



Brexit and the Metropolitan Areas

Impact of potential Brexit scenarios on Greater London,
Greater Manchester and Greater Bristol

A report by Cebr for LCCI (for the Chambers Alliance)

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Cebr

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Executive summary

This report looks at the impact on the economy of different potential Brexit outcomes. The study has an obvious focus on London, as the UK's largest regional economy, but also the wider UK and in particular large 'metro' conurbations like Manchester and Bristol.

The key conclusions are:

- The economy of the UK capital, London, is at immediate risk from Brexit if not handled carefully.
- The biggest Brexit related risks are *loss of financial business* from the City of London's trading activity with the remaining EU member states and *loss of service sector business* from reduced migration. On the goods side the danger is that even if an agreement results in no tariffs being imposed on UK exports there will still be extra costs in trading with the EU if the UK ends up without an arrangement that replicates most of the benefits of the current customs union and the single market which will make trade more costly with the EU. These costs include customs checks, border controls, direct regulatory requirements when trading, increased government and company bureaucracy and legal differences that will impact on firms trading across- they are non-tariff barriers on trade in goods, not only in services, which means an end to 'frictionless' trade- adding extra costs.
- It is possible to mitigate these risks and even ultimately possibly generate a net gain:
 - 1) A **Norway type EEA deal** would leave much of the economy unaffected;
 - 2) A liberal migration policy (possibly enforced through regionalisation of the migration system) could minimise the losses from abandoning the free movement of labour from the EU;
 - 3) A deal on financial services allowing continuing trade with the EU could limit the loss of financial service activity;
 - 4) A so-called **Canada plus deal** might achieve much of this though it will depend on the nature of the deal that is achieved; and
 - 5) Deregulation and enhanced trade deals elsewhere could (though only after a period) not only offset the losses from EU trade and from reduced labour supply but even possibly lead eventually to higher GDP. It must be said that there is considerable scepticism about the ability to achieve this. Indeed, the Government has already made it clear that there would be no race to the bottom in this area and its own analysis suggests that even if those opportunities exist in areas like the environment, employment rights and product standards they are unlikely to make up for any loss in income from introducing restrictions in UK trade in goods and services with the EU.
 - 6) A **WTO based deal** looks to be a worse option than any other option as it would leave services, including the financial sector, particularly exposed. Though there are opportunities to capitalise on.
- For areas outside London, because the dependence on the manufacturing sectors is much greater, different considerations apply. Any trade deal needs to ensure that supply chains in sectors such as aerospace and the motor industry are not disrupted. This means that the relative importance of achieving at least a Canada plus deal or ideally a Norway deal with membership of a customs union

attached is rather greater than in the context of London alone. On the other hand, although migration is not unimportant for the economies outside London, the relative dependence on migrant employees and especially skilled migrant employees is very much less and so these are less critical factors.

- Applying WTO rules will certainly hit the wider UK economy in the short term and have a depressing impact in the medium term. A Centre for Cities and LSE's Centre for Economic Performance study in mid-2017 'suggested that all British cities will be negatively affected by Brexit with the impact likely to be twice as negative under a 'hard Brexit', in other words the WTO option. They estimated that ten years after the new trading arrangements were implemented, in other words by 2030, economic output in the cities would be "1.2 per cent lower on average under a 'soft Brexit' and 2.3 per cent lower under a 'hard Brexit' than if the UK remained in the EU".
- Opinions are split about whether there would be potential for longer term gains that would justify these short-term costs. Any such gains would in any case be unlikely to materialise for a significant length of time after the initial losses in trade with the EU.
- In additions, given the uncertainty at present over what exactly each possible option might entail, and the lack of a real counterfactual given that what the UK is going through at present is unprecedented, there is considerable variation in some of the estimates. This is the case not only on the overall impact of various options but also on the more disaggregated effects on sectors and regions.
- **To be more definitive at the local level one would need to delve more deeply into city regions' specific attributes and strengths and therefore be able to pronounce on which options might be, or would be, least harmful for areas such as Greater London, Greater Bristol and Greater Manchester.**

And of course, impacts will differ whether one is looking at the short term, the medium term or the long term. Without further research one can therefore, at this stage only talk in generalities and use regional models that already exist even though they were not initially constructed to deal with the impact on an open economy like the UK 's of something quite as unprecedented as Brexit.

- These studies all try to compare the current state with a post Brexit scenario with the limitations that such an analysis inevitably carries. It is though worth noting that two developments are likely to change the shape of trade and the implications of trade deals in the medium term irrespective of Brexit:
 - 1) The *first* is the increasing importance of 3D printing for manufacturing, meaning that manufacturing will increasingly move closer to customers. Adidas have already built factories in the US and Germany to do this.
 - 2) The *second* (and related) change is that by far the fastest growing element of world trade is trade down telephone lines potentially rendering any trade deals- bilateral or multilateral- redundant. The changing underlying technology that makes this possible and issues such as harmonisation of digital regulation are likely in time to become rather more important than trade deals as such. But it is difficult to quantify the impact of these trends and they are rarely considered in modelling future trade flows. We have not attempted to do this in the current report but it is worth bearing in minds that they could fundamentally alter the way trade is done in the future, bypassing national frontiers completely.

Current analysis reflects this:

- For **London**, the Government impact studies that were initially leaked a few weeks ago suggest that the city would be least hit by 2030 by comparison to other parts of the UK. Under a Norway style arrangement London's economic output by 2030 would be 1% less by comparison to current arrangements against some 2% for the UK, under an FTA some 2% less against 4.8% less for the wider UK; and under a no-deal WTO arrangement the impact on London would be some 3.5% against 8% loss for the UK as a whole. Our own modelling provides similar insights. In practical terms, the outcome of a Norway style model would be surprisingly little changed for London. The modelled outcome of a Canada Plus Brexit shows a potential loss of 1.9% of London's GDP. However, highly tentative modelling shows a net gain of 1.5% of GDP if assumptions regarding aggressive deregulation and additional trade deals are applied. In contrast, the estimated loss to London's GDP from a WTO Brexit deal could be 5.5% of GDP after 15 years. Again, under assumed conditions and highly tentative modelling there could still be a positive net gain of 1.7% of London's GDP, if this is backed by far-going deregulation and additional trade options.
- For the **Greater Manchester economy**, it would stand to reason that it would be likely to be affected in a similar way to the London economy for part of its activities. Indeed, in the LSE/Centre for Cities study indicates urban areas are worse affected because they tend to specialise in sectors that are more likely to be impacted by Brexit, given that the introduction of non-tariff barriers when none existed will affect them disproportionately. However, although having less dependence on migration than London it has a larger manufacturing sector that would be negatively impacted by leaving the customs union and the single market. The LSE/Centre for Cities study is suggesting that under soft Brexit Manchester could suffer a GVA loss of between 1.3% and under a hard Brexit a GVA loss of 2.4%.
- The **Greater Bristol economy**, also strong in IT, creative and digital, financial and business services and high-tech manufacturing would be affected in a broadly similar way to Manchester. Although the government report suggests rather smaller impacts on the South West than on either London or the North West of England, the LSE/Centre for Cities study is suggesting that under soft Brexit, Bristol could also suffer a GVA loss of between 1.3% and under a hard Brexit a GVA loss of between 2.6%. However, given the stretch of the metropolitan coverage in this case there will also be the added impact that the aerospace cluster which would be adversely affected by any form of Brexit that inhibited either its exporting capability or its access to its supply chain.
- Interestingly the LSE/Centre for Cities study also suggests that cities/areas that may be more affected by Brexit, due to a more flexible and varied pool of labour, also perhaps have the capacity to find it easier to adapt in the long term. This may well in fact apply to all three areas we are looking at. Again, it is an assumption that will have to be tested more at some stage but also stresses the importance of trying to separate short term, medium term and longer-term impacts to the extent one possibly can.

