the clustering of technology-based start-ups (e.g. Tech City) with 40,000 tech businesses headquartered in inner London;[19]

— proximity to sector regulators,[20] (e.g. the Financial Conduct Authority ('FCA')), which provide a sophisticated regulatory environment;

— an openness among FinTech's customer base to new ideas and London consumers' high adoption of FinTech products relative to the rest of the UK (25% adoption in London versus 14% for the UK as a whole);[21]

— the open, welcoming and mercantile culture and the English language.

"London has the talent, not just in finance but in design, IT, engineering - all the hiring areas you need to build a successful online business."

Nutmeg

"History of FinTech innovation, diverse talent pool, global metropolis, English language."

Yoyo Wallet

"(1) Effective regulatory framework. (2) Access to suitable skillsets / talent. (3) Access to capital from investors."

Property Partner

## FinTech's wider benefits to consumers and businesses

The growth of the FinTech sector brings wider economic benefits to consumers and businesses.

14% of 'digitally-active' consumers in the UK use FinTech products such as overseas money transfer services or investment management services. Use in London is higher still, reaching 25% of 'digitally-active' consumers. These consumers benefit from a range of innovative and new financial products, which offer alternatives to traditional services that could be cheaper and/or more in keeping with a consumer's lifestyle than traditional options.

"We're open to new ideas and fed up with the banks overcharging"

FinTech company

The UK has been one of the fastest adopters of peer-to-peer ('P2P') lending, with the total volume of lending increasing by 85% between 2014 and 2015 and doubling in every year between 2010 and 2014. This has provided capital to consumers and enterprises that may otherwise have struggled to receive the appropriate level of funding through more traditional channels; 12% of lending to small business comes from P2P. In 2015, the value of lending originated through P2P platforms amounted to:[22]

£1490m
In business Lending

£909m
In consumer Lending

£325m
In invoice Financing

£332m
In equity Crowdfunding

14. SouthMountain Economics – London: Digital City on the Rise, June 2014 https://www.mikebloomberg.com/content/uploads/sites/10/2015/06/London-Digital-City-On-The-Rise.pdf
15. http://www.techcityuk.com/investors/
16. https://www.cityoflondon.gov.uk/business/economic-research-and-information/statistics/Pages/research-faqs.aspx
17. https://next.ft.com/content/fad8a17a-b38e-11e5-b147-e5e5bba42e51
18. http://www.level39.co/members/companies
19. http://www.techcityuk.com/investors/
20. The other regulator of relevance is the Prudential Regulation Authority ('PRA')
21. EY FinTech adoption Index 2015
22. KPMG – Pushing Boundaries, February 2016

# The drivers of FinTech's growth

## Why is FinTech successful in London and the UK?

A Government-commissioned report found that the UK had the strongest FinTech ecosystem compared to the other FinTech centres globally (including California, New York, Germany, Hong Kong, Singapore and Australia).[24]

Four attributes were identified that contribute to the UK's world-leading position: i) talent; ii) capital; iii) policy; and iv) demand.

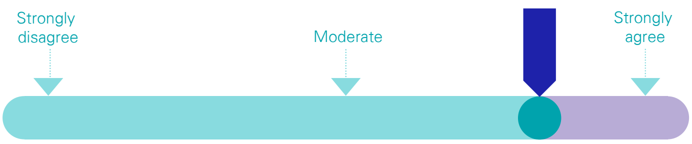
To add to publicly-available information[25], we have spoken to some of the UK's top FinTech companies.  In the rest of this report, we summarise: what they have told us; the strength of their sentiment regarding what they consider to be the fundamental reasons behind FinTech's success in London; and what they consider to be the potential affects of the UK leaving the EU on the sector.

