INITIAL ANALYSIS

The Impact of Brexit on Birmingham and the West Midlands

Birmingham City Council

The Mutual Understanding

Britain and the EU, on November 14th, published both the Draft Agreement on the withdrawal from the EU and Euratom, termed the Mutual Understanding, as well as secondly the Outline Political Declaration on the Future Relationship.

The Mutual Understanding details the legal and procedural complexities of Britain's withdrawal and is currently expected to be ratified by the European Council of Ministers on Sunday, November 25th, and then subsequently by the British Parliament and the European Parliament. The Mutual Understanding forms the conclusion of the negotiating process, and, following legal verification and ratification, will become the legally enforceable Withdrawal Agreement. Should ratification fail at any stage, then currently Britain would still leave the EU on March 29th, 2019 but without any agreement in place. In summary, the Mutual Understanding encompasses the following aspects of the withdrawal process:

- the objective of the overall process is to secure an orderly withdrawal;
- Britain will cease to be a member of Euratom;
- reciprocal protection of EU citizens and British nationals, who have exercised free movement before a date to be set by the agreement;
- prevent disruption and provide legal certainty;
- determine the parameters and length of a transition or implementation period;
- EU law will be applicable to Britain during the transition, although Britain can prepare for new international arrangements post-transition during the transition phase;
- the EU and Britain agree to honour the mutual financial commitments;
- establish a joint dispute resolution process given Britain's third country status;
- establish separate protocols to address the Republic of Ireland/Northern Ireland, Cyprus Sovereign Base Areas and Gibraltar issues during transition;
- agreement founded on overall balance of benefits, rights and obligations for Britain and EU.

Political Declaration

During the transition period the EU and Britain will commence formal negotiations to conclude the framework for the future relationship outlined in the Political Declaration. These will focus on:

- shared values and approach to rights and data protection;
- a close relationship on services and investment, including on financial services;
- wide-ranging sectoral cooperation, for instance on transport and energy;
- requirements for open and fair competition to underpin the future economic relationship;
- broad and deep partnership on foreign policy, security and defence;
- comprehensive arrangements toward creating a free trade area, combining deep regulatory and customs cooperation, building on the Withdrawal Agreement single customs territory;
- on internal security, the need for comprehensive law enforcement and judicial cooperation in criminal matters, identifying ways of delivering strong and important operational capabilities.
- the process that will follow the conclusion of the Article 50 negotiations.

1. Foreword

Cllr Brigid Jones
Deputy Leader for
Birmingham City Council

The nature of Britain's exit from the European Union, and our nation's future relationship with it, will define our country for decades to come. At the time of writing, four months out from the UK's exit date, the EU and the UK parliament have yet to finalise what this might be, and it remains possible that the UK will leave without a deal. This report aims to identify the potential economic and social impacts of different aspects of Brexit on the West Midlands region, to allow businesses and public sector bodies to plan and shape their responses. It draws on a wealth of academic research and analysis from the Government, Core Cities and Local Government Association to look at potential local impact on trade and business, jobs, funding and infrastructure and public services.

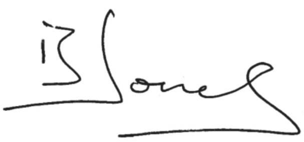
This analysis was commissioned by Birmingham City Council's Brexit Commission, which draws on representation from a cross sectoral group of stakeholders. These include a range of public sector, academic and business stakeholder from across the West Midlands Combined Authority Area.

To bring about continued global investment, inclusive growth and prosperity for the West Midlands, we must address serious challenges to the region, including access to funding, skills and talent, knowledge and innovation, and maintaining competitive business and trading conditions. With the UK government having one of the highest concentrations of centralised revenue streams globally, we must now be handed the reins by government to drive forward the future economy through increased and accelerated devolution. The West Midlands has a bigger population than nine member states including Finland, Slovakia and Ireland. The economic output of West Midlands is bigger than 13 member states including the Czech Republic, Hungary and Romania. The significance of our presence, and the importance of Brexit working for this region is clear.

Local government has been subject to almost a decade of austerity and funding cuts, and is limited in financial resource to mitigate any negative impacts of Brexit. Poverty in this country has reached such levels as to be investigated by the UN. This context must be understood when preparing for Brexit, and any Brexit conditions that might exacerbate this must be met with devolved funding from national government to address this.

Brexit will signal a change in our relationships and interactions at a regional, national and international level, and it is vital that we maintain an outward vision and readiness to co-operate with our neighbours. Birmingham is a city built on migration and immigration. Knowledge exchange and progress go hand in hand. Leaders across the West Midlands are clear that our leaving the EU does not correlate to a withdrawal from open collaboration with cities and regions across Europe or the rest of the world. The West Midlands has been at the forefront of change and innovation throughout successive industrial revolutions. The major cities in this region have been strongholds of technological and manufacturing development for the whole of the UK. The West Midlands is still highly recognised both nationally and globally as a region open to new ideas, new working practices and bringing significant investment into the UK economy. We have a strong track record of bringing in major investment from European and other global partners which has brought prosperity, growth and employment to the region and UK as a whole.

As the future remains uncertain, the breadth of this report should help highlight and plan as we go forward.



2. Contents

3. Overall Context

Notwithstanding the announcement of a Mutual Understanding arrived at between the British government and the EU negotiators, this is only the start of the final process of Britain withdrawing from the European Union. There remain significant hurdles to surmount, including achieving Cabinet unanimity on the understanding; securing House of Commons approval; ratification by the remaining EU 27 members states as well as ratification by the European Parliament. Moreover, the scope and detail of the understanding has yet to be made public. It is not beyond the bounds of possibility that either the Prime Minister may resign or the government fall.

Accordingly, until a final agreement is achieved the range of final outcomes remains as detailed in this report.

People need information not opinion – if the Referendum demonstrated anything it was that the electorate is quite capable of forming their own opinions based on their life experience and their confidence in the analysis publicly available to them. There are many interpretations as to why the 2016 Referendum resulted in a narrow majority vote to leave the EU, there is however an inescapable fact that this essentially political act is having, and will have, economic implications. Britain, already regarded as a semi-detached EU member, will have to become accustomed to becoming a detached third-party economy. The scale of the impact will obviously be determined by the nature and structure of any final agreement reached, or, in the event of a reversal of the decision to leave, the parameters of any re-entry process (via cancellation of Article 50 or a new application via Article 49 of the Treaty of Lisbon).

Although the parameters of the agreement remain subject to further intense negotiating, the options would appear to be narrowing along the following lines:

- a settled agreement, such as temporary reversion to European Economic Area status;
- an as yet undefined transition programme;
- adoption of a WTO-based trading regime;
- without an actual deal, and with no recourse to other trading regimes;
- unanimous agreement to an extension of the Article 50 process, pending a Second Referendum of the decision to leave;
- UK application to re-join EU via Article 49, after March 29th exit.

A settled agreement would obviously be the optimum solution as effectively it would appear to ensure arrangements would continue as present and it could also generate a revival of investment, both domestic and inward. In the time now available before the exit date of March 29th, it would appear difficult to deploy the necessary physical infrastructure as well as agree the required tariff quota regimes to enable WTO status to be immediately achieved. Leaving without an actual deal and being unable to transition to full WTO rules (due to time pressures and the need to resolve current objections from some 20 WTO members over the proposed UK-EU trading schedules) is the worst option, and it is unclear what the impact would actually be, although potentially seriously disruptive.

Additionally, there remains the possibility that the proposed Mutual Understanding between Britain and the EU will fail to progress at any one of the three stages of ratification (EU Council of Ministers, UK Parliament and EU Parliament). Such an impasse in the negotiating process could lead the British Parliament to decide to hold a second referendum. A more long-term option, if Brexit proves to be more economically debilitating than anticipated, could be an application to join the EU via Article 49, after March 29th exit.

Any change to the deep and extensive relationship between Britain and the EU will inevitably provide new opportunities as well as precipitate fresh barriers, some of which can be identified, others unexpected and will only emerge later. The challenge to Birmingham, and the wider region, is to identify these and develop appropriate responses to both capitalise on any advantages and minimise the negative impacts.

Nevertheless, until the final settlement(s) are agreed and ratified, it is difficult to calculate with any confidence the impact of leaving the EU on the local and regional economies. However, considerable research has been undertaken examining the potential range of overall economic impacts, and in terms of sectoral impacts it is possible to identify which sectors are most exposed to more constrained access to the markets of the EU. Furthermore, until the precise nature of any WTO trading arrangements are confirmed, it is similarly problematic to calculate the economic prospects resulting from them.

It is noticeable that the currently available estimates, leaked from HM Treasury, for the worst-case scenario are substantially less than the estimated cumulative impact of the 2007-09 financial crisis, which has been calculated as equivalent to a loss of a fifth of GDP. HM Treasury had forecast that by 2023, UK GDP would be approximately 25% higher than 2008, whereas the economy would only be 17.3% larger by 2023 under a WTO scenario.

Subsequently, BoE governor Mark Carney has warned that the UK crashing out of the EU could lead to house prices falling by 25-35% and net emigration from the UK for the first time since 1994, as well as travel disruptions between the UK and the EU leading to a contraction in supply and increased inflation.

WMEF: West Midlands Estimated Real Impact

	2016	2017e	2018e	2019f	2020f	2021f	2022f	2023f
WM GVA Growth (1)	1.8	1.9	1.9	2.0	1.8	1.5	1.3	1.2
WM GVA Growth (2)	1.8	1.9	1.9	0.7	0.9	1.4	1.5	1.5
WM GVA Growth (3)	1.8	1.9	1.9	0.5	0.7	1.2	1.5	1.8
WM GVA Growth (4)	1.8	1.9	1.9	-0.3	-0.1	0.3	0.7	1.0

Deflated using estimated national deflator

Source: ONS, IMF, OECD & WMEF

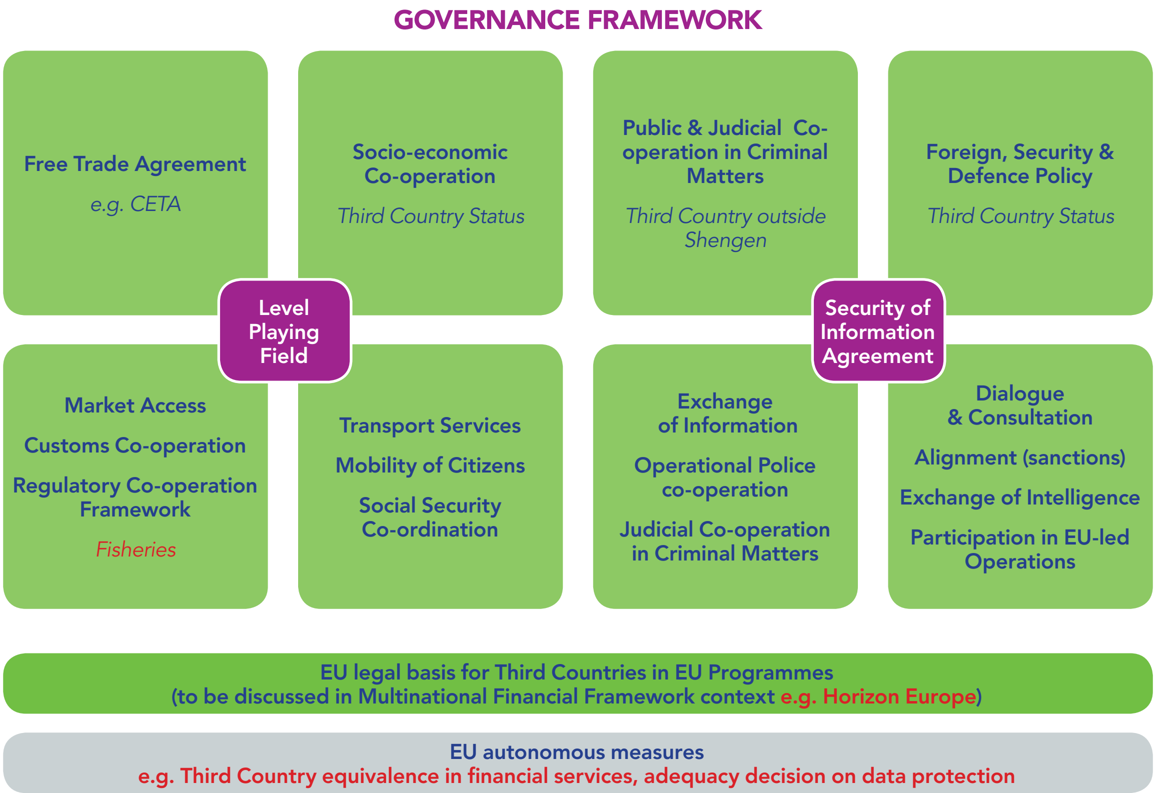
Nevertheless, on the basis of available evidence it has been possible to make some tentative forecasts. It should be noted that the data for the West Midlands are nominal, but the figures above have been deflated using an estimated national deflator. If there is a transitional arrangement (1), then it is anticipated that the current growth trajectory will be preserved until 2020. If, however, the current negotiation path still seems intractable by 2021, it is envisaged some deterioration in medium term performance will take place, and a rise in inflation, most likely due to currency pressures. An Ad Hoc interim outturn (2) where trading terms are forced by physical events, rather than negotiations, could cause serious disruption in the second and third quarters of 2019. This would most likely include substantial inflationary pressures, with some recovery in growth, but below trend, in 2020. Going forward after 2021, after some expected economic and policy adjustment, growth is forecast to be still below previously anticipated growth prospects, with inflation remaining elevated. Reversion to WTO trading status (3), is likely to have a large impact, not only on contemporaneous economic activity, but also future investment flows and levels of job creation, and a consequent sharp uptick in inflation as Moody's warn that a lower pound would lead to higher inflation and a squeeze on real wages. Optimistically, it would take 2-3 years for the economy to adjust to a WTO context, but again with slightly weaker growth than could currently be achieved and inflation remaining above previous trends.