1 Introduction

This is a report on potential Brexit impacts written by Cebr for London Chamber of Commerce and Industry (LCCI) for the Chambers Alliance.

The purpose of the report is to assist the Alliance in representing broad views from business. The report looks in detail at the three most often-quoted Brexit options for the UK:

- Norway model
- Canada Plus model
- WTO rules applying to future trade relations

The report also looks at the impact on London as well as other major conurbations in the UK like Manchester and Bristol and at the UK wide impact.

Where this report is unique is that it takes account of the specific requirements of metro regions, especially London. London is not only heavily influenced by the financial economy of the City of London but also by the modern development of the so-called Flat White Economy of creative and technological industries that now accounts for more jobs even than the financial service sector. The Flat White Economy is generally expected to account for a major part of the UK economy going forward. Because the Flat White Economy is 1) hard to measure with much of its product being virtual; and 2) hard to categorise because it involves sectors which have traditionally been coded in very different parts of the economy, few if any other studies of Brexit have taken it into account.

Where this report is also unusual is in its detailed analysis of the dependence of the London and other urban economies on migration. Cebr has earlier reported for LCCI on the case for a London work visaⁱⁱ and has also prepared a special report on migrationⁱⁱⁱ that shows how the UK economy and especially the London economy has become heavily dependent on migration and how cutting migration will slow growth and lead to serious fiscal problems.

The analysis of the Greater Manchester and Greater Bristol economies also takes account of their essentially service based economies, though neither is as heavily dependent as London is on migration.

The report then examines each of the three Brexit options in detail and concludes by identifying policy implications emerging from the analysis.

2 The UK economy and how it compares with large English conurbations

2.1 Introduction

This section looks at the sectoral composition of the London economy and compares that with both the UK and with the UK excluding London. It also looks at the Manchester and Bristol economies.

2.2 The sectoral breakdown

For this purpose, we make a different sectoral breakdown from that usually made. The reason for this is the importance of identifying two discrete sectors that are of importance to London and still of relatively less importance to the rest of the UK currently.

These sectors are financial services and the so-called ‘Flat White Economy’ that combines part of the creative sector with the IT sector.

Financial services

The wholesale financial service cluster in the City of London and Canary Wharf (as well as elsewhere in Central London) is well known. What is less familiar is the direct dependence of a proportion of the professional service industry in London on the wholesale financial service sector. We have included City lawyers and accountants and other consultants in our wider financial service sector as their business is driven directly by the City. This enables us to give a more accurate weighting to the sector.

The Flat White Economy

London is home to the Flat White Economy, described by Cebr founder and Deputy Chairman (and co-author of this report) in the eponymous book^{iv}. What is unusual about this is that it is more dependent on the use of IT than directly on the digital sector. Although the Flat White Economy is made up of a range of sectors, the two biggest driving forces in London are:

- 1) online retail where the UK share is the highest in the world, together with the associated online marketing; and
- 2) fintech – the various digital developments that are changing the world of finance, that are driven largely as an offshoot of the proximity of the London’s digital hub and its financial hub.

The categorisation

So for this analysis we have split the economy into the following categories:

- 1) Financial services and associated professional services (that is the professional services directly dependent on the FS sector).
- 2) Headquarters and corporate centres
- 3) Flat White Economy (Tech plus Creative)
- 4) Rest of service sector
- 5) Rest of economy

Table 1 shows the different shapes of the London, UK and rest of UK economies using the breakdown described above.

What is clear is that two major industries, financial services and the Flat White Economy, which together account for not far short of a third of the London economy, account for about half that share for the UK as a whole. Indeed, looking at the UK excluding London, these sectors only account for 11.5% of the economy as opposed to 29.3% of the economy in London. On the other hand, the non-service sectors (essentially construction, manufacturing and utilities) account for only 8.3% of the economy in London (of which the largest part is construction) but 24.4% of the economy for the UK outside London.

Table 1 GVA Shares of the London and UK economies 2016

	London	UK	UK excl. London
Financial Services	14.24%	6.60%	4.39%
Headquarters and corporate Centres	20.69%	17.08%	16.04%
Flat White Economy	15.06%	8.87%	7.09%
Rest of Service Sector	41.68%	46.68%	48.12%
Rest of Economy	8.33%	20.77%	24.36%
	323,981	1,449,176	1,125,195

Other large conurbations

The value add data for cities that are not regions in themselves like London is not at a sufficiently granular level for analysis in a similar fashion to the London data. However, there is some knowledge available.

There are wholesale finance businesses in the UK outside London but (other than in Edinburgh) they generally are not on such a scale as to change dramatically the economic profile of the local economy.

Cebr has, however, developed a model for understanding the potential for the Flat White Economy based on analysis in the US where the digital economy has been developing for longer. The model has been described in the UK Sunday Times^v.

From this analysis three factors stand out as driving the scale of the Flat White Economy in a city or a region.

The first is the preponderance of skills. We measure this as the percentage of the population with Level 4 or above qualifications. The second is the density of cultural activities measured by proportion of the economy devoted to culture. Finally, another driver of the Flat White Economy is the easy availability of cheap property.

Based on this we have created an Index of Flat White Economy potential. Both Bristol and Manchester are well into the UK's top quartile for digital potential. Manchester is second out of 157 while Bristol is also near the top, ranked 30th (the reason for Bristol's lower ranking is the higher cost of property in the area).

It is worth pointing out that the latest Tech City report on the scale of the UK tech economy in the regions has Manchester as the largest Flat White economy outside London with 62,653 digital jobs and 'Bristol and Bath' as the fourth largest with 35,929 digital jobs. Indeed, if the whole 'M4 corridor' is taken together, it is the largest digital cluster outside London (although it would seem unreasonable to

agglomerate the whole of the M4 and not compare it with something more equivalent like Manchester/Liverpool or the M62 corridor).

2.3 Economic prospects

Cebr produces monthly forecasts for the UK and London economies. Some of the aspects of these forecasts are set out in the charts and tables below. They assume a 'most likely outcome' Brexit which is similar to the Canada Plus option described in this report.

Figure 1



Figure 1 shows that after years of strong growth, the London economy is expected to slow in the coming years. This is partly affected by Brexit but is also a consequence of capacity constraints. Labour markets are tighter than in the boom years while high costs, particularly for property, are pricing some activity out of London.