> "Britain's membership of the EU gives home-grown talent unparalleled opportunities to learn"
>
> Toby Triebel, Spotcap[29]

> "Britain is seen as one of the world's entrepreneurial hotspots, with money and talent flowing in like never before."
>
> Jeff Lynn, CEO Seedrs[30]

## Talent

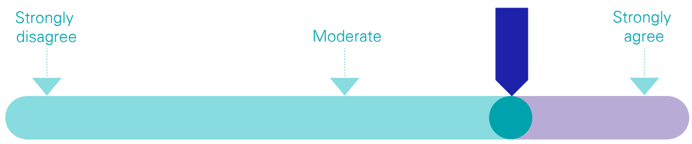
**Talent is a key reason for London's global leading position as a FinTech hub.**




| Strengths | Weaknesses |
|---|---|
| Strong financial services infrastructure from London's position as a global centre for finance. | In 2013, 45% of technology business leaders reported a skill shortage,[28] with the potential need to import technical talent from outside the UK. |
| Access to high quality financial services talent (1.04 million employees in the UK of which 34% are in London).[26] | |
| World-class higher education institutions, providing access to a global talent pool. | |
| London has a high density of top-ranked higher education institutions, with four of the top thirty ranked universities in the world.[27] | |

## Capital

**Access to funding in London, at relatively competitive rates, has helped FinTech companies start-up and grow**




| Strengths | Weaknesses |
|---|---|
| London is a significant global international capital centre, which is driven by good businesses and ideas. | The UK compares less favourably with California (£3.6 billion of investment in 2015)[33] with particular gaps in capital provision at the development (£5-100m) and IPO (£1bn+) stage compared to California. |
| The UK receives the most FinTech investment in Europe.  The UK received 35% more investment in FinTech than Germany in 2015.[31] | The perception of a risk-averse investment culture. |
| Start-up capital provision (£0-5m) in particular is good, with private investors providing £800m to £1bn of early stage investments.[32] | |

24. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
25. KPMG sent a questionnaire to selected companies in the FinTech 100, asking a range of questions on the effect of the UK leaving the EU on their business. We received responses from 7 companies.
26. https://www.cityoflondon.gov.uk/business/economic-research-and-information/statistics/Pages/research-faqs.aspx
27. https://www.timeshighereducation.com/world-university-rankings/2016/world-ranking#!/page/0/length/25/sort_by/rank_label/sort_order/asc/cols/rank_only
28. Government Office for Science – FinTech Futures The UK as a World Leader in Financial Technologies, March 2015
29. https://www.finextra.com/blogposting/12420/will-a-brexit-kill-britains-fastest-growing-industry
30. http://www.cityam.com/239224/i-have-no-love-for-the-eu-but-leaving-would-only-undermine-the-uks-vibrant-startup-ecosystem
31. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.
32. EY – Landscaping UK FinTech, 2014.
33. EY – UK FinTech On the cutting edge – An evaluation of the international FinTech sector, 2016.

London's strengths in providing a deep and diverse talent pool, wide availability to capital and potential access to a large consumer market are all helped by the UK's membership of the EU. These strengths could be affected if the UK leaves the EU, with potential negative consequences for the growth of the FinTech sector.

"It's no secret that hundreds of UK FinTech businesses... enjoy the UK's clear, forward-thinking regulatory regime."

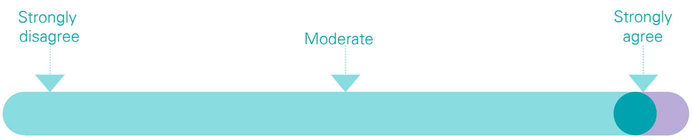
Michael Kent, CEO Azimo[34]

"Markets larger than Britain would be needed longer term for the fledgling companies to "scale up.""

Rhydian Lewis, CEO Ratesetter[40]

## Policy

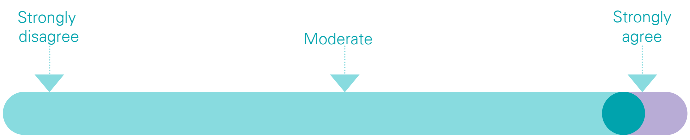
London has a supportive regulatory environment for FinTech




| Strengths | Weaknesses |
|---|---|
| World-leading policy environment, combining strong regulatory and tax incentives with government programmes. | The regulatory environment could be more open to innovation. |
| UK regulator, FCA, is well-regarded compared to its international peers and is open-minded to innovation (e.g. its Project Innovate and the Regulatory 'sandbox' schemes). | UK tax incentives are not as generous as some other jurisdictions (e.g. Singapore) and may be constrained by the EU's State Aid rules. |
| UK Government offers a range of tax incentives including Enterprise Investment Scheme ('EIS'), the Seed Enterprise Investment Scheme ('SEIS') and R&D tax credits. | |