Given the timeframes currently involved in the Brexit process, this could create difficulties in having the infrastructure required for WTO trading regime in place by March 2019. Moreover, some 20 countries, including USA, China, Australia and New Zealand, have rejected the initial schedules proposed by the UK and the EU meaning that the UK's accession to the WTO will likely involve a lengthy negotiation process. In this context, it seems increasingly unlikely that the UK will be able to adopt WTO status in time for March 2019. This could lead to a fourth potential outcome, a unilateral trading position (4) where the UK leaves the EU and has no other trading regime to fall back on. This would obviously be a significant negative shock to the economy, with the possibility of a recession in 2019 as well as high inflation from currency pressures. The economy would take a significant amount of time to recover from this shock, as the UK would need to determine its status in the short term, in order to allow trade to continue, as well as negotiate its membership of the WTO in the longer term.

These forecasts are based with the significant caveat that the British government does not pursue accommodative policies and local government is constrained in its ability to facilitate a positive response.

The parameters of the final trade settlement between the EU and Britain will obviously have an impact on Birmingham and the wider region, both in terms of domestic funding and policies as well as how the region sustains economic ties internationally and with the EU. Furthermore, how Central Government proposes to develop economic and trading ties with Non-EU economies will impact on future growth prospects for the region. Undoubtedly, more constrained access to the region's single largest export market will compress these growth prospects; however, whether this leads to an actual contraction of performance will be heavily dependent on what policy responses can be and are adopted locally. An increase in demand for local authority services, coupled with the loss of a significant source of funding could lead to considerable pressure being placed on local government. Most immediately, these trade negotiations are obviously a discussion within which Birmingham and the region needs to articulate its aspirations.

EU-Britain Possible Framework for Future Partnership Discussions



Source: EU & WMEF

If indeed Withdrawal phase of negotiations do conclude amicably and an orderly Brexit is achieved, the European Commission has already mapped out a proposed framework for Future Partnership Discussions and this effectively provides a roadmap for future local government interventions to influence the expected further negotiations.

4. Executive Summary

This study commissioned by Birmingham City Council's Brexit Commission is intended to map the range of the currently available research on the potential impact on the region, rather than initiate new analysis. Moreover, whilst the report is intended to be as comprehensive as practically feasible, it is not intended, even where this is practicable given the current state of negotiations, to provide a definitive assessment of the final overall impact. Rather it is designed to provide an accessible route to understanding the complexities of the Brexit process.

Moreover, the purpose of this report is not to make a judgement on the efficacy of the Referendum result to leave the EU. Rather it is an attempt to provide an informed insight into the likely outcome of the negotiations between the respective EU and British representatives and the conceivable, potential range of impacts on the region. The paper draws on the publicly available information, primarily regionally but also nationally and internationally, on the forecast impacts of Brexit, both positive and negative, and these are included in the bibliography within the report.

The research (which is detailed in an accompanying paper entitled The Research Findings) focussed on five key impact areas; on the basis of this research and findings, the Brexit Commission has identified the likely areas of concern, which are listed below.

Trade	
1. Trade	The impact of the conclusion to the Brexit process, notably customs arrangements, tariffs, regulation, freight and borders, on the regional economy, particularly advanced manufacturing given its high servitisation component.
2. Infrastructure & Investment	The impact of Brexit on continued investment into transport infrastructure, broadband, housing and business investment, given the need to sustain international competitiveness.
3. Just in Time Impacts	Implications may lead to the need to stockpile goods such as food and medicines, and issues of where these will be stored. Further implications for energy. The impact on current supply chains and the impact of longer lead times, for example in the manufacturing sector.
Jobs	
4. Key Employment Sectors	Key sectors which are particularly vulnerable to Brexit, including automotive plus those in the wider supply chain. Health and social care are also sectors of concern, with 1 in 10 social care nurses being EU nationals, as well as the broader impact of a general economic downturn/compression in growth. The ability to identify those sectors which are most at risk.
5. Productivity and Skills	The recruitment and retention of skills, especially maintaining access to technical, proficient labour, such as currently provided by EU nationals and addressing skills shortages
Business	
6. Business Adaptability	The preparedness of business to deal with the Brexit outcome (especially SMEs which make up 99% of enterprises in the WMCA) notably the need to increase awareness of the new conditionalities of trading with Europe, potentially under WTO auspices.

Funding	
7. EU Funding	Birmingham alone has benefitted from over £1billion in EU funding and the loss of this resource will have an impact on key priorities for local government such as jobs and skills and inclusive growth. New UK Shared Prosperity Fund critical to filling this funding gap.
Public Sector	
8. Fiscal, Financial & Economic	The potential, up to 13%, compression on the regional economy from Brexit, possibly leading to an increase in pressure on LA services. The impact of volatile interest rates and markets and their impact on servicing debts.
9. Security	Need to increase awareness of adherence to international treaty obligations and trading regime requirements to ensure compliance.
10. Data Sharing	The impact of Brexit on current collaborative arrangements between EU and regional institutions on knowledge transfer and data sharing platforms. This may have implications for issues such as counter-terrorism, but also industries such as medicines and healthcare.
11. Public Services	EU funding, trading standards, environment & health regulation, procurement, workforce issues and resilience.

4.1. Trade

Some 40% of regional merchandise exports are to EU destinations, principally Germany, France, the Netherlands (notwithstanding the Rotterdam effect) and the Republic of Ireland. As these West Midlands exports to the EU are equivalent to over 10% of regional GVA, the terms and structure of the final Brexit agreement will have a significant impact on the region. Moreover, in terms of regional industry specialisation, close to a third of manufacturing output is calculated to be vulnerable to Brexit. The West Midlands flagship sector, the automotive sector, is of particular concern with only an estimated 40% of components sourced locally and therefore would appear particularly exposed to supply interruptions or delays given their reliance on just-in-time delivery systems. Similarly, the aerospace sector and precision components production are heavily integrated into EU rapid delivery value-added supply-chains.

Furthermore, as Manufacturing 4.0 continues to be progressively rolled out across the region, it is increasingly no longer tenable to treat manufacturing and many services sector enterprises as distinct and separate. The increasing symbiosis between these sectors, and the expanding scale of the services inputs into advanced manufacturing products, ensures that any future trade negotiations must recognise this development. West Midlands manufactured exports have amongst the greatest proportion of services sector inputs.

Birmingham Export Position (2016)

	World	UK	West Midlands	Birmingham
Value of EU Exports (£m)	3,414,200	139,975	12,871	1,657
EU Exports % of GVA		8.01	10.17	6.44
% of Total EU Imports	100.00	4.10	0.38	0.05
Value of Non-EU Exports		147,905	16,862	2,489
Non-EU Exports % of GVA		8.46	13.32	9.68

Source: UNCTAD, HMRC, OECD & WMEF

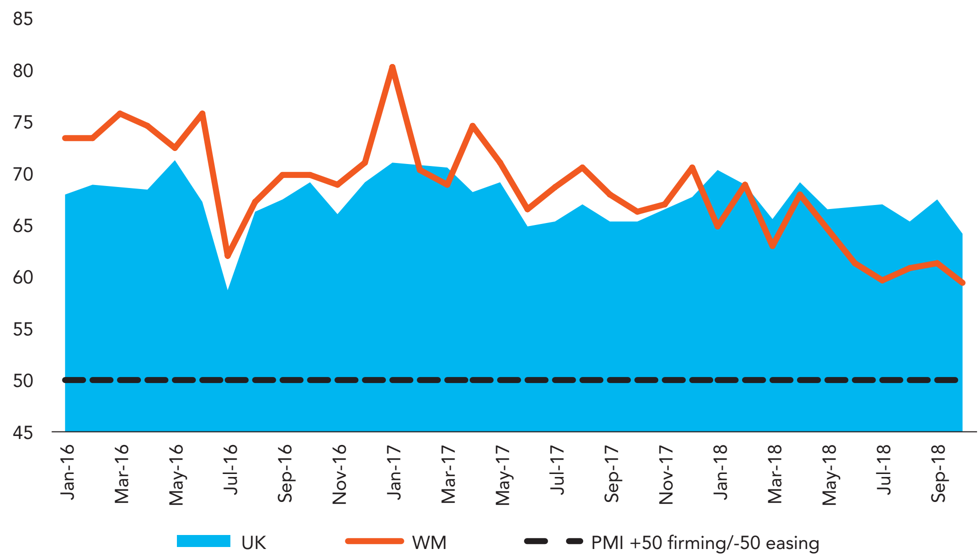
Regardless of the Brexit option pursued, geography will ensure that the EU will remain a key market for Birmingham and the wider region. Enhancing the connectivity to this market, through improvements in regional infrastructure provision should be part of any effort to mitigate the negative impacts of leaving the EU. This could include improving direct access via air, road, rail and sea as well as boosting internet capacity and provision. Indeed, the actual depth of the current relationship is certainly much deeper than the gross trade data indicates, and critical is the exposure of intensely integrated EU-wide supply-chains to Brexit. These EU supply-chains, however, extend beyond the borders of the Single Market and of the Customs Union, encompassing many manufacturers and service providers located in economies without formal trade agreements in place and operating under WTO rules. These supply-chains are not simply the progressive assemblage of products but incorporate associated services sector deliveries, such as design and software provision. Until a trade agreement is in place, the resilience of these supply-chains will be severely tested when, and if, WTO-style tariffs and rules of origin are rapidly and rigorously applied. In the interim it seems more probable that a transition period will be agreed until the end of 2020.

Having a formal input into future trade negotiations will be essential if regional institutions are to provide effective support to the local economy. Furthermore, regional comprehension of the implication of future trade agreements, and the necessary requirements to observe any new arrangements, such as documentation, certification, rules of origin and tax procedures, will be essential to fill current business information gaps. Consideration of free trade zones to support export capacity, whilst dynamic engagement with regional export markets will need to be deepened and expanded, such as the active engagement programme proposed with the Free State of Saxony (see detailed exposition in the Research Findings). With some 60% of regional exports currently to Non-EU destinations, the West Midlands already has a proven track record in succeeding in exporting on WTO and Non-FTA terms.

4.2. Business

Regional business confidence on future prospects has, until recently, held up relatively strongly, despite the continued ambiguity surrounding the final Brexit proposals. However, as the potential for a Brexit without an agreement has increased, this confidence has been eroded. Restoring such confidence will require demonstration by regional institutions that there is a credible strategy to address both the opportunities and risks that arise from any exit from the EU locally. Key to this will be the articulation of a regional focus to the National Industry Strategy. Paradoxically, if Brexit does not include continued membership of the Single Market, this may permit a more activist role to be pursued by public sector institutions and programmes in a less restrictive environment for state aid.

West Midlands Future Business Activity



Source: NatWest Regional PMI & WMEF

In contrast to the small state advocated by many of the leading Brexiteers, with over 98% of the 213,455 businesses regionally employing less than 50 staff, they may not have the capacity to deal effectively with complexities of the post-Brexit environment and require official assistance, putting additional pressure on public services.

Although Brexit may be a significant short-term concern, anecdotal evidence suggests that the longer-term primary constraint on business activity continues to be inadequate connectivity infrastructure, both domestic and international. Developing an internationally competitive infrastructure will not only boost economic potential, over the medium-to-longer-term, but, given the structure of many manufacturing processes spread over a number of units separated geographically, could facilitate productivity gains.