2 below gives Cebr's latest forecasts for the London Economy for GVA growth (compared with the UK's GDP growth) and for employment.

Table 2

	UK GDP	London GVA	London Employment
2016	1.9%	2.3%	3.1%
2017	1.8%	1.6%	2.1%
2018	1.6%	1.4%	1.4%
2019	1.4%	1.2%	1.4%
2020	1.7%	1.5%	1.2%
2021	1.6%	1.4%	0.8%
2022	1.5%	1.4%	0.1%
2023	1.5%	1.4%	0.2%
2024	1.5%	1.7%	0.2%
2025	1.5%	1.7%	0.2%
2026	1.5%	1.7%	0.5%

The key point about the forecast is that whereas for many years the London economy has consistently outperformed the UK economy, in the immediate future this is not expected to be the case. Some of this effect reflects the disruptive effects of Brexit but in addition the UK's economic cycle is near its peak with fewer potential gains from take up of unused capacity.

One small caveat is that the tech and related sectors are almost certainly under measured and are proportionately more important in London. London's growth would be higher if these sectors were properly measured. But the message that growth is slowing down, best illustrated in Figure 2, would still be the same even if the growth numbers were all adjusted up.

Figure 2

London growth expected to reach a four year low

Real London GVA – annual % change



Source: ONS, Cebr analysis

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2.4 The Single Market

At first sight one might imagine that the Single Market might have little effect on the London economy since the London economy is essentially service based while the Single Market largely deals with goods.

But a more detailed analysis suggests this view would be wrong for three reasons:

- 1) The Single Market is linked with free movement of labour (see migration below) and migration is important for the London economy;
- 2) The area of services where the Single Market is already most developed is Financial Services which are of particular importance to London; and
- 3) While many other areas of services are currently only affected in a minor way by the Single Market this is likely to change over time. The Digital Single Market especially is likely to be of increasing importance over time as the issue of regulation of the tech giants becomes a major issue of political focus.

And indeed, even now increasing areas of trade in services (see below) are covered by the Single Market.

2.5 What is the single market in services?

The single market ensures more total trade access than a typical FTA as it relates to a deeper level of access in services. Service access within the single market is supported by EU legislation guaranteeing certain mobility rights for individuals and firms as well as rules that restrict discrimination based on national origin. Access is also directly and indirectly facilitated through common regulatory frameworks and oversight mechanisms that monitor and enforce the rules and regulate disputes.

These common features prevent countries from inserting barriers to trade within the single market, ensuring that firms and individuals from other member states face fewer direct and indirect frictions. Furthermore, exporters are not faced with having to export different services to meet different standards, thus lowering their cost overheads.

The common rules also allow deep access to certain regulated markets such as financial services and air travel, since the rules and oversight mechanisms are the same or are substantially harmonized. Furthermore, the single market's free movement of labour/people provisions intersect with services where self-employed individuals choose to exercise their mobility rights across the market.

It is also important to emphasize that the barriers to service trade, where these exist, tend to be regulatory. Therefore, a desire to have complete control or effective autonomy over domestic economic regulations is incompatible with the free movement of many regulated services as the countries where these exports are going will not accept the provision of such services subject to different rules.

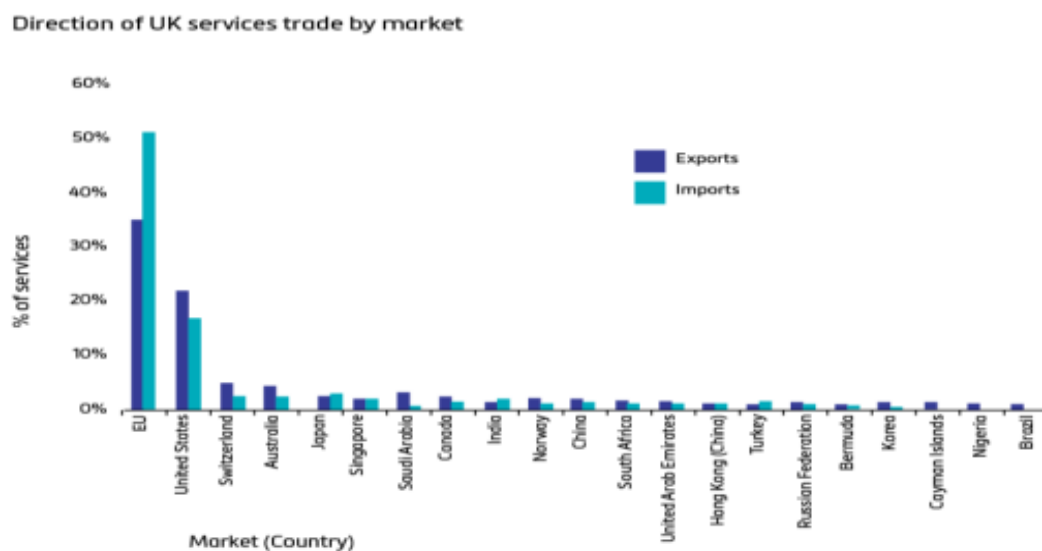
However, unregulated services such as many creative and tech industries, consultancies and research providers may continue to operate under similar terms even without formal service access. These could still be affected indirectly by the single market through the free movement of labour, but they could be being more resilient to a withdrawal of current access.

The single market in services is especially relevant for the UK's exports of financial services, telecoms and travel services. And the largest market with which we trade services is the EU.

Figure 3

SERVICES WORRIES IN ANY NEW TRADE AGREEMENT:

Source: London First-June 2016- concerns over passporting, Euro Clearing, EAB, non-tariff barriers..



2.6 The IMF Report on the impact of Brexit on Financial Services

In February 2018 the IMF included a sub study of the potential impact of Brexit on Financial Services in the UK in its annual Article IV report on the UK economy. The key conclusions are reported below.

Financial services make an important contribution to the UK economy. They account for 7 percent of gross value added, an estimated 11 percent of tax revenues, and 3 percent of employment (plus another 3 percent of employment in related professional services). The UK runs a substantial services trade surplus, which partly offsets its goods trade deficit. Exports of financial services amounted to 2¾ percent of GDP in 2015, nearly half of which were to the EU. About half of financial services are related to the domestic economy, a quarter to EU-related business, and another quarter to non-UK, non-EU business.

Exit from the Single Market would imply that UK-based institutions lose their passporting rights. These rights enable them to provide financial services throughout the EU on a cross-border basis or through branches without additional local authorization, and without having to set up EU subsidiaries to continue serving their European clients. An alternative could be to reach equivalence agreements, which allow non-EEA financial institutions to provide specific services if their home country regulatory regime is deemed to be equivalent to EU standards. Existing equivalence agreements with non-EEA countries do not cover all services (for example lending, deposit-taking, custody and payment services, and trade finance are excluded). In addition, equivalence must be requested and approved, and can be revoked at any time if the regulatory regimes are no longer deemed to be aligned. For asset managers, it will be critical to retain the ability to delegate portfolio management to the location of their choice. In addition, bilateral arrangements with EU member states might be needed to retain market access. UK central counterparties (CCPs) will need recognition from the EU regulatory bodies to continue providing clearing and settlement services to EU institutions. Otherwise, UK-based euro denominated derivatives clearing and settlement activity may have to relocate.