## Demand

London's strength as a global financial services hub is critical to the success and growth of FinTech in London.




| Strengths | Weaknesses |
|---|---|
| UK is a global hub for financial services with a large international client base including 251 foreign banks and 588 foreign financial services companies.[35] | FinTech operations, such as payment services, seek access to large markets which allow them to benefit from reduced costs as a result of the benefits of economies of scale. |
| UK has a technologically-sophisticated consumer base open to FinTech products due to digital connectivity and lack of investment by incumbents. | Potential risk of reduced access to a customer base across the EU should the UK vote to leave. |
| UK consumers are open to switching service providers. For example, 30% of consumers used an aggregator to source their car insurance in 2012.[36] | |
| Beyond the 65 million[37] consumers in the UK, its EU membership provides businesses with access to a market of 508 million[38] consumers. | |
| The UK is considered to be a good base to expand business into the EMEA region. | |

34. http://www.cityam.com/239400/eu-referendum-im-a-fintech-startup-founder-and-heres-why-im-against-brexit
35. UKTI – FinTech The UK's unique environment for growth, 2013.
36. Finnacord Aggregation metrics survey, UKTI – FinTech The UK's unique environment for growth, 2014.
37. https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates
38. http://ec.europa.eu/eurostat/documents/2995521/6903510/3-10072015-AP-EN.pdf/d2bfb01f-6ac5-4775-8a7e-7b104c1146d0
40. http://www.techeye.net/business/uks-fintech-would-get-short-term-boost-from-brexit

# Scenarios of a British exit from the EU

## Potential scenarios in the event of a leave vote

Following a potential 'out' vote, it remains unclear how a separation would work.

The rules of the Lisbon Treaty state that there will follow up to two years of negotiation. In practice, it could take much longer than that. A recent Government report suggests it could take a decade to establish the UK's trading agreements with the rest of the EU.

> "a vote to leave the EU... could lead to up to a decade or more of uncertainty"
>
> HM Government report[41]

The eventual outcome, and the prevailing legal and trading relationships with the EU, would hinge on those negotiations.

Following negotiations, the UK's relationship with the EU may be similar to other existing relationships, such as with Norway, Switzerland or Turkey.

Equally, the UK may develop a bespoke arrangement through a new free trade agreement ('FTA'). Failing this, it could also revert back to WTO rules.

The salient features of the scenarios set out in Table 4 are that:

— both the Norwegian and Swiss options require some payment into the community budget, and require free movement of labour to EU citizens;

— under all the options, the UK would remain subject to EU regulations on any goods or services it wishes to sell into the Single Market; and

— although the FTA scenario may allow the UK flexibility to build agreements with countries outside of the EU, the resulting trading arrangements are unknown.

Although there is a range of oft-cited scenarios, the probability attached to each of them is unknown

## Macroeconomic effect

A wide range of studies attempt to calculate the potential macroeconomic effects.

### Short term

In the short term, there are likely to be several potential impacts of a leave vote. These are outlined in Table 5.

### Long term

The longer term impacts are harder to predict and will depend on policy choices and the form of the negotiated exit. HMT concludes that growth would suffer both from lower investment and from the adverse effect on productivity of reduced openness to external competition. A selection of the most recent studies assessing the economic impact are outlined in Table 6.

> "Britain would be permanently poorer if it left the European Union. Under any alternative, we'd trade less, do less business and receive less investment."
>
> George Osborne, Chancellor of the Exchequer

## Table 4: Summary of potential scenarios following a leave vote

| Scenario | EU trade | Compliance with regulations | Free movement of labour | Contribute to EU funds | Ability to negotiate extra-EU trade agreements |
|---|---|---|---|---|---|
| 1.Norway option | Member of European Free Trade Association ('EFTA') and the European Economic Area ('EEA') | Yes | Yes | Yes | Yes, independently and through EFTA |
| 2.Switzerland option | Member of EFTA with bilateral agreements | Yes | Can impose quotas | Yes | Yes, independently and through EFTA |
| 3.Turkey option | Customs union for industrial goods | Yes | No | No | Yes, in areas outside of the customs union |
| 4.World Trade Organisation ('WTO') option | WTO trade rules | Yes | No | No | Yes, independently |
| 5. Free Trade Agreement | Negotiated agreement between the UK & EU | Yes | Maybe | Maybe | Yes, independently |