While the sensitivity of the WMCA economy has been calculated to be 12.2% exposed to Brexit in GDP terms (the same level as the UK overall), this most probably understates the overall dependency. The erosion of the relationship is unlikely to be total, although it will be significant and contribute to some compression of output growth. By some of the most pessimistic estimates currently available, from HM Treasury, probably close to 1% per annum over a 15-year period. However, specific businesses are likely to suffer disproportionately and a response mechanism will need to be developed to deal with these, which the region has unfortunately, but nevertheless successful, experience of such interventions. More pessimistically, the prospect of leaving the EU without any agreement in place raises the potential of a sudden and severe shock to growth prospects which is difficult to quantify. Given the past history of EU summits and negotiating processes, it is possible that a last-minute deal will avoid such an outcome, however such brinkmanship will do nothing to assuage business concerns. It also seems likely that the EU will itself resort to emergency action to permit continued economic relations, whilst any impasse is resolved.

The region, and indeed Birmingham, has been very successful in attracting inward foreign direct investment (FDI) over the past decade, and its growth model is based on continuing to attract such flows. Brexit will change the value proposition of the WMCA. However, it is not just Brexit that will influence future FDI inward flows but the future structure of the global economy. With the increasing technological sophistication of the economy likely to alter investment objectives, the region needs to be sufficiently agile to respond to the new requirements. In terms of Greenfield FDI the region has been identified as one of the strongest performers in western Europe over the five-year period ending in 2016.

Location of Greenfield Manufacturing FDI

Top 10 Western Europe States for Manufacturing								January 2012-December 2016
By Job Creation			By Capital Investment			By Project Numbers		
Rank	State	Country	Rank	State	Country	Rank	State	Country
1	West Midlands	UK	1	Catalonia	Spain	1	Vlaams Gewest	Belgium
2	Catalonia	Spain	2	Vlaams Gewest	Belgium	2	Catalonia	Spain
3	Scotland	Scotland	3	West Midlands	UK	3	Scotland	UK
4	Baden-Wurttemburg	Germany	4	Scotland	UK	4=	Baden-Wurttemburg	Germany
5	Vlaams Gewest	Belgium	5	Baden-Wurttemburg	Germany	4=	West Midlands	UK
6	North West	UK	6	Nordrhein-Westfalen	Germany	6	Nordrhein-Westfalen	Germany
7	North East	UK	7	West-Nederland	Netherlands	7	Bassin Parisian	France
8	South East	UK	8	North West	UK	8	Quest	France
9	Sudodterreich	Austria	9	Castilla y Leon	Spain	9	Est	France
10	Est	France	10	Est	France	10=	North East	UK
						10=	Sachsen-Anhalt	Germany

Top 10 Western Europe Cities for Manufacturing								January 2012-December 2016
By Job Creation			By Capital Investment			By Project Numbers		
Rank	State	Country	Rank	State	Country	Rank	State	Country
1	Wolverhampton	UK	1	Martorell	Spain	1	Antwerp	Belgium
2	Graz	Austria	2	Antwerp	Belgium	2	Barcelona	Spain
3	Barcelona	Spain	3	Vigo	Spain	3	Coventry	UK
4	Solihull	UK	4	Rotterdam	Netherlands	4=	Madrid	Spain
5	Vigo	Spain	5	Dublin	Ireland	4=	Rotterdam	Netherlands
6	Coventry	UK	6	Valladolid	Spain	6	Dunkirk	France
7	Birmingham	UK	7	Luterbach	Switzerland	7	Ghent	Belgium
8	Sunderland	UK	8	Madrid	Spain	8	Sunderland	UK
9	Swindon	UK	9	Solihull	UK	9	Berlin	Germany
10	Valladolid	Spain	10	Sunderland	UK	10=	Dublin	Ireland
						10=	Livingston	UK

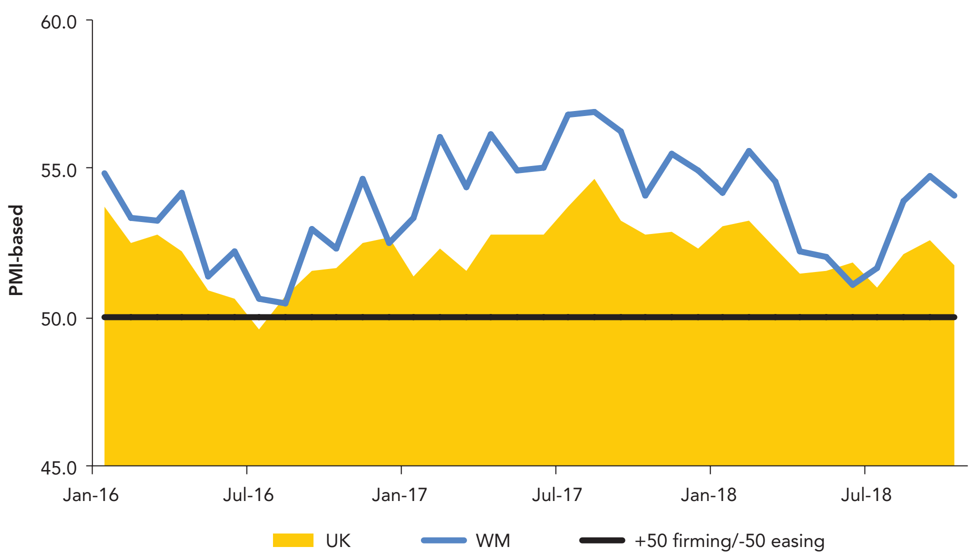
Source: fDi Markets & WMEF

The deepening of the relationship between business and academia has continued apace, with regional institutions particularly successful. EU collaborative funding flows for academic institutions, such as Horizon 2020 which was worth €4.98bln to the UK in 2015, has provided crucial support for the links with businesses. There needs to be an urgent response to secure future equivalent funding after 2019 and facilitate continued participation by City institutions in EU research programmes.

4.3. Jobs

It is not clear what migration policy will be developed post Brexit to deal with potential labour market demand, given the tightness of current conditions. The government appears to have assumed that Brexit was in part a collective response to perceived levels of immigration. Although this is cited as a factor by many commentators, the evidence is not convincing, with other factors, such as cutbacks in local government frontline services and compressed real wages perhaps as significant a factor. The Institute for New Economic Thinking suggests that the areas hardest hit by welfare reforms and austerity were more likely to support UKIP and vote for Brexit than other areas. Moreover, different British regions have different labour demands, and this will also need to be addressed both in terms of domestic policy responses as well as how to meet any supply constraints through migration programmes.

Employment Demand



Source: NatWest Regional PMI & WMEF

The formal regional labour market is close to historic employment highs, with over 60% of the 16-64 age cohort in employment. However there remain pockets of endemic long-term under-employment and unemployment, with registered unemployment at 7.1% in the WMCA – the highest of all the UK combined authorities. Nevertheless, labour market conditions can be expected to remain tight, provided growth momentum is sustained. As a result, there are reported major skills shortages in key high value-added sectors. In part, this can be attributed to the comparatively low skills levels in the WMCA economy compared to the wider region and the UK as a whole. Although it should be noted that the workforce is the most skilled it has ever been, the percentage of 16-64-year-olds with no formal qualifications is 13.1% in the WMCA, compared to 10.4% in the West Midlands and 7.7% in the UK overall. This highlights the need for local skills strategies to tackle structural issues within regional and local economies, especially with regard to the Shared Prosperity Fund.

Much of the workforce is, however, located in low-paid, low-value-creation sectors, increasingly staffed by people on temporary and zero-hour-contracts. A skills strategy needs to be sufficiently adroit to accommodate these aspects, with simple supply-side solutions unlikely to be sufficient.

Given the tightness of the labour market, demand for skilled migrant staff will remain robust for the foreseeable future, indeed, as can be seen from recent PMI data, it has remained robust in the region despite the headwinds from Brexit. The skills strategy adopted by government, and critically devolved to local government and/or the English regions, Brexit also needs to understand the nuances of different types of workers and people coming to the UK. Sectors in the West Midlands where a significant number of EU nationals make up the workforce, such as health and social care where 4.2% workers are from the EU, rising to 10% of registered nurses, will also come under considerable strain. As another example, an EU-based HGV driver may come to the UK for 24-36 hours at a time, bringing in goods and components and taking out exports, but returning as many as twenty or thirty times a year. With 87.4% of powered goods vehicles crossing the UK border being registered in the EU, visa restrictions to these workers after Brexit could pose considerable strain on the region's exporting capacity. Similar problems could apply to seasonal workers, for example those in the agricultural and tourism sectors or other areas such as the annual German Market. These are highlighted in the case studies on Birmingham Wholesale Markets and health & social care in the region.

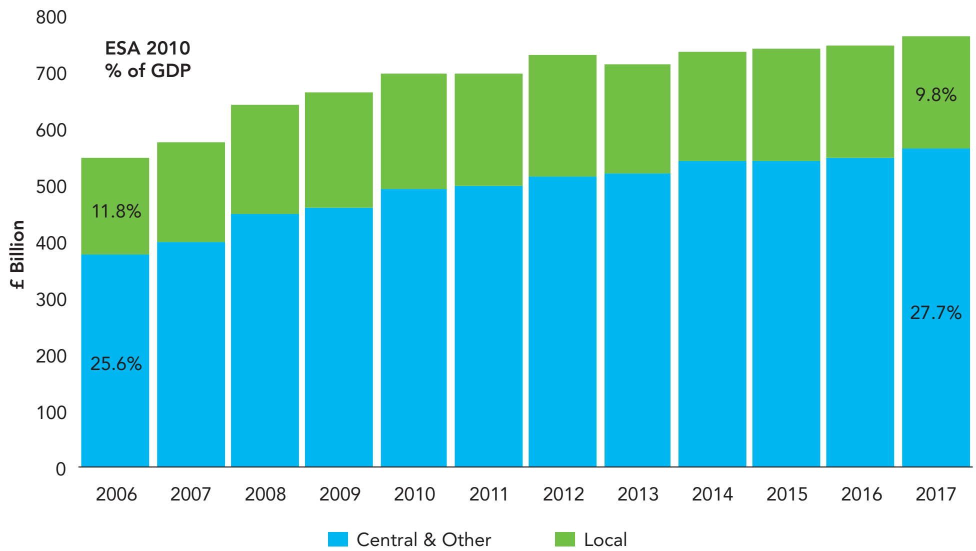
The strategy adopted by government should therefore consider the different needs of industries, sectors and regions within the UK, with a more nuanced, and possibly devolved, visa process introduced.

4.4. Future funding

The loss of access to EU funding flows by 2020 at the latest, is simply yet a further damaging contraction of the local government resource base, particularly in the sectors which rely heavily on this funding, such as employment and skills. It is estimated that Birmingham has benefitted from over £1 billion in EU funding. Overall, the LGA has identified a potential €10.5 billion (£8.4 billion) UK-wide funding gap for local government that would immediately open up from the point we officially exited the EU, unless a viable domestic successor to EU regional aid was in place.

Notwithstanding the increased moves by central government to decentralise policy and responsibility, with some key success in the devolution agenda, as reflected in the creation of the WMCA, the corresponding provision of funding has been piecemeal. A comprehensive review of the funding for English local government is urgently required, with the excessive concentration of revenue powers at a central level one of the highest globally. The highly centralised nature of the British government could also lead to a diminution of the voice of British regions and cities on a European and global stage. Instead of being able to secure funding and lobbying power on a European stage, these regional bodies will now have to communicate their needs through Whitehall and central government.

Aggregate Government Expenditure



Source: ONS & WMEF

EU funding does not just support local government, revenue streams for universities, chambers of commerce and business support projects could potentially lose funding that is allocated on a medium-term basis, and is not subject to changes with the electoral cycle. As an interim measure to offset the impact of losing EU funding, the Core Cities proposals for the Shared Prosperity Fund will need to be adopted in full to avoid a loss of delivery capacity. These are:

- be a multi-year (minimum 7 years), fully devolved funding programme, aligned to each region's strategic economic framework;
- start by 2020/2021 to ensure continuity in activity;
- be a flexible fund which avoids a restrictive siloed approach, funding activities in the fields of innovation, skills, business support, regeneration, and employment support, to fit the needs of each area;
- support the aim to reduce disparities between and within regions; with a shift towards more broadly defined growth benefits (e.g. 'quality GVA');
- be targeted to reflect economic conditions, recognising the latent potential in many currently underperforming areas, and not allocated on a competitive basis;
- have the flexibility to lever in private funds or other public funds where this is suitable or offer a wholly-financed approach where appropriate;
- have the flexibility to fund both revenue and capital projects, or a combination of these;
- increase the accessibility of funds currently restricted by setting arbitrary minimum levels of match;
- have simple, clear and concise guidance that allows projects to be delivered with maximum benefit and not impacted by unnecessary administration duties.