2.7 Migration

The UK is highly dependent on migration and major conurbations, especially London, are even more so. This is particularly the case in two key industries – the financial service economy and the Flat White Economy but also applies to sectors such as construction, hospitality, health and social care as well as in digital and the creative sector more generally.

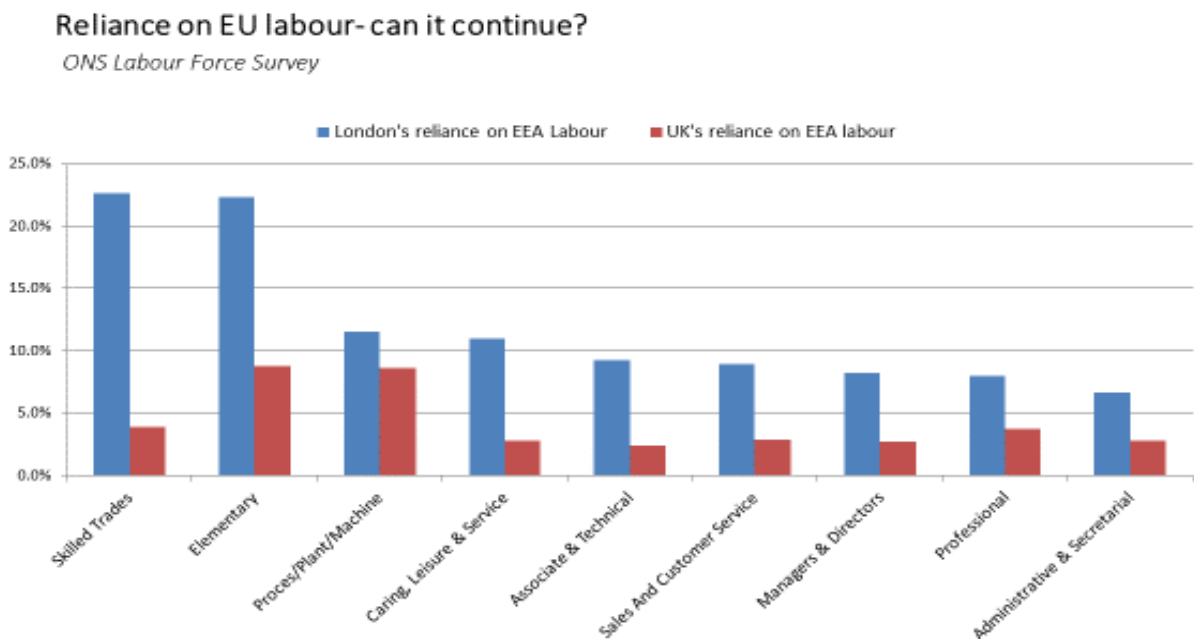
First: migration alleviates skill bottlenecks and hence removes barriers to faster growth.

Second: migration boosts diversity and also boosts creativity which enhances productivity with both direct and indirect effects on economic growth.

Third: migration makes business more profitable, enhancing investment and hence growth. Even if the initial impact is to place downward pressure on wages through the enhanced supply of labour relative to demand, the secondary effect is to boost wages through faster growth^{vi}.

Because our analysis takes account of these dynamic effects of immigration, which are well supported by academic analysis, it suggests the effects of cutting immigration are greater than those estimated by conventional analysis.

Figure 4



3 Norway model

3.1 Description

Some discussion of the likely form of the UK Brexit suggests that a Norway style option for Brexit might be appropriate, either as a long-term outcome or possibly as a part of a transitional phase.

In his press conference after the Sandhurst Summit with the British Prime Minister Theresa May in January 2018, President Macron of France suggested this as an appropriate position^{vii}.

Technically for this to happen, the UK would apply to join EFTA and then seek membership of the EEA. Then, provided these were accepted, the UK would be outside the Customs Union but inside the EEA

We have taken the descriptions from those produced by the eminent EU economist Michael Emerson in his special Centre for European Economic Studies report 'Which Model for Brexit?'^{viii}

Commenting on the Norway model he says:

'This model is clearly defined: the non-member state is treated with regard to the single market exactly as if it were an EU member state. This requires that all EU single market legislation is fully implemented, including new legislation as it becomes effective, or amendments to existing legislation. But it does not entail membership of the Customs Union, thereby permitting EEA/EFTA states to make their own free trade agreements with third countries, which they have done in 31 cases. It also excludes EU agricultural and fisheries policies.'

This model also requires respect for all four freedoms on which the EU is based, including the free movement of people. Significant contributions are made to the EU budget by Norway, and also by Switzerland.

Enforcement is assured by specially created institutions, namely the EFTA Surveillance Authority and the EFTA Court, while this Court is subordinated to the rule that it cannot contradict the case law of the Court of Justice of the European Union.

The advantage of this model is that it is a system that exists, offers legal clarity and actually works. It is the closest among other options to sticking to the status quo in economic terms and it would avoid uncertainty and thereby minimise damage to the UK as a destination for foreign investment aimed at the EU market. Of all the models one can entertain for the UK, it is the closest to continuing membership, i.e. full inclusion in the single market, but it would not allow the country to have any say in how single market policies are determined.

A detail regarding Liechtenstein is worth noting. In its negotiations with the EU, this very small state secured the right to impose quantitative limits on immigration from the EU; but it is so small that the EU would doubtless say that it does not amount to a relevant precedent.'

3.2 Impact on migration

We are assuming that under this scenario there will be no impact on migration and that free movement of labour will continue.

3.3 EU contributions

Although there is the possibility of reduced payments, the access to the Single Market likely to emerge from such a deal will probably involve some payments from the UK to the EU on close to the current scale. We have therefore not made any assumption of reduced payments.

3.4 Effect

In practical terms the outcome would be that surprisingly little changed. There might probably be a slight reduction in financial contributions. Leaving the common fishing policy and the CAP would be likely over the longer term to lead to cheaper food prices but this is by no means certain.

There would be some scope for trade deals but these would have to be in line with existing Single Market deals and it would probably not be appropriate to claim much credit for economic gains from these.

It is claimed that in this case the UK would have no influence over the future of regulations or trade deals signed by the EU. This is an exaggeration but it would be improbable that the UK would have as much influence as it might have had had it remained in the EU.

Thus, over the very long term there might be some adverse economic effect from regulations being applied that do not support the UK economy. But overall given the way we are assuming that a Norway option might work there are no significant effects for the London economy in these areas under this scenario.

4 Canada Plus model

4.1 Description

To describe the Canada Plus model used in this report, we again start with the descriptions from Michael Emerson in his special Centre for European Economic Studies report ‘Which Model for Brexit?’^{ix}

‘This (still unratified^x) Comprehensive Economic and Trade Agreement (CETA) is an advanced model of a quite deep trade agreement, except that it is very limited in the services sectors. It is comprehensive in coverage and is the most up-to-date example of a free trade agreement between advanced economies that applies comparably high regulatory standards. The EU’s free trade agreement with Korea is another but somewhat older example in the same category. The relevance of this model for the UK, however, is much reduced, since it ignores the large amount of EU market law that the UK will most likely retain in order to maximise its access to the EU single market. The CETA could be a useful template to expedite future UK negotiations of its own bilateral trade agreement with Canada and other advanced economies, but not with the EU.’