41. HM Government – The process for withdrawing from the European Union, February 2016.



## Table 5: Short term macroeconomic effects of the UK leaving the EU

| Macroeconomic factor | Short term effect |
|---|---|
| Exchange rate | — Sterling has recently weakened and volatility increased. [42]<br>— Consensus among market commentators indicates that following a leave vote Sterling would depreciate by 10% to 20%.[43] |
| Inflation | — Imported goods and services account for a third of the CPI.<br>— The depreciation in the exchange rate could therefore eventually lead to an increase in the price level of 3% to 7%.<br>— The actual impact on inflation will depend on how the Bank of England responds. |
| Interest rates | — The MPC has committed to meet its inflation target following the EU referendum.[44]<br>— If the increase in prices threatens to breach the inflation target, interest rates could increase.<br>— In the event of a leave vote both cost of debt and equity capital could increase (PwC assumed increases of 50bps and 20bps respectively in its analysis of a leave vote).[45] |
| Economic growth | — The IMF and the Bank of England have both highlighted concerns that uncertainty in the run up to the referendum and during potential negotiations, in the case of a leave vote, may reduce domestic and foreign investment.[46]<br>— Analysis by PwC indicated this cost of uncertainty could reduce GDP by 1.9% to 2.6% in 2020.[47] |

## Table 6: Estimated impacts of EU membership on GDP

| Study | Range of estimated net impact of leaving the EU as a percentage of GDP |
|---|---|
| **HMT (2016)** | -3.4% to -9.5% a year |
| **PwC (2016)** | -1.2% to -3.5% a year by 2030 |
| **Oxford Economics (2016)** | -0.1% to -3.9% a year |
| **Centre for Economic Performance (2016)** | -1.3% to -2.6% a year |
| **Open Europe (2015)** | +1.6% to -2.2% a year |

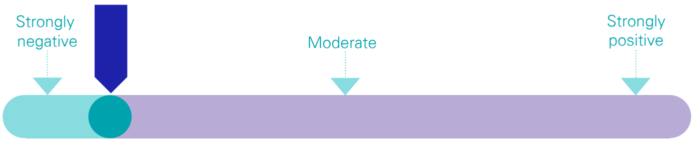
42. This movement may have been driven by other factors such as changed expectations on the renormalisation of UK monetary policy, and increasing concerns over the size of the UK's current account deficit (7% of GDP in Q4 2015).
43. http://www.theguardian.com/business/2016/feb/04/brexit--slash-sterling-20-warns-goldman-sachs, 44. http://www.theguardian.com/business/2016/feb/24/brexit-could-wipe-20-percent-off-the-pound-warns-hsbc, PwC Leaving the EU: Implications for the UK economy, March 2016.
44. Bank of England - Monetary Policy Summary and minutes of the Monetary Policy Committee meeting ending on 13 April 2016, Published 14 April 2016.
45. PwC Leaving the EU: Implications for the UK economy, March 2016.
46. IMF World Economic Outlook, April 2016, Bank of England - Monetary Policy Summary and minutes of the Monetary Policy Committee meeting ending on 13 April 2016, Published 14 April 2016.
47. PwC Leaving the EU: Implications for the UK economy, March 2016.

# How are FinTech's drivers of growth likely to be affected by a leave vote

## The overall effect on FinTech

Industry views indicate a range of opinions but the consensus view is that the UK leaving the EU is likely to be broadly negative for FinTech in London.