Local authorities have become highly dependant on EU funding streams, for example in areas of skills development and business support, and any loss of these resources will have a detrimental impact on local government services. In this regard, future funding streams made available by central government will be critical.

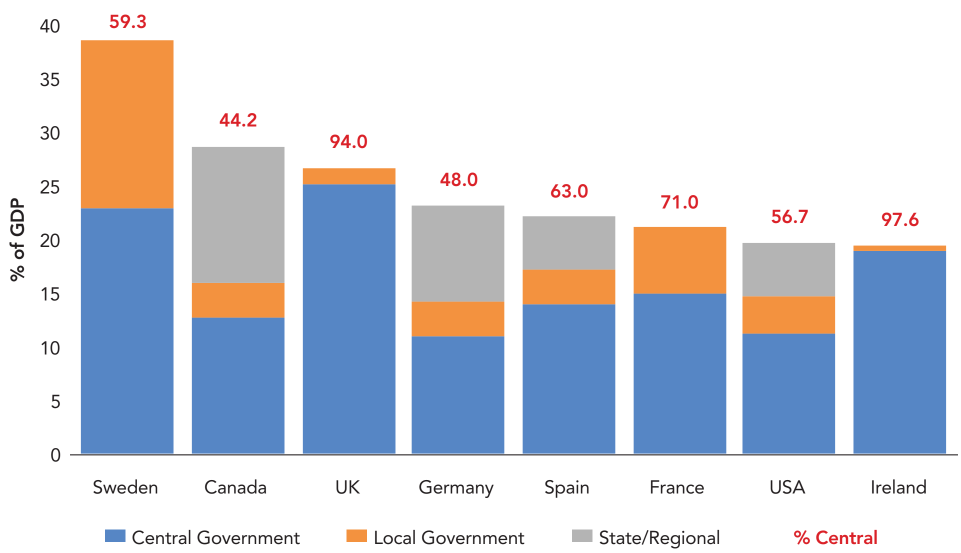
4.5. Public Services

Membership of the EU has had a significant influence on the way public services are delivered. The EU's ambitions for an integrated Europe with a harmonised Single Market have led to a raft of EU legal instruments having relevance on a wide range of areas affecting public service delivery. This comprises trading standards, including health and environmental concerns; regulation and legal issues such as procurement and state aid. A cornerstone of EU citizenship has been the right to freedom of movement across borders within the EU. The workforce has been a net beneficiary of this with many non-UK EU nationals working in critical areas of public service delivery, such as social care and health. Public service delivery also encompasses resilience and security issues, including police and security co-operation, the effect of Brexit upon this is still unclear. In addition, local government has a role in supporting business and responding to economic impacts in our areas, including trade and travel, regulation and potential impacts on infrastructure projects. Furthermore, the EU has developed an extensive regional framework in an attempt to promote growth and expansion across the EU, albeit one that is mediated by differing and distinct approaches adopted by member-states. As a result, EU funding streams, as well as best-practice knowledge diffusion, have been heavily integrated into British local authority strategies. Birmingham alone has been a net benefactor of over £1bn of funding and is currently delivering £103m of EU funded programmes.

Regardless of the final form of disengagement, the net impact on public services, across sectors is expected to be appreciable. Currently many core services such as employment and skills and business support are resourced through EU funding. A withdrawal of this funding would threaten the delivery of such services.

Although not within the purview of this report, perhaps a more fundamental review of both the funding of devolution and of the funding of local government needs to be undertaken, possibly by a Royal Commission. Not only does the current Barnett formula effectively curb English regional capital and current expenditure, but London continues to receive a disproportionate level of public sector provision with some 34% of regional GVA in the capital derived from it. Indeed, the United Kingdom government administration continues to be a grossly over-centralised process, especially when considering revenue harvests compared to comparable economies.

Comparative Government Revenue Structures (2016)



Source: OECD & WMEF

This issue can only really be addressed if there is a real transfer of power and funding resources. Government should use Brexit as an opportunity to shape the future economic and social landscape by accelerating the devolution of powers, funding and responsibilities to the region. By linking devolution to the Industrial Strategy, the region will have an enhanced opportunity to improve skills, boost exports and invest in infrastructure and growth sectors which in turn will provide better jobs, life chances and future prosperity for citizens.

Notwithstanding, the current focus of negotiations on the form of disengagement, access to the Single Market and Customs Union, the overall impact of the public sector, notably in terms of sources for new UK funding streams replacing current EU flows, has yet to be calculated and determined. EU funding does not just support local government; revenue streams for universities, chambers of commerce and business support projects could potentially lose funding that is allocated on a medium-term basis, and is not subject to changes with the electoral cycle.

As an interim measure to offset the impact of losing EU funding, the Core Cities proposals for the Shared Prosperity Fund will need to be adopted in full to avoid a loss of delivery capacity. Thus, both the negative risks and potential opportunities need to be identified. New rules to be introduced regarding the free movement of EU citizens will also have an effect.

In the event that free movement ends, issues to be resolved would include:

- rules around EEA citizens already in the UK;
- the cut-off date(s) which would apply;
- whether there would be a transitional period with more limited immigration: with, therefore, fewer people eligible for housing and related services;
- a plan for the long-term: would the same rules apply to all EU countries or might the future be a number of bespoke agreements?

By 2016 it was estimated that over 200,000 non-British nationals were employed in the health and social care sectors, an increase of almost three-quarters in the period since 2006, according to ONS data. However, both anecdotal evidence from unions, the NHS and social-care provides, as well as data from ONS indicate a significant fall in these numbers, potentially by as much as 40,000, with the bulk of this migrant work force located in London.

In the West Midlands, the most significantly affected part of the social care workforce is registered nurses. Typically, these would be nurses in settings such as older adult nursing homes. The significant figure here is that 10% of the registered nurses in West Midlands care settings are of an EU nationality; far higher than the proportion in any other setting or job role. This could cause great difficulty post-Brexit, particularly against a backdrop of already high vacancy and low staff retention of nursing staff. A further area of concern is that 3.7% of the domiciliary care (home care) workforce is made up of EU nationals, and this accounts for a high number of staff due to the size of the sector. Across the Midlands, there are over 2,000 EU domiciliary care workers providing essential care to people in their own homes.

The impact is indeed, likely to be felt across the public sector. As of June 2018, there were 2,28 million EU nationals employed in Britain, a fall of 86,000 from a year previous and the largest drop since comparable records began in 1997.

The public sector interface with the business community (shared services) is an area of concern, with agreements and operating practices bound up within EU legal frameworks. Until the effective transfer and repatriation of necessary legislative frameworks are undertaken by Britain, shared services are another sector which it still remains problematic to determine. Future taxation variances from EU norms and current British tax concessions continuity could also have a considerable impact. Nevertheless, current business structures, including locations and supply chains, may have to be modified, whilst a combination of uncertainty on future economic trends and access to (migrant) labour could jeopardise business confidence, eroding investment flows. Similarly, a rapid depreciation of Sterling could undermine commercial viability.

A particular area of concern is procurement. Procurement is of critical importance to local authorities as it is one way of building local wealth. The purchasing power in terms of local authorities creating local investment provides additional social value for local citizens, often those who are most vulnerable. The Public Contracts Regulations 2015 governs the way Contracting Authorities procure their services, supplies and works. It is hugely important both for Contracting Authorities and supply markets alike to have clarity regarding what rules will apply, including any transitional arrangements and implications for potential variations in processes. Lack of such clarity could lead to costly delays and challenges that would focus already stretched resources into abortive work.

The continued integrity of environmental directives, largely originated by the EU but administered and implemented by Britain, especially by local governments is essential. It is noteworthy that in internal European Commission discussions, Britain has continually resisted the establishment of binding long-term stringent targets. On recycling, all EU states have a target of recycling 50% of household waste by 2020. The EU is considering imposing recycling targets of 65% by 2030, about which Britain as expressed reservations. In England, recycling has increased from around 10% in 2000 to about 44%. This increase has slowed more recently however, impacted by an unstable waste market. It is anticipated that local authorities will be required to do more, with increased waste separation. The Brexit effect would have little effect in Wales and Scotland as both devolved governments have already set even more challenging targets than the EU ones. In England, however, leaving the EU could mean less stringent targets.

Trading Standards work both as a regulator and as business advisor, and are heavily heavily influenced by harmonised EU wide legislation. There are 250 different pieces of legislation that places a statutory duty on the public services. Trading Standards Officers are authorised to enforce that legislation. However much of the legislation is derived from the EU. The Government has indicated its ambition to maintain 'high regulatory standards'. However, questions remain about how the Government will be able to reciprocate high standards of consumer protection.

In the context of developing local Brexit planning, the lack of clarity and the scale of the task accommodating necessary changes to local government responsibilities and derogations remain a huge challenge. Notwithstanding this uncertainty, it is vital that local government and its partners do what they can to most effectively prepare for the consequent impacts, whether positive or negative.

Whilst it is appropriate to explore where we can secure benefits and opportunities from Brexit, it is also prudent that we plan for a No-Deal scenario.

RESEARCH FINDINGS

5. The Brexit Context

The EU reaction to the June 2016 British Referendum result has remained consistent since the immediate hours after the result was declared through to the content of the November 2018 Mutual Understanding document. This EU negotiating stance had been best summed up by President Macron, quoted in the FT, as "Brexit shows us one thing: it's not easy to leave the EU, it is not without cost, it is not without consequence". Some of the key consequences apparent from the negotiating process is that, for the European Commission at least, that leaving the EU means leaving its constituent institutional frameworks, most notably leaving both the Single Market and the Customs Union. However, such a rupture could be offset by the more qualified membership of the EEA or EFTA. Above all, collectively the EU-27 are concerned that if there are no adverse consequences from leaving the bloc, then its longer-term viability will be seriously jeopardised.

In contrast, the British position would appear to be a member currently enjoying a range of opt-outs, such as from the Euro, Schengen and the Charter of Fundamental Rights, wanting to become a non-member but with a series of significant opt-ins, namely preferential access to the Single Market, the Customs Union and the Erasmus Programme.

Despite the seeming incompatibility of these positions, progress has reportedly been made on a number of issues since Article 50 was triggered with the publication of the draft Withdrawal Agreement, the so-called Mutual Understanding published in November 2018. Although, under the original formal negotiating schedule agreed once Article 50 was triggered, the timeline for concluding the negotiations has expired in October 2018, now the period between November 2018 and March 2019 will be used to secure respective member ratifications, thereby enabling an orderly Brexit. Nevertheless, at this extremely late stage, less than five months before Britain is actually scheduled to leave on March 29th, it still remains unclear what the final form of this exit will take. EU-27 members are continuing to prepare the ground to introduce emergency measures to accommodate the severe disruption anticipated should no final agreement be reached.

At this stage there remain a number of probable outcomes for what form the Future Relationship could take, after the 29th March 2019 exit, based on the parameters established under the Mutual Understanding agreement:

- a settled agreement, such as temporary reversion to European Economic Area status;
- an as yet undefined transition programme;
- adoption of a WTO-based trading regime;
- without an actual deal, and with no recourse to other trading regimes;
- unanimous agreement to an extension of the Article 50 process, pending a Second Referendum of the decision to leave;
- UK application to re-join EU via Article 49, after March 29th exit.

In consideration of the most appropriate of these options, a number of factors have had to be considered, requiring concessions from both sides.

Firstly, membership of the Single Market is based on acceptance of the so-called "Four Freedoms", namely freedom of movement for capital, goods, services and labour. These are defined in the Treaty of Lisbon, which superseded the founding Treaty of Rome, a key difference between them, is that the former details the free movement of labour, whereas the latter talked of the free movement of people. Although various EU members adopt distinctive and more restrictive labour market policies, the EU insistence that Britain, which currently operates one of the most open labour market policies, fully accepts the free movement of labour is critical if it is to have unfettered access to the Single Market. The attitude of the British government seems to suggest that immigration is assumed to have been a key factor precipitating the vote to leave.

A European Parliament study 'Future relations between the UK and the EU: options after Brexit' finds that there are only two possible outcomes for the future trading environment which preserve the integrity of the Single Market. These are continued membership of the Single Market through the EEA or another similar organisation, or a customs union/FTA which abandons the continued integration of the UK and EU markets.