Some of the aspects of a Canada Plus agreement have been outlined by the UK’s Brexit negotiator, Mr David Davis^{xi}. He used an interview on the Andrew Marr programme on BBC 1 to set out his vision for the UK outside the European Union a week before the Cabinet holds a formal discussion of the ‘end state’ of the Brexit talks.

Mr Davis said he wanted to see an “over-arching trade deal” based on Canada’s trade treaty with the European Union but including services.

It would set out “individual arrangements for aviation, nuclear and for data”, as well, he said, describing it as “Canada plus plus plus”. He said: “All we want is a bespoke outcome. We will probably start with the best of Canada, the best of Japan and the best of South Korea.

“And then add to that the bits that are missing – which are the services.”

One consultancy has described a Canada Plus style Comprehensive Economic and Trade Agreement (CETA^{xii}) in the following terms:

Main Provisions

An EU-UK CETA Treaty would give the UK the following benefits that reflect many of the key aims of the Brexit campaigners:

- *A free trade area would be established based on WTO principles and agreed rules of origin for the majority of products.*
- *Simplified import, export and transit requirements would be introduced.*
- *After a transitional period of up to seven years for some products, customs duties would either be eliminated or reduced for nearly all manufactured goods. Tariffs and/or quotas would remain on sensitive food and agriculture products.*
- *UK exports would have to meet EU standards, conformity assessment procedures and regulations, including sanitary and phytosanitary measures that are important for the agri-food sector.*
- *The qualifications of regulated professions (such as architects, accountants and engineers) would be recognised.*

- *The UK would not have to make a payment to the EU budget for market access.*
- *The current rules on procurement would remain largely unchanged.*
- *The temporary entry and stay of key personnel, contractual services suppliers and professionals and short-term business visitors would be controlled in a flexible manner.*
- *The full application of EU competition law is out of scope.*
- *The UK could conclude bilateral agreements with other non-EU trading partners using the CETA model. There are some negatives for the UK.*
- *Being outside the EU's customs union and within a CETA arrangement, UK exports of goods would have to comply with additional bureaucratic customs checks, which could raise costs particularly for those firms with complex supply chains. Therefore, EU customs checks on UK imports/exports would have to be introduced.*
- *Arguably the biggest challenge the EU-Canada deal poses as a potential model for UK-EU relations after Brexit is that it only grants limited services liberalisation in areas such as postal services and maritime transport.*
- *In order to take advantage of the EU financial services 'passport', UK firms would have to establish a presence in the EU and comply with EU regulations. Therefore, the 'Canadian model' could ultimately make it harder for UK-based financial services firms to sell into the EU market.*
- *As a UK-CETA agreement would imply the UK not adopting vast areas of the EU legislation and remaining outside EU co-funded programmes, this would inevitably impact on investment decisions in the areas of energy, transport, research and development and intellectual property for example.*
- *As for institutional provisions, a CETA Joint Committee, co-chaired by the UK Minister for International Trade and the EU Trade Commissioner, would supervise and facilitate the implementation and application of the agreement and oversee the work of specialised committees and other bodies established under CETA.*

This does not take account of any special provisions for services which Mr Davis indicated that the UK will be trying to negotiate. It is likely that these would cover financial services at least and probably telecoms and digital areas as well. We have assumed that deals would be made in these areas which would provide about 80% of the market access currently available as an EU member.

4.2 Impact on migration

There is no hard information that would make it possible to determine the migration impact of the Canada Plus model. We have therefore crudely modelled the impact on migration as 50% of the impact of the impact of the WTO Brexit.

4.3 EU contributions

Although technically the Canada CETA agreement does not involve payments, the enhanced access to the Single Market likely to emerge from such a deal will probably involve some payments from the UK to the EU. We have assumed 50% of current payment levels.

4.4 Effect

Table 3 sets out the initial effects on the London economy of the reduction in trade with the EU from a Canada Plus Brexit without making any allowance for deregulation and new trade deals elsewhere. It shows a potential loss of £7.5 billion at today's prices and level of GDP. This represents 1.9% of London's GDP.

Table 3

Impact on economy of Canada Plus Brexit with no deregulation and no additional boost from trade deals

Sector	Share of London GDP (2016)	Impact on EU trade	Impact from labour	Impact from contributions	Impact from deregulation	Impact from new trade	TOTAL
Financial Services	14.24%	-3.25%	-0.05%	0	0	0	-1890
Headquarters and corporate Centres	20.69%	-1.48%	-0.05%	0	0	0	-1252
Flat White Economy	15.06%	-0.30%	-1.05%	0	0	0	-828
Rest of Service Sector	41.68%	-1.68%	-1.55%	0	0	0	-5500
Rest of Economy	8.33%	-0.55%	-0.05%	0	0	0	-187
Total £ million	408479	-6373	-3373	2167	0	0	-7579

Cebr has modelled the impact of a Canada Plus deal if one made more optimistic assumptions about the impact of deregulation and of new trade deals. We have taken into account the work done by Matt Persson of Open Europe^{xiii} as well as that of other economists, though our estimates are more cautious.

Obviously, these figures are highly speculative and at some level it is arguably not right to compare relatively certain losses from losing EU markets and migrant labour with highly uncertain gains from deregulation and new trade deals. But equally not to make these comparisons would mean a basis of comparison which in some sense is rigged.

Perhaps the best way to look at these what this information is telling us is to say that IF the Canada Plus option is chosen, it will be have an economic cost UNLESS it is backed by aggressive deregulation and by achieving additional trade options from the fast-growing markets outside the EU.

The highly tentative modelling set out in Table 4 suggests a potential net gain after 15 years of £6.0 billion or 1.5% of London's GDP if these assumptions are applied. It should be noted that the negative effects would be achieved earlier and the positive effects later so even on this scenario in the initial period the net effects would be negative. However, we have used cautious estimates of the potential gains so that also has to be taken into account.