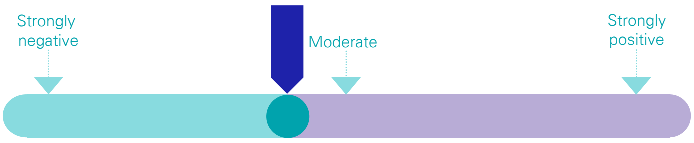
**How might the UK leaving the EU affect talent?**




> "We have a diverse European workforce in London and withdrawal from the EU could impact hiring, and retention of staff."
>
> Property Partner

> "Free movement of people from the EU should remain untouched."
>
> FinTech business, half of whose engineering team consists of citizens from the EU (excluding UK)

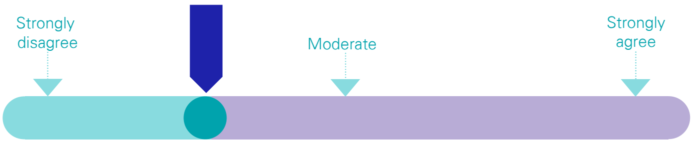
**How might the UK leaving the EU affect access to capital and your ability to fund / grow your business?**




> "There is a lot of inward investment from outside of the UK that could be diverted to other jurisdictions if the UK withdrew from the EU"
>
> Property Partner

> "[without] easy access to the EU market through EU-wide regulatory licensing... This would make UK FinTech companies less attractive from an investor's point of view"
>
> FinTech business with 25% of its activity attributable to trade with the EU

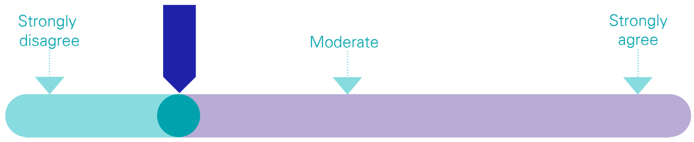
Does the EU provide unwelcome regulatory burden for FinTech in London?




> "The EU is actually the source of important consumer standards for UK investors... In our view, the standards that MiFID II will bring should already be in place at the UK level."
>
> Nutmeg, on the requirement for wealth managers to display all fees in pounds and pence at the point of sale

> "UK FinTech companies have easy access to the EU market through EU-wide regulatory licensing arrangements, which would not be available if the UK were to exit the UK"
>
> FinTech business

To what extent do you think the UK withdrawing from the EU might undermine London's strength as a global financial services hub?




> "There will still be plenty of scope to trade with Europe... But it will be much, much harder"
>
> Jeff Lynn, CEO Seedrs[48]

> "In the long term Brexit would deprive FinTech of potential access to a large market."
>
> Rhydian Lewis, CEO Ratesetter[49]

48. http://www.cityam.com/239224/i-have-no-love-for-the-eu-but-leaving-would-only-undermine-the-uks-vibrant-startup-ecosystem
49. http://www.techeye.net/business/uks-fintech-would-get-short-term-boost-from-brexit

# Talent

## How does the EU currently affect it?

Free movement and residence for EU citizens in London and the UK provides access to the EU talent pool.

The EU's Working Time Directive ('WTD') is an example of the perceived regulatory burden that reduces the flexibility and mobility of labour, although the UK's opt out from the social chapter of the Maastricht Treaty and WTD has reduced the potential costs of these regulations.

According to the OECD, the UK is already amongst the most flexible labour markets in the developed world.[50]

## What are the current benefits?

> 12.5% of London's FS workers were born in an EEA country (excluding UK).[51]

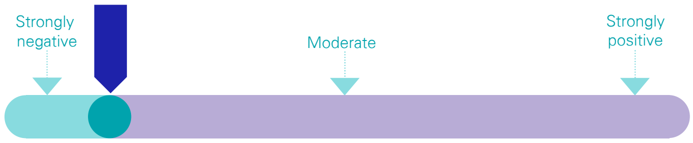
32% of EU migrants hold degrees (compared to 21% for the UK's domestic workforce).[52]

Access to younger and technically-skilled talent pool to fill skills gaps, as experienced in the FinTech sector.

63% of CBI members stated that free movement of labour had been beneficial to their business.[53]

Evidence from businesses in the FinTech sector indicated that EU (excluding UK) citizens made up to 30% of their workforce.

## How might the UK leaving the EU affect talent?




## What are the potential effects of a leave vote on the FinTech sector?

Evidence from the sector indicated that the majority of businesses considered that a vote to leave would have a moderate or strongly negative affect on their access to talent.