Secondly, a major stumbling block is the status of the United Kingdom-Republic of Ireland border. The 1998 Good Friday Agreement, which brought a seemingly fragile form of resolution to the long-running "Troubles" in Northern Ireland, was achieved in part because of the respective memberships by the Republic of Ireland and the United Kingdom of the Single Market, established in 1993. Although the current border takes a number of forms (legal, economic, veterinary and fiscal), membership of the Single Market ensures that a physical customs border, with all the associated paraphernalia, is not required. Britain and Ireland remain close culturally, with the number of British citizens claiming Irish passports since the Brexit referendum reportedly up 50%, and many Irish citizens and their descendants living in the West Midlands.

It is feared that physical customs checkpoints threaten to unravel the Good Friday Agreement and undermine current social stability. The range of options being considered for the trilateral (the United Kingdom, Republic of Ireland and EU) treatment of the province of Northern Ireland would appear to dilute the principle of territorial inviolability upon which the EU is founded due to the "backstop" idea, where Northern Ireland would effectively remain part of the Customs Union and the Single Market if no alternative solution could be found to avoid a hard border between Northern Ireland and the Republic. This proposal would seem to be difficult for any sovereign state to countenance, let alone the UK given its historic baggage accumulated as a result of its creation.

The exit of the EU would necessarily seem to involve the repatriation of a range of powers and responsibilities that were accumulated by the EU, and its predecessors: the European Economic Community, the European Coal and Steel Community and EURATOM, over the past forty-plus years of Britain's membership. Indeed, membership of the EU was the context within which the devolution settlement was arrived at for Scotland and Wales, brought into the long-standing arrangements for Northern Ireland and, to some extent, shaped the arrangements for the Government of London. As a result, some of the responsibilities being repatriated to the United Kingdom are in part already decentralised to these devolved entities and the process by which Whitehall will undertake full repatriation is already subject to contentious debate.

Similarly, after a decade-long period of fiscal retrenchment, English local government entities have benefited from, and indeed become heavily dependent on, EU-derived fiscal support programmes. These are largely but not exclusively part of the European Regional Development Fund (ERDF) and European Social Fund (ESF) programmes. The devolved governments have also benefitted heavily from these programmes.

As a result, regardless of how Britain finally leaves, the impetus for reform seems to be present and growing. Given the constitutional and fiscal impact of leaving the EU, and how deeply embedded this relationship has become, there it would seem opportunities to forge a new government settlement for the United Kingdom, and the English regions in particular.

Additionally, universities and other academic institutions have had recourse to EU funding programmes, which has provided substantial support to research capacity as part of Europe-wide (including EEA entities) collaborative programmes.

Until Brexit is finally achieved it will not be apparent whether these current levels of funding (estimated to be £4.5bln in 2016) will or can be sustained by the British Treasury, although recent government documents pledge to continue EU funding, at least partially. To some degree, this stems from the fact that calculating the British budget contribution is distorted by the abatement (sometimes referred to as a rebate). The calculated level of GDP also determines Britain's contribution in the EU budget cycles and levels of recipient allocation (losing the GDP link could result in real terms reductions over future programme periods). Furthermore, there has been some concern over the methodology by which HM Treasury administers EU funding which has drawn past criticism from the European Commission.

Attention has also, understandably, focussed on the scale of the potentially detrimental impact of more constrained access to both the EU and the Customs Union, as a result of Brexit, on both exports and imports. Britain's trade profile lags behind almost all other member states in terms of its proportionate integration with other EU members, for instance Britain and Malta are the only EU member states that trade more with Non-EU economies than with fellow EU members. This is obviously partly a reflection of the continental geographic location of many members.

It seems imperative that the expected new trading environment is effectively exploited, firstly, to offset any diminution of trade to Europe, and secondly provide fresh opportunities for British trading. Until these new volumes of trade flows emerge in the post-Brexit environment, it will not be the negotiation of bilateral Free Trade Agreements that stimulate these flows, rather it will be the provision of necessary international and domestic connectivity that will provide the framework to facilitate export growth. This facilitation must necessarily include more assertive trade policy officers coupled with sufficient infrastructure to support their activity alongside that of exporters. Indeed, the British Foreign Policy Group has indicated in their paper 'The Price of Freedom' that the costs of international engagement, in its broadest definition but including trading relations, will have to be substantially increased to meet post-Brexit aspirations. With London, Scotland, Wales and Northern Ireland already articulating assertive international engagement strategies, consideration needs to be given as to how the international aspirations of Birmingham and the wider region are formally accommodated.

It has been argued that Britain's membership of the EU has enabled it to become the largest recipient of FDI within the EU, largely attributed to Britain being able to act as a gateway to the EU. This role has also been aided by some other EU members, notably Germany, adopting more restrictive, less accommodative, policies toward FDI. Whilst future FDI flows will be largely determined by corporate, and essentially transnational institutional sentiment toward investment destinations and hence difficult to forecast, it would seem obvious that the parameters determining these decisions will shift. Furthermore, these anticipated changes will have an impact on the current principal sources of British FDI, such as Japan. There are already indications that, combined with projected developments of the technological basis of the global economy, a major reassessment of the structure of FDI by the originators is already underway. It is not merely the context for FDI that is changing, but the global economic environment.

Trade tensions between the United States and China, the EU and Canada, as well as with a number of Emerging Markets, have been escalating over the course of the year with tariffs and counter-tariffs being respectively proposed and imposed. Of more serious concern for Britain's apparent aspirations has been the erosion of the effectiveness of the WTO by the United States. According to a recent paper by the Peterson Institute for International Economics 'The dispute Settlement Crisis in the WTO: Causes and Cures', this is not simply yet a further novel initiative on the part of President Trump, but more an extension of previous administrations voiced concerns regarding the WTO assumption of legislative functions that the Americans consider beyond its remit. This has led to the United States effectively delaying judicial appointments to the WTO appellate body and as a result it could soon be rendered inquorate and unable to adjudicate on trade disputes. Thus, by the time Britain leaves the EU, the WTO option may prove to be valueless, and with President Trump intensifying his anti-WTO rhetoric, there are considerable doubts that it will be able to survive as an effective trade arbiter. Accordingly, as Britain develops its post-Brexit trading relations, rather than an environment within which multinational trade arrangements are the norm, bilateral ties between nation-states could become much more significant.

It is in this context that the British Government is negotiating the UK's exit from the EU. Previously, in the White Paper 'The Future Relationship Between the United Kingdom and the European Union' (otherwise known as the Chequers Proposal), the Government set out its aims for Brexit, including the formation of a free trade area for goods as well as the UK following a common rulebook. This arrangement would, in theory, continue to enable the free movement of goods across borders with no need for customs checks. However, this would not cover services, an important component of the British economy, and increasingly important in the production sectors that the arrangement seeks to protect. In fact, 15.2% of Great Britain's services exports to the EU came from production industries in 2015 – but this was higher in the West Midlands at 39.9%.

In contrast to the British pre-occupation with Brexit, recent events in the EU and reporting in the media would suggest that Brexit is lower down the list of priorities for the EU than some other issues. The argument, often presented by those from the Brexiteer camp, that the UK will receive a favourable deal as it runs a trade deficit with the EU is at odds with some research in that area. Chen et al find that the UK is 4.6 times more exposed to risks from Brexit than regions in the remainder EU. In the EU, they identify Irish regions as the most exposed, although the levels of this exposure are comparable to the least exposed areas of the UK (London and parts of Scotland), followed by North-West Europe, especially Germany.

Nevertheless, there would appear to be some support from EU countries for the UK: in Aston Centre for Europe's paper 'Brexit, Post-Brexit Europe and the V4', it is argued that the Visegrad Four countries (namely Czechia, Hungary, Poland and Slovakia) have an interest in maintaining security ties with the UK, as well as citizens' rights for the many of their citizens currently resident in the UK. The question of the Irish Border, a contentious issue in the Brexit negotiations, is also of issue to these countries, many of whom have outside borders with Non-EU countries.

In his paper 'The Left and Brexit: facing up to the realities of an interdependent world', Jon Bloomfield argues that there are four possible options after Brexit; the hard right's preferred option of a lightly regulated tax haven with a new subordinate relationship with the USA, redoing the Brexit referendum, the nationalist left's go-it-alone Keynesian socialism or a soft Brexit. He argues, from a left-wing perspective, that the last of these options is the best outcome for the UK, including tariff-free seamless trade and application of the EU rule on migrants being sent home if they are not in work or financially independent after three months. A policy that ironically would seem consistent with the Treaty of Lisbon and the stipulation for the free movement of labour – something that a British government could have possibly implemented years ago.

Moreover, the ratings agency Fitch has recently announced that it is increasing its expectations of a disorderly Brexit. This came as the government releases its 84 papers on the sectoral impacts of a No Deal Brexit.

6. The Regional Context

The West Midlands was proportionately the largest leave voting region in the UK in the 2016 Referendum, with 59.3% voting in favour of leaving the EU. Birmingham, although narrowly voting to leave by 50.4% (slightly lower than the overall UK vote of 51.9% to leave), had the second lowest vote to leave in the West Midlands after Warwick, the only local government area within the region which voted to remain. Indeed, in the WMCA area, excluding Birmingham, the vote to leave was 63.0%.

Much has been written about the reasons to vote to leave, with immigration seen as one of the key drivers to the vote. However, when Colantone and Stanig examined this claim in their paper 'Global Competition and Brexit', they found that exposure to increased Chinese exports and the subsequent de-industrialisation of an area actually had a closer correlation with the leave vote on a NUTS3 level, suggesting that the vote to leave was a reaction to losses attributed to globalisation coupled with the failure of policy-makers to offer an effective response. Moreover, remain voting areas were actually the areas with higher levels of immigration according to their polling data.

In their analysis 'The Regional Policy Implications of Brexit', McCann and Ortega-Argiles found that leave voting regions were more dependent on the EU in their trading relationships and have been greater beneficiaries of EU funding. They also suggest a lack of understanding of global supply chains and the economic impact of Brexit among leave voters. They posit that it will become increasingly important for government to address regional imbalances as they increase because of the impact of Brexit, and suggest a replacement of EU regional funding after Brexit as one way of achieving this. They also note that, although the government has consulted with the three devolved administrations and London, it has not consulted any of the other eight English regions in the Brexit negotiation process. This suggests that, rather than feeling left behind, these regions feel ignored, and perhaps this was one of the elements behind the vote to leave the EU in many English regions.

In their paper 'How the Economics profession got it wrong on Brexit', Ken Coutts, Graham Gudgin & Jordan Buchanan from the Centre for Business Research, University of Cambridge, have suggested that Britain's membership of the EU was not necessarily an unalloyed success and that Britain failed to capitalise on the opportunities available. By the approximate measure of GDP per capita, as a proportion of the USA, British GDP per capita has remained relatively static. Whilst it may have arrested decline, it does not appear that EU membership has transformed the growth trajectory. Domestic policy has had a far greater impact, notably the structural reforms introduced by the Thatcher administration and pursued by successive administrations. Thus, leave, as indeed remain, voters may have simply making a summation of their life experiences when casting their votes.