Table 4

Impact on economy of WTO Brexit with high deregulation and additional boost from trade deals

Sector	Share of London GDP (2016)	Impact on EU trade	Impact from labour	Impact from contributions	Impact from deregulation	Impact from new trade	TOTAL
Financial Services	14.24%	-3.25%	-0.05%	0	5%	4%	3317
Headquarters and corporate Centres	20.69%	-1.48%	-0.05%	0	2%	0	-27
Flat White Economy	15.06%	-0.30%	-1.05%	0	0	0	-828
Rest of Service Sector	41.68%	-1.68%	-1.55%	0	2%	2%	459
Rest of Economy	8.33%	-0.55%	-0.05%	0	2%	2%	987
Total £	408479	-6373	-3373	2167	7241	6413	6074

5 WTO Rules

5.1 Description

To describe the WTO Rules option, we again look at the descriptions produced by Michael Emerson in his special Centre for European Economic Studies report ‘Which Model for Brexit?’^{xiv}

He comments on the WTO option:

The UK is and will remain a member of the WTO post Brexit. There are two major issues to work through here, on the UK’s future bound tariff schedule in the WTO, and its schedule of reservations (if any) on trade in services and establishment for individuals and companies engaged in service sectors. With its existing WTO membership renegotiated on these points, the UK will be free to negotiate its own free trade agreements with the EU and any other WTO member, as long as it keeps out of the EU’s Customs Union (see below). A first task will be to reconstitute as fast as possible the free trade content of the EU’s many preferential agreements with many countries, including some advanced industrial economies, such as Korea, Singapore and Canada as well as many developing countries. The second step would be to negotiate agreements with countries with whom the EU has no agreement so far, including major cases that are currently under negotiation (e.g. the US, Japan and India). Advocates of Brexit have argued that the UK could negotiate such deals faster and better on its own, but indications from the US and elsewhere suggest rather that the UK will be ‘at the back of the queue’^{xv}.

The UK’s future tariff schedule at the WTO. Since this will have to be agreed with all other WTO member states, the UK will have a strong interest in making this process as easy and speedy as possible. One obvious way of proceeding would be to retain the EU’s MFN (most favoured nation) tariff schedule unchanged, or to do this with exceptions only for tariff lines for which it might propose more liberal rates than the EU, including possibly a more liberal tariff-quota regime for agricultural products. But the UK could not expect to persuade the rest of the world to revise its tariffs downwards in exchange. On the contrary, other WTO member states could take the occasion to demand various concessions, since the process requires that the applicant reaches bilateral agreements with each of them. This would apply to the EU itself as well, since its formal WTO commitments on some points will have to be adjusted, and these will have to be agreed with the rest of the WTO.

Services. This will be a highly complicated affair in negotiations with both the WTO and EU. The WTO’s General Agreement on Trade in Services (GATS) contains extensive lists of subsectors for which member states retain reservations limiting market access. The EU’s service markets (internally) are partly subject to EU-level regulation and partly remain a matter of member state competences. As a result, there is a double set of reservations at the WTO for the EU as such, and for each of the 28-member states individually. The UK will therefore have to decide what list of reservations it wishes to retain. The UK might choose a relatively more liberal package than the EU’s existing reservations, which of course would facilitate agreement. But as in the case of the tariff schedules, this would be done unilaterally by the UK, without any real possibility to persuade the rest of the world to reciprocate.

The UK’s negotiation of its services regime with the WTO will go alongside its negotiations with the EU on the same subject. The main point to keep in mind is that while the EU’s services market is far from completely integrated, it is incomparably more liberalised than the WTO regime.

Overall, if the UK opted to rely entirely on WTO rules for its future trading relationship with the EU, in the absence of a free trade deal, there would be a sharp reduction of market access for both goods and services. The EU’s existing preferential trade agreements with third countries would also cease to apply to

the UK, and it would take years for the UK to reconstitute them bilaterally. The potential cost of this loss, including for the UK as a location for foreign direct investment targeting the EU market, is amply discussed in the British debate, and to which this note does not try to add.

5.2 Impact on migration

We have assumed that the impact of a WTO style deal would be to reduce migration into the UK to the ‘tens of thousands’ planned in the Conservative manifesto for the June 2017 election and modelled by Cebr in its special report on migration in May 2017^{xvi}.

We have taken account of London and the Flat White Economy’s increased dependence on migration compared with the rest of the UK. For some sectors, however, the loss of economic activity means that labour supply is unlikely to be a constraining influence so in these cases we have set the impact of reduced migration at zero.

5.3 Effect

The effects of a WTO Brexit deal could go either way. In assessing them one must balance the (relatively certain) losses from lost EU trade and potentially reduced migration with the highly speculative gains from deregulation and increased trade from new agreements elsewhere.

Table 5 shows the impact if there is no deregulation or new trade deals and it is clear that the negative economic impact after 15 years is considerable. We estimate a loss to London’s GDP in this hypothetical case of £22 billion or 5.5% of GDP after 15 years. The largest single loss comes from loss of markets in the financial service sector, but there are considerable costs from loss of migrant labour in the service sector more generally and in the Flat White Economy.

The only upside in this calculation is the gain from reduced contributions to the EU. We have calculated London’s share at our estimate of London’s share of marginal tax revenue (approximately a third).

Of course, this report is not predicting this result – it is a calculation of what is at risk if negotiations fail and if governments fail to take mitigating actions.

Table 5

Impact on economy of WTO Brexit with no deregulation and no additional boost from trade deals							
	Share of London GDP (2016)	Impact on EU trade	Impact from labour	Impact from contributions	Impact from deregulation	Impact from new trade	TOTAL
Sector							
Financial Services	14.24%	-16.24%	0	0	0	0	-9450
Headquarters and corporate Centres	20.69%	-4.94%	0	0	0	0	-4175
Flat White Economy	15.06%	-2.96%	-2.10%	0	0	0	-3115
Rest of Service Sector	41.68%	-1.68%	-3.10%	0	0	0	-8139
Rest of Economy	8.33%	-5.50%	0	0	0	0	-1872
Total £ million	408479	-20180	-6570	4333	0	0	-22417

As can be seen from above, the impact on the London economy is potentially unfavorable if a WTO style Brexit is not accompanied by any gains from deregulation or new trade deals elsewhere. However, this outcome seems unlikely.

Cebr has also modelled the results of a different scenario where a WTO Brexit is followed by substantial deregulation and by the UK making new trade deals with other countries. We have used the work done carried out by a number of economists include that by Matt Persson of Open Europe^{xvii} but the estimates are our own.

As with the figures for the Canada Plus option, these figures are obviously highly speculative and at some level it is arguably not right to compare relatively certain losses from losing EU markets and migrant labour with highly uncertain gains from deregulation and new trade deals. But equally not to make these comparisons means a basis of comparison which in some sense is rigged.

Perhaps the best way to look at these what this information is telling us is to say that IF the WTO option is chosen, it will be highly costly UNLESS it is backed by aggressive deregulation and also by achieving additional trade options from the fast-growing markets outside the EU.

The highly tentative modelling which is set out in Table 6 suggests a potential net gain after 15 years of £6.9 billion or 1.7% of London's GDP. It should be noted that the negative effects would be achieved earlier and the positive effects later so even on this scenario in the initial period the net effects would be negative. However, we have used extremely cautious estimates of the potential gains so that also has to be taken into account.

Table 6

Impact on economy of WTO Brexit with high deregulation and additional boost from trade deals							
	Share of London GDP (2016)	Impact on EU trade	Impact from labour	Impact from contributions	Impact from deregulation	Impact from new trade	TOTAL
Sector							
Financial Services	14.24%	-16.24%	-5.00%	0	20%	15%	8003
Headquarters and corporate Centres	20.69%	-4.94%	-1.00%	0	3%	0	-2485
Flat White Economy	15.06%	-2.96%	-2.10%	0	0	0	-3115
Rest of Service Sector	41.68%	-1.68%	-3.10%	0	3%	2%	374
Rest of Economy	8.33%	-5.50%	0.00%	0	3%	2%	-170
Total £	408479	-20180	-10323	4333	20299	12812	6941

6 Impact on other large conurbations and on the country as a whole

6.1 Introduction

This is a qualitative assessment of how the analysis in the preceding pages applies to the UK as a whole and to large conurbations like Manchester and Bristol.