> "The IT skills gap is global and coders from Eastern Europe will simply move to France or Germany who have similar skills problems rather than bother with the hassle and expense of visa applications"
>
> Eric Dodds, CMO Iron Yard.[54]

50. Portes – "Economic implications of the UK leaving the EU", 2013.
51. Lyons – The Europe Report: A win-win situation, 2014.
52. CityUK –"Analysing the case for EU membership",2014.
53. CBI – "Our Global Future", 2013
54. http://techcitynews.com/2015/06/30/brexit-will-only-widen-londons-tech-talent-gap-experts-warn/
55. http://www.cityam.com/239400/eu-referendum-im-a-fintech-startup-founder-and-heres-why-im-against-brexit



"We have a diverse European workforce in London and withdrawal from the EU could impact hiring, and retention of staff."

Property Partner

"success ultimately boils down to being able to attract the most talented people, no matter where they're from ... If Brexit wins on June 23, though, that talent pool is sure to dry up for UK-based companies."

Michael Kent, CEO Azimo.[55]

"the free flow of labour between the EU and UK would be impaired."

FinTech business with 30% of its workforce drawn from the EU (excluding UK)

"we will be able to choose the best people for the job"

FinTech business who believed a leave vote could be strongly positive

# Capital

## How does the EU currently affect it?

The free movement of capital prohibits any restriction on capital movements and payments.

## What are the current benefits?

The UK is the third largest recipient of FDI in the world and the leading destination for EU FDI.

> The EU contributed £5 billion of inward FDI in 2014, although FDI has fallen from its pre-financial crisis peak.[57]

> Between 2010 and 2014, 50% of all FinTech FDI in Europe was invested in London.[58]

Membership in the EU is not the sole reason in the UK's ability to unlock significant amounts of capital and encourage FDI to the UK. Other reasons include:[59]

— the English language;

— the English legal system;

— world class universities;

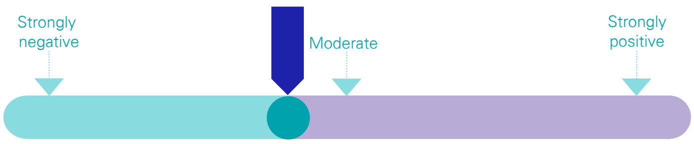
— flexible labour markets;

— ease of doing business; and

— proximity to the Single Market.

Some FinTech businesses also cited some of these reasons as contributory factors in London's position as a global FinTech hub.

**How might the UK leaving the EU affect access to capital and your ability to fund / grow your business?**




## What are the potential effects of a leave vote on the FinTech sector?

A number of FinTech businesses felt the effects of a leave vote would be moderately negative on the accessibility to capital whilst others felt the effects would be neutral.

— The UK has a long history of free movement of capital since capital controls were abolished in 1979.

— EU Member States will be required to maintain free movement of capital with the UK under Article 63 of the Treaty on the Functioning of the European Union ('TFEU').[56]

## In the short term, the availability of capital to the FinTech sector may also be affected by a leave vote due to:

— a general reduction in domestic investment and FDI as a result of uncertainty in the run up to, and negotiations following, a leave vote; and

— the possibility of higher interest rates and the cost of capital for businesses, which will make capital more expensive.

56. http://ec.europa.eu/finance/capital/third-countries/index_en.htm
57. ONS, Inward Foreign Direct Investment (FDI) Involving UK Companies, 2014
58. Government Office for Science – FinTech Futures The UK as a World Leader in Financial Technologies, March 2015
59. Ilzkovitz et al, 2007, "Steps towards a deeper economic integration: the internal market in the 21st Century A contribution to the Single Market Review" CBI.
60. http://uk.reuters.com/article/uk-britain-eu-fintech-idUKKCN0WA237
61. http://uk.reuters.com/article/uk-britain-eu-fintech-idUKKCN0WA237

"[without] easy access to the EU market through EU-wide regulatory licensing... This would make UK FinTech companies less attractive from an investor's point of view"

FinTech business with 25% of their activity attributable to trade with the EU

"There is a lot of inward investment from outside of the UK that could be diverted to other jurisdictions if the UK withdrew from the EU."

Property Partner

"Would there be a flight of capital out of the UK? Would investors be spooked? All of it is so uncertain that it's dangerous."

Dan Gandesha, CEO Property Partner[60]

"Other cities such as Berlin or Paris would start to look more appealing than London as a European hub."