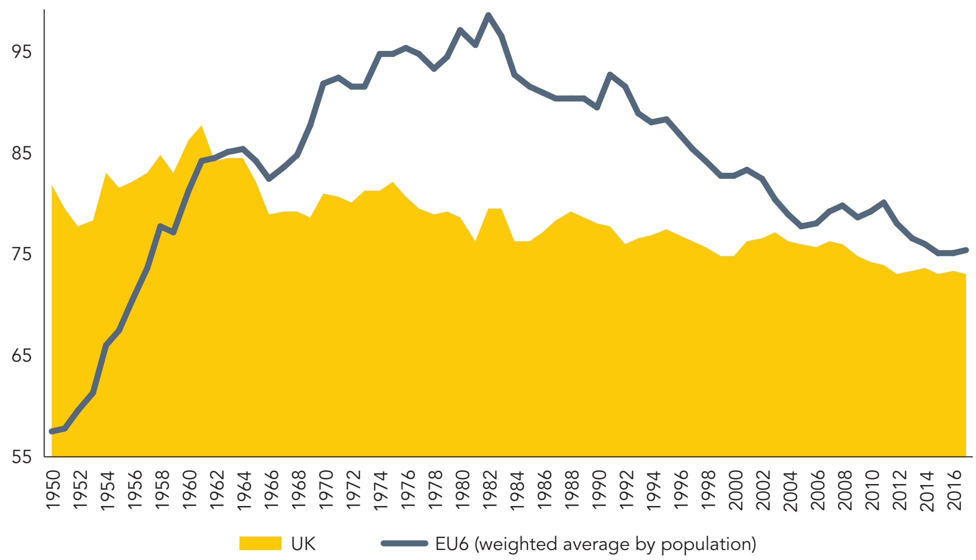
June 2016 Referendum: Comparative Results

		Remain %	Leave %	Leave Majority Votes	%	Turnout %
UK		**48.10**	**51.90**	**1,269,501**	**3.80**	**72.20**
of which:	England	46.60	53.40	1,921,410	6.80	73.00
	Scotland	62.00	38.00	-642,869	-24.00	67.20
	Wales	47.50	52.50	82,225	5.00	71.70
	Northern Ireland	55.80	44.20	-91,265	-11.60	62.90
	West Midlands	40.70	59.30	548,512	18.60	72.00
	East Midlands	41.20	58.80	442,443	17.60	74.20

WMCA Relationship	Local Government Area	Electorate	Percentage Turnout	Remain Votes	Leave Votes	Percentage Remain	Percentage Leave	Leave Majority	Percentage Leave Majority	Leave % of Electorate
Constituent	Birmingham	707,293	63.81	223,451	227,251	49.58	50.42	3,800	0.84	32.13
Constituent	Coventry	221,389	69.21	67,967	85,097	44.4	55.60	17,130	11.19	38.44
Constituent	Dudley	244,516	71.71	56,780	118,446	32.4	67.60	61,666	35.19	48.44
Constituent	Sandwell	221,429	66.58	49,004	98,250	33.28	66.72	49,246	33.44	44.37
Constituent	Solihull	160,425	76.06	53,466	68,484	43.84	56.16	15,018	12.31	42.69
Constituent	Walsall	194,729	69.68	43,572	92,007	32.14	67.86	48,435	35.72	47.25
Constituent	Wolverhampton	174,760	67.54	44,138	73,798	37.43	62.57	29,660	25.15	42.23
Non-Constituent	Cannock Chase	75,010	71.47	16,684	36,894	31.14	68.86	20,210	37.72	49.19
Non-Constituent	Nuneaton & Bedworth	93,978	74.35	23,736	46,095	33.99	66.01	22,359	32.02	49.05
Non-Constituent	Redditch	61,038	75.22	17,303	28,579	37.71	62.29	11,276	24.58	46.82
Non-Constituent	Tamworth	56,825	74.18	13,705	28,424	32.53	67.47	14,719	34.94	50.02
Non-Constituent	Telford & Wrekin	124,338	72.15	32,954	56,649	36.78	63.22	23,695	26.44	45.56
Observer	North Warwickshire	49,790	76.27	12,569	25,385	33.12	66.88	12,816	33.77	50.98
Observer	Rugby	74,137	79.03	25,350	33,199	43.3	56.70	7,849	13.41	44.78
Observer	Stratford-on-Avon	98,014	80.82	38,341	40,817	48.44	51.56	2,476	3.13	41.64
Observer	Shropshire	236,788	77.42	78,987	104,166	43.13	56.87	25,179	13.75	43.99
Observer	Warwick	103,099	79.22	47,976	33,642	58.78	41.22	-14,334	-17.56	32.63
LEP-affiliate	Bromsgrove	74,170	79.35	26,252	32,563	44.63	55.37	6,311	10.73	43.90
LEP-affiliate	East Staffordshire	83,558	74.39	22,850	39,266	36.79	63.21	16,416	26.43	46.99
LEP-affiliate	Lichfield	80,369	78.78	26,064	37,214	41.19	58.81	11,150	17.62	46.30
LEP-affiliate	Wyre Forest	77,878	74.05	21,240	36,392	36.85	63.15	15,152	26.29	46.73
Other WM Region	Herefordshire	138,247	78.36	44,148	64,122	40.78	59.22	19,974	18.45	46.38
Other WM Region	Stoke-on-Trent	179,010	65.74	36,027	81,563	30.64	69.36	45,536	38.72	45.56
Other WM Region	Newcastle-under-Lyme	92,816	74.30	25,477	43,457	36.96	63.04	17,980	26.08	46.82
Other WM Region	South Staffordshire	85,777	77.81	23,444	43,248	35.15	64.85	19,804	29.69	50.42
Other WM Region	Stafford	99,612	77.83	34,098	43,386	44.01	55.99	9,288	11.99	43.55
Other WM Region	Staffordshire Moorlands	79,347	75.36	21,076	38,684	35.27	64.73	17,608	29.46	48.75
Other WM Region	Malvern Hills	60,217	80.61	23,203	25,294	47.84	52.16	2,091	4.31	42.00
Other WM Region	Worcester	73,516	73.85	25,125	29,114	46.32	53.68	3,989	7.35	39.60
Other WM Region	Wychavon	94,497	80.88	32,188	44,201	42.14	57.86	12,013	15.73	46.78

Source: WTO, HMRC & WMEF

GDP per Capita Index for EU6 & UK (USA = 100)

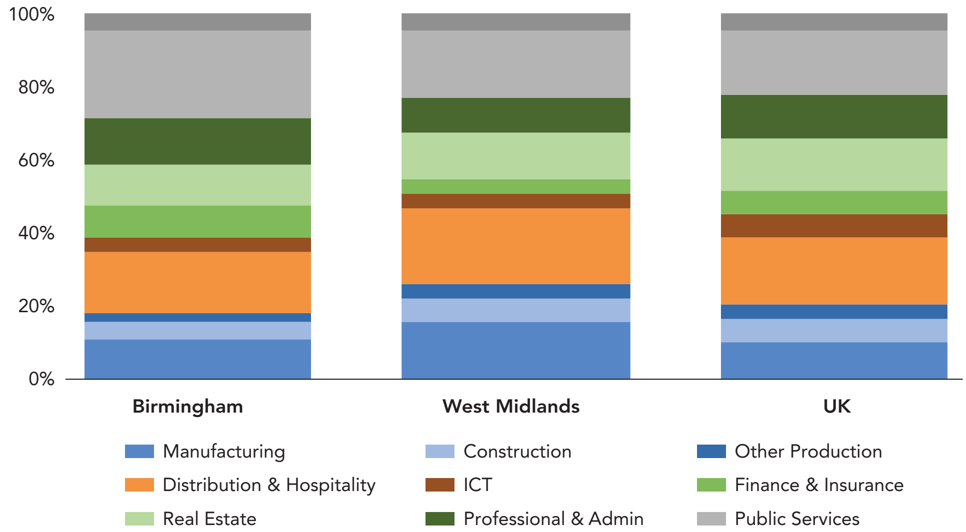


Source: US Conference Board, CBM & WMEF

Anecdotal evidence from various stakeholders across the region, gathered for this report, suggests that the largest concern for businesses and people in the region is not the nature of the final outcome of the Brexit negotiations, but how long they will have to prepare for it. Indeed, some expressed that the need for clarity was more important than achieving a soft Brexit. Unfortunately, there now seems insufficient time to prepare for Brexit, as the details of the mutual understanding still need to be clarified.

7. The WMCA Economy

WMCA Comparative Output Structure (2016)

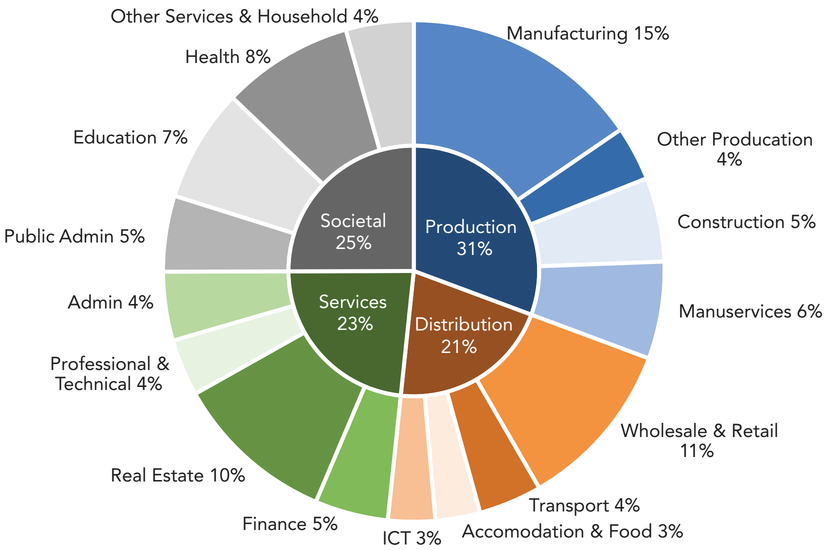


Source: ONS & WMEF

The output structure of the WMCA is fairly similar to the output structure of the West Midlands, although with a slightly smaller production sector (manufacturing is 15% of output for both the WMCA and the West Midlands). This is due to the slightly larger services sector in the WMCA, probably due to the presence of professional services (including design and engineering) in Birmingham, as well as a larger finance & insurance sector.

Public services were the largest sector of output in the WMCA in 2016, producing 21% of output. This probably reflects Birmingham's status as the UK's second city and the wider WMCA's regional role in the larger presence of government offices. The scale of the education sector, as there are a disproportionately larger number of school-aged children in Birmingham given its younger age profile than the UK overall, is also probably a factor. In comparison, 31% of London's GVA comes from public sector services. Other key sectors include distribution & hospitality, with the former related to the WMCA's strong exporting profile.

Output Structure of WMCA (2016)



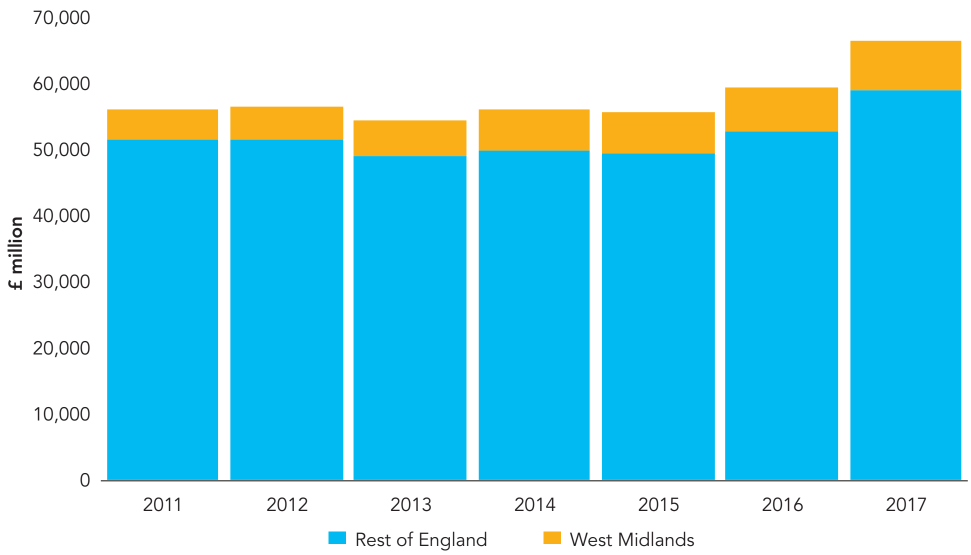
Source: ONS & WMEF

An aspect that ONS data tends to overlook is the increasing complexity of the relationship between the production, particularly the manufacturing sector, and specific services sector enterprises. Indeed, as manufacturing develops into its next iteration, involving increased so-called servitisation of the manufacturing process, this symbiology can be expected to deepen and broaden. In the BCU Discussion Paper 'The Secondary Impact of Manufacturing in the Midlands', this relationship has been termed as ManuServices. Developing this analysis, the production sector can be seen to be equivalent to close to a third of the overall WMCA economy, with a similar proportion recorded for both the wider West Midlands and Midlands economies. In terms of export performance, ManuServices enterprises will probably play an increasingly significant role, and can now be seen to be intrinsic to the global competitiveness of the region. Additionally, many manufacturing enterprises derive often in excess of 40% of their turnover from ancillary services associated with their core manufactured products. This inter-relationship will need to be reflected in future trade agreements.

The impact of servitisation on manufacturing is evidenced by the scale of the services component in manufactured exports. The scale of overall services sector exports is comparatively well known; indeed, these are equivalent to 45% of total exports. These are defined by the WTO (in the General Agreement on Trade in Services) and according to the UKTPO take four modal forms, namely:

- mode 1 direct cross-border services trade;
- mode 2 consumption abroad;
- mode 3 sales through establishment of commercial presence abroad;
- mode 4 the temporary presence of natural persons as service suppliers abroad.

Domestic Mode 5 Exports



Source: UKTPO, HMRC, OECD & WMEF

The UKTPO, utilising WTO, OECD and HMRC data, have attempted to calculate what can be termed the fifth mode of services trade, the proportion of the value of manufacturing exports that comprise services sector inputs. These can include design; software, as part of the production and distribution process; R&D; trademarks; and branding. Whilst the services sector component varies significantly by sector and industry - food & beverages enjoy the highest in terms of domestic services component at 28.8% and coke & petroleum the lowest at 12.0% - the UKTPO identified the contribution of each region. After London and the South East, the West Midlands is the third strongest performer contributing some 10.6% of these embedded services in England. Moreover, in marked contrast to national performance, over the period since 2011 the West Midlands is one of the few regions to consistently register growth in this sector – expanding by over two-thirds.