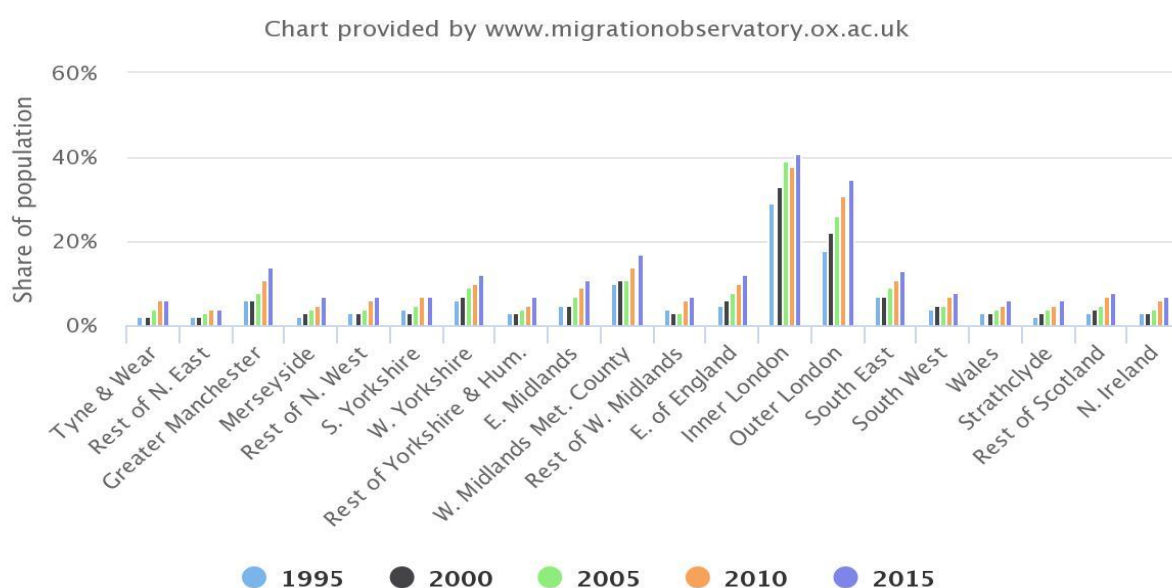
6.2 Impact on the UK as a whole

The impacts on the UK as a whole are qualitatively similar to those for London. The big impacts are from loss of trade and from loss of migration.

The chart below from the Migration Observatory from Oxford University^{xviii}

Figure 5

Share of foreign-born in the population by region, 1995–2015



Source: Labour Force Survey, Q

The chart shows that 41% of the population in Inner London and 35% of the population in Outer London were born outside the UK whereas the national average for the UK as a whole is 13.5% (figures for 2015). Obviously not all these migrants are from the EU but the differing dependence on migration in different regions affects the extent to which a curtailment of migration from any source will impact on the labour force and hence on the local economy.

The government has allegedly written a report on the regional impact of Brexit under different assumptions and the report or parts of it have been leaked.

According to the recent government impact report^{xix}, all Brexit options will leave the UK's GDP lower. We have set out the detailed regional analysis from the Sky News report in Table 7 below but obviously the quality of work cannot be assessed without a better understanding of the basis of the report.

It is likely that the government's report does not take into account any potential upside from deregulation or from new trade deals and that it does not fully take into account the effects of limiting migration. Nevertheless, the data has some value in that it gives one basis for comparing impacts between regions on the particular assumptions included.

Table 7

	EEA	FTA	WTO
London	<-1%	-5.0%	-8.0%
South West:	-1%	-2.0%	-5.0%
Yorks/Humb	-1.5%	-4.5%	-7.0%
South East	-1.5%	-5.0%	-7.0%
East of England	-1.5%	-5.0%	-8.0%
East Midlands	-1.5%	-5.0%	-8.0%
Scotland	-2.5%	-6.0%	-9.0%
Wales	-1.5%	-5.0%	-9.0%
North West	-2.5%	-8.0%	-12.0%
Northern Ireland	-2.5%	-8.0%	-12.0%
West Midlands	-2.5%	-8.0%	-13.0%
North East	-3.5%	-11.0%	-16.0%
UK	-1.5%	-5.0%	-8.0%

6.3 Manchester

According to the UK Powerhouse, produced by Cebr for Irwin Mitchell^{xx}, Manchester is in the top half of fastest growing cities in the UK ranking 18th for economic growth measured by GVA growth with 1.6% GVA growth and ranking 11th for employment growth with 0.8% employment growth.

The Sky News report of the government paper for the North West of England indicates that this is one of the regions that is potentially most affected by any type of Brexit with the assessed impacts of each of the three options about twice as severe as for London.

The most recent GVA data for Greater Manchester by sector is for 2011. The scale of the contribution in that year from each of the broad sectors is given in Table 8.

Table 8: GVA by Sector Greater Manchester 2011 £ millions and % of total^{xxi}

Greater Manchester		
Agriculture, forestry and fishing	55	0.19%
Production	6235	17.47%
of which Manufacturing	5171	15.38%
Construction	3171	9.27%
Distribution; transport; accommodation and food	9951	20.87%
Information and communication	2399	3.57%
Financial and insurance activities	3684	2.92%
Real estate activities	6153	12.26%
Business service activities	5842	7.44%
Public administration; education; health	10179	22.61%
Other services and household activities	1792	3.40%
Total GVA	49461	100.00%

This shows a significant manufacturing sector compared with London; also quite a large distribution sector. Finance and business services are relatively small but will probably have grown since 2011.

In theory the Greater Manchester economy is likely to be rather more affected than the London economy by all types of Brexit that potentially disrupt the manufacturing supply chain. This will especially be the case for the WTO case. The LSE/Centre for Cities study is suggesting that under soft Brexit Manchester could suffer a GVA loss of between 1.2 to 1.3% and under a hard Brexit a GVA loss of between 2.4% and 2.7%. by 2030.

6.4 Bristol

According to the UK Powerhouse, produced by Cebr for Irwin Mitchell^{xxii}, Bristol is in the top quartile of fastest growing cities in the UK ranking 11th for economic growth measured by GVA growth with 1.7% GVA growth and ranking 20th for employment growth with 0.7% employment growth.

The city has been voted the best place to live in the UK and has also been ranked top in the Huawei Smart Cities Index. The City is also in the top quartile for Cebr's Flat White Index.