Taavet Hinrikus, CEO TransferWise[61]

# Policy

## How does the EU currently affect it?

The EU has developed the Single Market and harmonised regulations, which set, for example, minimum standards that govern the provision of financial services across EU Member States (and are applied by national regulators).

The UK's FCA has the flexibility to develop its own rules in 'new' areas not yet covered by EU regulations (e.g. crowdfunding, where regulations are more developed than those across the EU).[62]

The UK Government also provides tax incentives and programmes to FinTech companies (so long as they comply with EU State Aid rules).

## What are the current benefits?

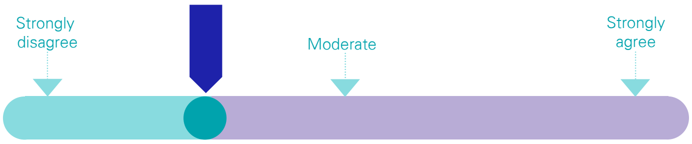
'Passporting', which is a broad term covering rights under a variety of regulations (e.g. MiFID and EMIR)[63], is a measure that allows financial services firms in EU Member States to deliver these services in any Member State, subject to their domestic regulator being notified and approving.

> Passporting allows UK financial services firm to access the EU market, taking the potential customer base from 65 million people to 508 million people.

28 different national regimes have been replaced with one set of European regulations, with the aim of reducing non-tariff barriers to trade and ensuring greater pan-European integration. This lowers the cost of business to firms operating in the EU and opens up a broader market, although there are specific barriers to trade for service providers (e.g. legal entity forms).

The strength of the UK economy (the EU's second largest economy), London's position as the EU's financial centre and the FCA's innovative regulatory approach together mean that the UK can influence EU regulations in financial services, and by extension, FinTech.

Does the EU provide unwelcome regulatory burden for FinTech in London?




## What are the potential effects of a leave vote on the FinTech sector?

A majority of FinTech businesses that we contacted disagreed that the EU provided an unwelcome regulatory burden on the FinTech sector in London although a number moderately agreed.

It is unclear if passporting for financial services and FinTech would be negotiated in any trade deal.

Evidence from the FinTech sector indicated that a lack of passporting may reduce UK companies' access to the EU market, which may affect business models that rely on economies of scale / a large customer base.

The need to comply with multiple sets of diverging regulations may increase costs. For example, Switzerland, which is not part of the Single Market, must abide by rules set by the EU in order to access the market.

Reduced influence in shaping new regulations in financial services and FinTech (e.g. crowdfunding, which is currently being considered). This may affect British companies that are bound by EU regulations due to their operations and mean that they have to comply with regulations that may not be specified with London and the UK in mind.

A leave vote could present an increased ability to change other sector specific regulations (e.g. bonus caps). In addition the UK Government may have increased ability to give the FinTech sector support and tax incentives without concerns regarding State Aid.

62. http://ec.europa.eu/finance/general-policy/crowdfunding/index_en.htm#maincontentSec1
63. Markets in Financial Instruments Directive (MIFID), European Market Infrastructure Regulation (EMIR)
64. https://www.finextra.com/blogposting/12420/will-a-brexit-kill-britains-fastest-growing-industry

"The EU is actually the source of important consumer standards for UK investors... In our view, the standards that MiFID II will bring should already be in place at the UK level."

Nutmeg on the requirement for wealth managers to display all fees in pounds and pence at the point of sale

"UK FinTech companies have easy access to the EU market through EU-wide regulatory licensing arrangements, which would not be available if the UK were to exit the UK."

FinTech business

"The other EU countries may remove the possibility to 'passport'."

Yoyo Wallet

"Perhaps the single most important reason to stay within the EU. Passporting allows home-grown and major foreign companies to set-up in the UK, and transfer their businesses to the EU seamlessly."

Toby Triebel, CEO Spotcap[64]

# Demand

## How does the EU currently affect it?

The UK has access to the Single Market with free trade in goods and services, with tariff-free access to all EU consumers.

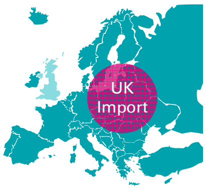
The UK benefits from the reduction in non-tariff barriers (e.g. harmonising product specifications and other regulations).