Chen et al, in their paper 'The continental divide? Economic exposure to Brexit in regions and countries on both sides of The Channel' found that the West Midlands was one of the more exposed regions to Brexit, with 12.2% of WMCA GDP exposed, with the least exposed being North Eastern Scotland (9.8%) and the most exposed being Cumbria (16.3%) making it the 19th out of 37 NUTS2 regions. In terms of manufacturing, this rises to 32.3% of manufacturing output exposed to Brexit, but this is only 25th out of the 37 regions.

They also looked at the impact of Brexit on European regions, with the two NUTS2 Irish regions coming out as the most affected (both by around 10.1%). The next most exposed areas were in Germany, in particular parts of Baden-Württemberg and Bavaria, of which 5.5-6.5% of GDP was calculated to be exposed to Brexit.

8. Manufacturing

In a policy briefing paper by Los et al., many of the industries which they found were going to be the most affected are industries which are important to the West Midlands. They found that, of the 54 industries, 15 had more than 20% of value-added exposed to Brexit, the highest being professional, scientific & technical services (36%). This is one of the key drivers of servitisation in the West Midlands, and an important industry to Birmingham – as well as an important element in many advanced manufacturing techniques. Other industries important to the West Midlands and Birmingham affected are electrical equipment (27%), computer electronic & optical (26%) and basic metals (26%). In terms of the overall hit to UK GDP, they calculate that 8.53% of value added is exposed to Brexit.

It is important to note that these calculations are not an estimate of the economic impact of Brexit, but merely of economic exposure in terms of trade, excluding the impacts of migration and FDI; in order for this to be the ultimate impact of Brexit, all exports to the EU would have to cease entirely (currently an unlikely outcome), and the eventual impact of Brexit on the national and regional economy is likely to be lower than this. Moreover, it has to be assumed that both national and regional policy-makers will adopt pro-active strategies to offset the negative impacts and harness the positive aspects of Brexit, including negotiating new FTAs.

West Midlands' trade is a higher percentage of GVA compared to most regions in the UK. Therefore, more export-orientated regions, such as the West Midlands, appear to be more vulnerable to Brexit. However, on top of the statistical analysis of pure trade exposure, it is also true that the effects in other regions, which appear to be less economically exposed to Brexit, can also include cultural and social linkages that are not necessarily picked up by statistical analysis. Moreover, even if overall regional exposure is low, there may be parts of regions whose exposure is high, and that areas which may not look quite so vulnerable may still need significant support to deal with the impact of Brexit.

As previously stated, Birmingham and the Wider West Midlands merchandise exports to the EU in 2016 were equivalent to 6.44% and 10.17% of GVA respectively, with the value of Non-EU exports being higher, both in terms of absolute value and as a percentage of GVA.

Birmingham Export Position (2016)

	World	UK	West Midlands	Birmingham
Value of EU Exports (£m)	3,414,200	139,975	12,871	1,657
EU Exports % of GVA		8.01	10.17	6.44
% of Total EU Imports	100.00	4.10	0.38	0.05
Value of Non-EU Exports		147,905	16,862	2,489
Non-EU Exports % of GVA		8.46	13.32	9.68

Source: UNCTAD, HMRC, OECD & WMEF

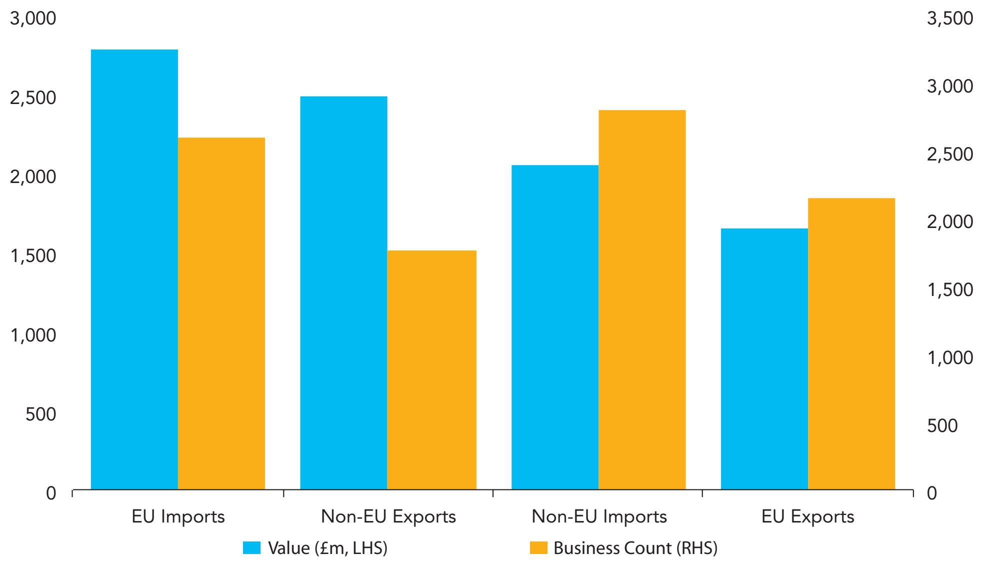
Compared to the UK overall, the West Midlands is a more export-oriented economy than the UK overall - at least in terms of merchandise exports - with the region performing in line with the UK, but with a stronger focus on Non-EU exports.

Calculated exposure to Brexit being skewed by regions with higher trade to GVA ratios and larger manufacturing sectors is also a criticism which can be drawn at the leaked government assessments of the regional impact of Brexit, which are based on the composition of exports (goods versus services) and exports as a proportion of the regional economy in order to come out with the final, rather pessimistic, figures for the impact of Brexit.

9. Future Trade Profile

In terms of total trade, the largest component for Birmingham are imports from the EU, which contributes to the city's overall trade deficit; Birmingham actually runs a merchandise trade surplus with Non-EU countries.

Birmingham EU and Non-EU Trade (2016)



Source: HMRC & WMEF

In De Propis and Bailey's paper 'Brexit and the Automotive Industry', they look into the automotive industry's success in the UK as a result of being a part of the Single Market, gaining the ability to source components from other countries, as well as access to skills and EU research funding. After Brexit, there could be tariffs levied on automotive components and on final products, which could be amplified for manufacturers in the UK if Sterling depreciates into a new, lower trading range. The paper proposes an industrial strategy focused on reshoring components of the automotive industry, with only 40% of components sourced locally by UK car manufacturers, compared to 60% in Germany. This is also critical to any FTAs under WTO rules of origin, which require 60% of the car's value to be generated domestically in order for the FTA to apply. This could impact on the supply chains of large OEMs in the region, but also impact the development on emerging industries in the region, for example connected and autonomous vehicles.

This point is echoed in the Centre for Brexit Studies working paper 'The Commonwealth: A Panacea for the UK's Post-Brexit Trade Ills?', they find that proximity is a large driver of trading partners, with limited potential existing to replace EU trade with other countries such as Australia, New Zealand, India and Nigeria – especially given the increasing importance of methods such as just-in-time manufacturing.

It is important to note that this should not simply be in terms of distance, but in terms of time travelled, and effective in-situ connectivity generally. If the infrastructural capacity is not in place, it will prove difficult for exporters to export to intermediately connected territories. Furthermore, a significant improvement in global connectivity times can be achieved locally. In the WMEF Paper 'Developing a Global Gateway for Airfreight Services', it was asserted that airfreight actually spends approximately 30% of transit time inflight, and that by reducing surface access time to air cargo facilities, estimated at 70% of transit time including customs clearance, can significantly improve global competitiveness.

Similarly, the UNCTAD Bilateral Maritime connectivity index measures the frequency and availability of shipping between two countries, providing indications of bilateral large volume connectivity.

West Midlands Trade Connectivity (2017)

Rank	Country	Trade (£m)	Trade Connectivity*	Trade Penetration	Ease of Doing Business Rank	Trading Across Borders Rank
1	Germany	10,468	0.83	0.39	20	39
2	USA	7,866	0.74	0.32	6	36
3	China	7,829	0.76	0.28	78	97
4	France	4,471	0.83	0.45	31	1
5		3,568	0.88	0.29	32	1
6	Italy	3,169	0.63	0.40	46	1
7	Belgium	2,648	0.87	0.28	52	1
8	Ireland	2,402	0.39	2.12	17	47
9	Spain	2,164	0.83	0.35	28	1
10	Poland	1,567	0.57	0.30	27	1
11	Sweden	1,293	0.63	0.39	10	18
12	Japan	1,245	0.62	0.09	34	51
13	Turkey	1,194	0.50	0.25	60	71
14	India	1,105	0.56	0.11	100	146
15	Canada	995	0.48	0.18	18	46
16	Australia	974	0.45	0.47	14	95
17	Czechia	923	N/A	0.17	30	1
18	South Korea	895	0.73	0.16	4	33
19	Hong Kong	873	0.68	0.07	5	31
20	Russia	827	0.48	0.31	35	100

**UNCTAD Liner Shipping Bilateral Connectivity Index*

Source: HMRC, UNCTAD, World Bank & WMEF

As can be seen above, the West Midlands' top trading partners all have relatively strong maritime connectivity with the UK – even if these countries are further afield, such as the USA or China. They are also countries with better ease of doing business ranks, according to World Bank data, which measures the levels of various factors in doing business, including the ease of trading across borders. In terms of rankings in relation to trading across borders, 16 EU countries are ranked joint-first, ensuring that whether or not the UK is a member of the EU, these are still some of the easiest countries in the world to trade with. In comparison, the UK was ranked 7th overall, and 28th for ease of trading across borders.

Doubts over the nature of the UK's membership of the WTO could add difficulty to trading after Brexit, provided of course the WTO continues to operate in a meaningful form. As pointed out in the Centre for Brexit Studies Discussion Paper 'Making a Success of Brexit', Britain will have to renegotiate its position within the WTO, as its current allocations and terms of membership are as a part of the EU. The initial suggestion for the allocation of tariff-rate quotas for agricultural goods was rejected by twenty countries, including the USA, Canada, Australia and New Zealand, who objected to the idea of the UK simply taking a share of the bloc's overall quotas. This may be partly due to the fact that EU-WTO negotiations have been continuing since 2004 (prior to which there were 15 EU members) on how to accommodate all now 28 members within the WTO regime.

Nevertheless, the Government seems confident that in the case of a No Deal Brexit, the UK would be able to trade under WTO rules. This would entail an increase in red tape for those trading with the EU, as it will be in line with businesses trading with Non-EU countries, such as the need for customs declarations, registering for a UK Economic Operator Registration and Identification number, as well as safety and security declarations for carriers and hauliers at borders. This increase in red tape could prove to be burdensome to many businesses, particularly smaller businesses like many in the WMCA which may have not dealt with this type of documentation before.

The government has also announced the creation of a new trade remedies system which will replace the role of the European Commission. This will continue to use EU laws after the UK leaves the EU, but will drop some measures following evidence from UK businesses as to what matters most to them.

Impact of WTO Trading Regime on WM Merchandise Exports to the EU

	Total WM-EU Exports 2017 (£'000)	WMEF Estimated Impact		
		Average	Minimum	Maximum
Exports	14,697,974	584,451	33,315	1,943,745
Implied Tariff Levels		4.0	0.2	13.2

Source: WTO, HMRC & WMEF

In the case of the West Midlands, if the UK does trade under WTO rules after Brexit, the implied weighted tariff level for exports in 2017 would be 4% if the average tariff was applied in all cases. The maximum weighted tariff would be 13.2%, or it could be as low as 0.2% if the lowest tariff was applied. This again assumes no offsetting policy measures as part of any post-Brexit response. This does not consider the additional costs in terms of regulations and time which could arise in the form of non-tariff barriers.

With Birmingham and West Midlands enterprises heavily embedded in global value-added supply chains, often close to the apex of these, there has been obvious concern regarding the resilience of these supply-chains. Price would only seem to be one factor to enable participation in any supply chain, and the further the ascendancy in the supply-chain and closer to final product an enterprise is located, then it would seem reasonable to assume that price (as influenced by tariffs) would lessen as a decisive factor. The past, and unfortunately extensive volatility of Sterling, would suggest these supply-chain ties can withstand some intense price pressures. Additionally, participation within a specific supply chain is determined by other factors, such as:

- the product offered;
- the services offered to sustain products use;
- product quality and precision, especially with regard to advanced industrial components;
- reliability and suitability;

- compatibility of the product to the finished end-products;
- IP security;
- brand awareness;
- regularity and timeliness of delivery.