Table 9: GVA by sector Bristol 2011 £ millions and % of total^{xxiii}

Bristol, City of		
Agriculture, forestry and fishing	4	0.03%
Production	868	7.52%
of which Manufacturing	654	5.66%
Construction	539	4.67%
Distribution; transport; accommodation and food	1741	15.07%
Information and communication	619	5.36%
Financial and insurance activities	1670	14.46%
Real estate activities	1667	14.43%
Business service activities	1639	14.19%
Public administration; education; health	2461	21.31%
Other services and household activities	343	2.97%
Total GVA	11550	100.00%

This shows a relatively larger financial and business service sector in 2011 than in Greater Manchester but a much smaller manufacturing sector. It should be noted however that the NUTS3 categorisation for Bristol excludes local industrial zones on the outskirts while the equivalent categorisation for Greater Manchester includes industrial areas.

The economy like most cities in the UK has a heavy digital bias with nearly 40,000 digital jobs. One feature of the city is its heavy dependence on the aerospace industry with its European supply chains. This is just outside the city and hence not included in the manufacturing sector in Table 9.

Taking these into account, it is likely that the impacts of different types of Brexit for Bristol will mirror those for London for most of its activities although there is a particular risk of a negative impact from any plan for Brexit that disrupts the supply chain for the aerospace industry. Again, the LSE/Centre for GVA Cities study is suggesting that Bristol will be affected similarly to both London and Manchester losing some 1.3% of its GVA under soft Brexit and 2.6% under a hard Brexit.

7 Conclusions

The key conclusions of the report based on literature research and CEBR's own analysis are by necessity only preliminary but suggest that:

- The economy of the UK capital, London, is at immediate risk from Brexit if not handled carefully.
- The biggest Brexit related risks for London are *loss of financial business* from the City of London's trading activity with the remaining EU member states and *loss of service sector business* from reduced migration. On the goods side the danger is that even if an agreement results in no tariffs being imposed on UK exports there will still be extra costs in trading with the EU if the UK ends up without an arrangement that replicates most of the benefits of the current customs union and the single market which will make trade more costly with the EU. These costs include customs checks, border controls, direct regulatory requirements when trading, increased government and company bureaucracy and legal differences that will impact on firms trading across- they are non-tariff barriers on trade in goods, not only in services, which means an end to 'frictionless' trade – adding extra costs. These will affect the three metropolitan areas we are looking at to varying degrees.
- It is possible to mitigate these risks and even ultimately possibly generate a net gain:
 - 1) A **Norway type EEA deal** would leave much of the economy unaffected;
 - 2) A liberal migration policy (possibly enforced through regionalisation of the migration system) could minimise the losses from abandoning the free movement of labour from the EU;
 - 3) A deal on financial services allowing continuing trade with the EU could limit the loss of financial service activity;
 - 4) A so-called **Canada plus deal** might achieve much of this though it will depend on the nature of the deal that is achieved; and
 - 5) Deregulation and enhanced trade deals elsewhere could (though only after a period) not only offset the losses from EU trade and from reduced labour supply but even possibly lead eventually to higher GDP.
 - 6) A **WTO based deal** looks to be a worse option than any other option as it would leave services, including the financial sector, particularly exposed. Though there are opportunities to capitalise on
 - 7) London would be likely to be affected disproportionately by Brexit given its dependence on financial services, business services and migrant labour by comparison to the rest of the UK. Although dependence on migrants is much less prevalent outside London there are similar characteristics in greater Manchester and greater Bristol that might result in not too dissimilar effects on Gross Value Added in those two metro areas. However, there is the possibility that all three areas could adjust more easily in the longer term given the type of labour availability and skills that allow for greater flexibility to adapt to change.

- Applying WTO rules will certainly hit the wider UK economy in the short term and have a depressing impact in the medium term. Opinions are split about whether there would be potential for longer term gains that would justify these short-term costs. Any such gains would in any case be unlikely to materialise for a significant length of time after the initial losses in trade with the EU.
- In addition, given the uncertainty at present over what exactly each possible option might entail, and the lack of a real counterfactual given that what the UK is going through at present is unprecedented, there is considerable variation in some of the estimates. This is the case not only for the overall impact of various options but also for the more disaggregated effects on sectors and regions.
- **Finally, to be more definitive at the local level one would need to delve more deeply into the metro regions' specific attributes and strengths and therefore be able to pronounce on which options might be the ones that would be least harmful for Greater London, Bristol and Manchester.** And of course, impacts will differ whether one is looking at the short term, the medium term or the long term.

ⁱ <http://www.centreforcities.org/wp-content/uploads/2017/07/17-07-26-Brexit-trade-and-the-economic-impacts-on-UK-cities-1.pdf>

ⁱⁱ A case for a London visa Cebr Report for the London Chamber of Commerce and Industry September 2016

ⁱⁱⁱ <https://cebr.com/reports/cebr-special-report-economic-consequences-of-limiting-migration/>

^{iv} The Flat White Economy: How the Digital Economy is Transforming London and Other Cities of the Future' Duckworth London 2015 (updated paperback edition March 2016).

^v <https://www.thetimes.co.uk/article/tech-on-the-tyne-is-all-mine-hp9z8dfbr> 'Tech on the Tyne is all mine' by Tommy Stubbington Sunday Times 21 January 2018

^{vi} 'The Flat White Economy: How the Digital Economy is Transforming London and Other Cities of the Future' Duckworth London 2015 (updated paperback edition March 2016).

^{vii} <https://www.ft.com/content/78564d98-fdbe-11e7-9650-9c0ad2d7c5b5>

^{viii} <https://www.ceps.eu/system/files/SR147%20ME%20Which%20model%20for%20Brexit.pdf>

^{ix} <https://www.ceps.eu/system/files/SR147%20ME%20Which%20model%20for%20Brexit.pdf>

^x The agreement has since come into force (21 September 2017) and been ratified

http://ec.europa.eu/trade/policy/in-focus/ceta/index_en.htm

^{xi} <http://www.telegraph.co.uk/news/2017/12/10/britain-should-sign-canada-style-trade-deal-european-union-brexit/>

^{xii} <http://www.ppan.ie/wp-content/uploads/2016/08/CETA-Brexit-Impact.pdf>

^{xiii} <https://openeurope.org.uk/today/blog/britain-can-prosper-post-brexit-if-it-embraces-free-trade-and-deregulation/>

^{xiv} <https://www.ceps.eu/system/files/SR147%20ME%20Which%20model%20for%20Brexit.pdf>

^{xv} This report preceded the US Presidential Election in 2016 and the reference to 'back of the queue' is probably out of date.

^{xvi} <https://cebr.com/reports/cebr-special-report-economic-consequences-of-limiting-migration/>

^{xvii} <https://openeurope.org.uk/today/blog/britain-can-prosper-post-brexit-if-it-embraces-free-trade-and-deregulation/>

^{xviii} <http://www.migrationobservatory.ox.ac.uk/resources/briefings/migrants-in-the-uk-an-overview/>

^{xix} <https://news.sky.com/story/hit-to-northern-ireland-and-north-east-england-gdp-revealed-in-new-brexit-impact-papers-leak-11240254>

^{xx} <https://www.irwinmitchell.com/ukpowerhouse>

^{xxi} Source: ONS Regional Gross Value Added (Income Approach) NUTS3 Tables

^{xxii} <https://www.irwinmitchell.com/ukpowerhouse>

^{xxiii} Source: ONS Regional Gross Value Added (Income Approach) NUTS3 Table