## What are the current benefits?


44% of the UK's exports went to the EU (2014).[65]

8% of total EU exports (2014).[66]

35% of the UK's financial services exports went to the EU (2013).[67]




53% of the UK's imports came from the EU (2014).[68]

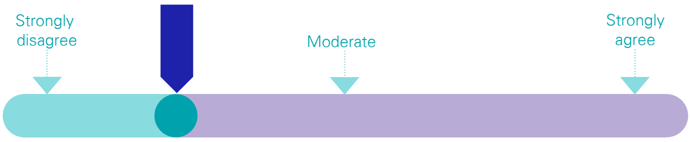
31% of the UK's financial services imports came from the EU (2013).[69]

**68% to 85% - the estimated uplift in total trade due to trade with EU countries (due to the Single Market).[71]**

The UK has access to 508 million consumers. FinTech companies benefit from network effects and economies of scale (i.e. a large potential customer – in this case, people not businesses – base).

Exposure to increased competition for these customers should drive innovation and dynamism in FinTech and across sectors.

**To what extent do you think the UK withdrawing from the EU might undermine London's strength as a global financial services hub?**




**£20 billion overall trade surplus in 2013 for the financial services sector.[70]**

EU-negotiated FTAs with other countries including Chile, Korea, Mexico and South Africa.[72] Negotiations are underway with another 80 countries with combined GDP of £13.8 trillion, 13 of which are in the UK's top 50 export list (including the USA, Japan and India).[73] This covers the negotiations over the TTIP with the USA, which includes plans to remove a number of non-tariff barriers, including in the financial services sector.

## What are the potential effects of a leave vote on the FinTech sector?

Evidence from FinTech businesses strongly indicated the importance of passporting in keeping access to the EU market. FinTech businesses that we contacted were concerned about the detrimental effects this may have on demand for their products and services.

FinTech businesses highlighted the EU, in particular Spain, Netherlands and Germany, as potentially high growth markets for their businesses, indicating that there may be potential negative consequences if trade with these countries was to become more difficult.

They also highlighted the USA, China and broader Asia as key growth markets. The benefit of the EU's size in negotiations compared to the potential improved flexibility of the UK alone (and in negotiating its own FTAs) lead to conflicting positive and negative consequences from a leave vote.

65. ONS – Pink book, 2015. These are the latest year of data available. Exports of goods and services.
66. https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk#fn:13. Exports of goods and services.
67. ONS – Pink book, 2015. These are the latest year of data available. Financial services includes Financial and Insurance & Pension.
68. ONS – Pink book, 2015. These are the latest year of data available. Imports of goods and services
69. ONS – Pink book, 2015. These are the latest year of data available. Financial services includes Financial and Insurance & Pension.
70. ONS – Pink book, 2015. These are the latest year of data available. Financial services includes Financial and Insurance & Pension
71. HM Government – HM Treasury analysis: the long-term economic impact of EU membership and the alternatives, April 2016
72. EU Free Trade Agreements – "Free Trade Agreements", 3 February 2014, http://ec.europa.eu/enterprise/policies/international/facilitating-trade/free-trade/index_en.htm#h2-1
73. CBI – "Our Global Future", 2013, converted to GBP using average exchange rates for US$ between 1 January 2014 and 31 October 2014; CityUK - Analysing the case for EU membership", 2014.
74. http://www.cityam.com/239224/i-have-no-love-for-the-eu-but-leaving-would-only-undermine-the-uks-vibrant-startup-ecosystem
75. http://www.techeye.net/business/uks-fintech-would-get-short-term-boost-from-brexit

In response to a question around a standalone trade deal between the USA and the UK (following a leave vote), President Barack Obama stated:

> "I think it's fair to say maybe some point down the line but it's not going to happen any time soon because our focus is on negotiating with the EU ... The UK is going to be at the back of the queue".
>
> US President Barack Obama

Domestically, the longer term drag on potential growth in financial services as a result of the reduced growth in the UK economy caused by a leave vote could have a detrimental impact on demand for FinTech products and services in the domestic UK market.

> "There will still be plenty of scope to trade with Europe... But it will be much, much harder."
>
> Jeff Lynn, CEO Seedrs[74]

> "In the long term Brexit would deprive FinTech of potential access to a large market."
>
> Rhydian Lewis, CEO Ratesetter[75]

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