There are numerous examples, in both Britain and the world, of failures to address these issues, in provider selection that have caused catastrophic disruptions to supply-chains and OEM reputational loss.

In the media, the WTO option is often touted as a No Deal, although as can be seen from the above description this is far from the case. There is, however, another scenario whereby No Deal does actually constitute leaving without any deal in place and without full WTO status, termed a unilateral trading position in this document. If such an eventuality were to result, it is envisaged that neither agreements for an orderly agreed exit process or reversion to WTO arrangements had been arrived at by the current Article 50 deadline and talks had broken down. Indeed, given the limited time now available it may now prove problematic to have all the necessary physical and bureaucratic apparatus in place to effect WTO trading. In this scenario, trade would stop and other economic ties would be severely compromised, leading to chaotic conditions at ports (air and sea), in supply-chains and financial markets amongst others. This would most likely precipitate rapid political action from the key European powers, with preparatory legislative and regulatory work apparently already being initiated by the European Commission (in response to pressure from EU-27 members), with temporary ad-hoc arrangements being adopted as a matter of expediency. This would then ultimately lead to some intense negotiations to resolve a temporary transition period. Obviously, this would be the worst-case scenario and any ad-hoc arrangements could exist for an indeterminate time.

CASE STUDY
European Regional Engagement

Notwithstanding the lack of available clarity on the final Brexit outcome, many City and regional institutions have drawn up post-Brexit strategies for continued EU engagement (usually as part of continuous development of associated corporate global engagement programmes) that can be subsequently amended as negotiations progress. This reflects the long-standing, often centuries long-links between reciprocal enterprises and institutions in Europe. Links between cities such as through twinning, between universities through collaborative research, and businesses through shared ventures and ownership, are extensive and substantial. Post-Brexit, these organic ties can be expected to be prove essential conduits to sustain inter-regional ties across Europe.

Scotland's Constitutional Relations Secretary Mike Russell appears to be advocating this approach, as have both the governments of Wales and London. Indeed, the region has already been approached by comparable regional bodies elsewhere within the EU to look at post-Brexit relations. Interest in the West Midlands has been sparked in Denmark as well as Saxony in Germany, where both Birmingham (with Leipzig) and Coventry (with Dresden) have strong historic ties.

In the case of Saxony, informal institutional discussions have been progressing for some time on establishing a formal post-Brexit programme of reciprocal relations to sustain growth and development in both regions. Under the title of the Anglo-Sax

Initiative (the Initiative) a joint programme is being developed by public and private sector institutions in both Saxony and the Midlands.

The objectives of the Initiative are founded on the recognition that, whilst Britain may be leaving the EU, although the form of which remains indeterminate, after Brexit, Saxony and the Midlands will continue to occupy the same geographic and cultural space. Moreover, they will continue to enjoy economic and trading ties, however truncated these may ultimately end up being. The Initiative aims to map the current trade ties, including the extent and scope of integrated valued-added supply chains, how these can be strengthened, if possible, what new opportunities will become available and what mechanisms are realistically open in order to mitigate the worst aspects of whatever agreement comes into effect.

There is also a recognition that whilst governments and public bodies can facilitate trade at an aggregate level, it is companies, large, medium, small and micro that actually undertake importing and exporting. Thus, although it is ultimately desirable to secure Free Trade Agreements (FTAs), trade needs to exist and be sustained between economies before FTAs can be agreed. Therefore, the Initiative seeks to identify what infrastructures need to be in place regionally to support links between Saxony and the Midlands.

In summary the objectives of the Initiative are as follows:

To encourage cultural, economic and trade relations between the regions of Saxony and the Midlands.

- promote and foster bilateral partnerships between institutions such as, but not exclusively, those in local government, education, business, culture, and sport;
- to develop greater understanding of the impact and scope of the Saxon and Midlands regional economies with their respective national structures as well as their respective positions within European and Global economies. In the first instance undertaking a comparative economic review of Saxony and the Midlands, and ultimately providing ongoing intelligible economic analysis of the components of each economy to foster and sustain business and inclusive economic growth;
- provide regular public interactions, via the broad range of traditional mechanisms (regular publications, briefings, seminars, and workshops) and new forms of connectivity (social media), to stimulate debate and collaboration, including rotating annual conferences.

Saxony is emerging as one of the key regions of Mitteleuropa with its geographic location and its concentration of manufacturing, across a broad range of sectors, providing the basis for transition to the next phase of advance internet-dependant manufacturing. Whatever the conclusion to the Brexit process, the region's expansion will be heavily reliant on access to precision components and customer-orientated business solutions.

Accordingly, Saxony is keen to develop linkages with potential providers of both solutions and product and are aggressively seeking future partners.

The Free State of Saxony, and its capital Dresden, has over recent decades re-emerged as an innovative economic component. Indeed, Saxony is regarded as an innovation leader, according to the EU regional innovation scoreboard, and within the Federal Republic ranks as the second most dynamic Lande. This is in part due to the concentration of universities and technical institutions, some 32 in all, and the array of allied applied research bodies, including some 18 Fraunhofer bodies. Dresden is host to the largest number of Fraunhofer institutes in Germany.

Economy of Saxony

Area	18,449 sq kms
Population	4.09 mln
Population Density	221 per sq km

GDP	€118.5 bln
Industrial turnover	€63.8 bln
Export Rate	37% of GDP
SME sector	93% of total

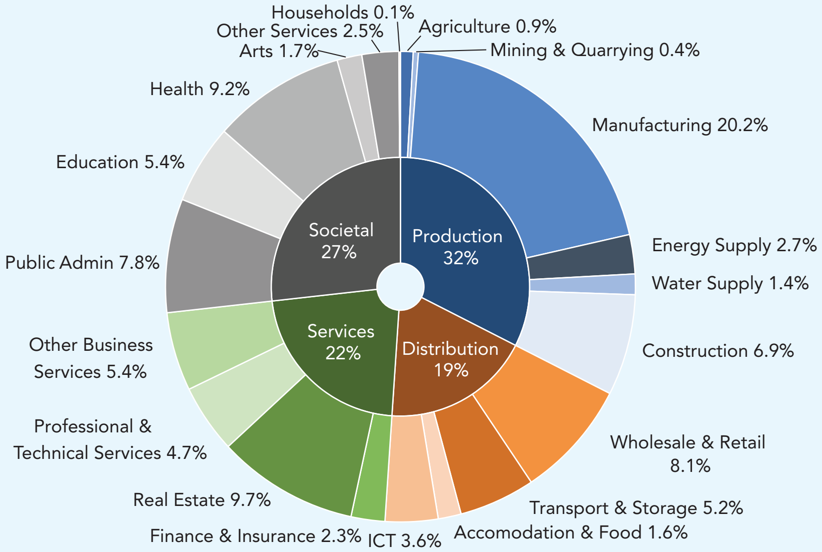
Largest Cities	
Dresden (capital)	549,487
Leipzig	579,530
Chemnitz	246,645

International Airports
Dresden
Leipzig/Halle

Source: WFS & WMEF

Dresden, in addition to being a key location for the automotive sector, hosting Volkswagen and associated suppliers, is a centre for micro- and nanotechnology, biotechnology, renewable energies, materials technology as well as mechanical and plant engineering. Every second microchip produced in Europe is made in Silicon Saxony, centred on Dresden. Leipzig, the second largest city to Dresden, is host to Leipzig-Halle International Airport, which has been DHL's centre of European operations since 2012.

Saxony Output Structure (2014) Total GVA



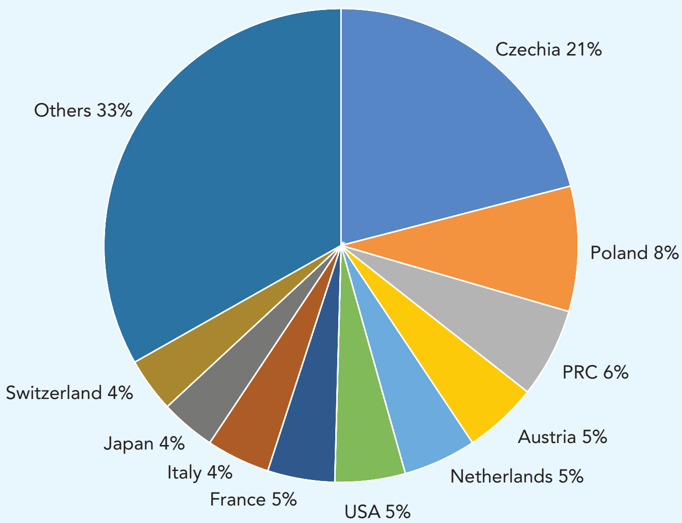
Source: Destatis & WMEF

Saxony has an extensive legacy of machine manufacturing. Currently, amongst the global corporations that have a presence in Saxony, are Volkswagen, BMW, Porsche, Infineon, GLOBALFOUNDARIES, DHL, Bombardier Transportation and NILES-SIMMONS HEGENSCHEIDT.

Since the turn of the century, the Saxony economy has grown by more than a fifth, amongst the strongest in the Federal Republic. This has been principally based on its core industrial sectors of automotive, mechanical engineering, micro-electronics and ICT. Notably, every tenth car produced in Germany is made in Saxony. In addition, substantive growth has also been registered in environmental and energy technology, life sciences, logistics, aerospace and railway technology.

In the 15-years ending 2008, economic growth was robust averaging 9.4% in nominal terms annually. Subsequently, however there was a protracted period of uneven growth encompassing the severe downturn of 2009 and the weakening associated with the EU contraction in 2012-13. Since then, in the 3-years ending 2016, there has been a modest recovery.

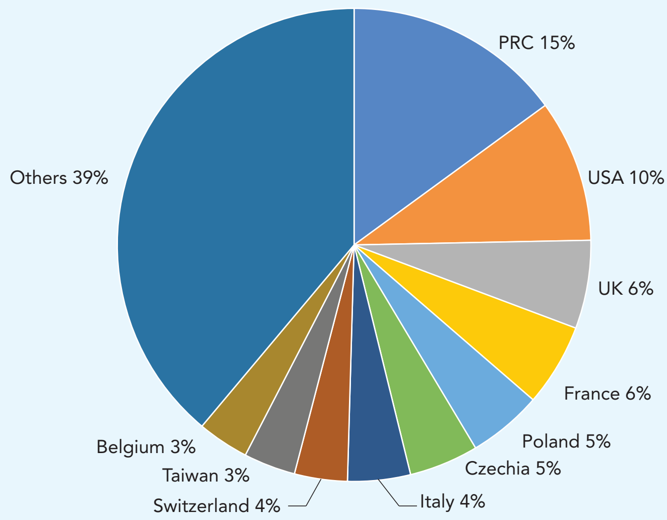
Saxony Imports (2016)



Source: WFS & WMEF

Saxony ran a merchandise trade surplus equivalent to €15 billion, perhaps reflecting its position as a key logistics hub, in terms of road, rail and aviation, in middle Europe and manufacturing sector. The region's import profile appears to reflect access to component suppliers, notably adjacent economies. Other than with Czechia, Saxony has no significant import dependency.

Saxony Exports (2016)



Source: WFS & WMEF

Saxony's export performance, measured as exports as a proportion of industrial sales, has been transformed in recent decades, from just under 13% in 1995 to over 37% in 2016. Moreover, proportionately this performance has been sustained and deepened through the downturns both within the EU and in Saxony's principal export markets. Although both the PRC and USA are important markets, there is no significant dependency on any one market, and indeed the export destinations are largely advanced industrial economies reflecting the quality of Saxony's export product profile.

CASE STUDY
Birmingham Wholesale Markets

Birmingham Wholesale Market established in the twelfth century, and has been trading in its current form since 1816, and is the largest integrated market in the UK, acting as a cluster for the local fresh produce industry, with companies ranging from SMEs to large corporates. It also offers an insight into the local food supply chain in Birmingham and the wider area. Overall, around 40% of the UK's fresh produce comes from the EU, with the UK supplying around one third – although this is obviously highly seasonal. Particularly important markets include the Netherlands and Spain – anecdotal evidence suggests that UK demand makes up 20% of Spanish agriculture.

With 400 goods vehicles arriving at the Wholesale Market nightly, there could be significant vulnerabilities to disruption after Brexit, with a just in time supply chain operation in the UK, holding between three- and five-days stock at one time – as obviously fresh produce has a limited shelf life. Disruptions at the border would be a significant issue for fresh produce providers, but also the supply of labour from the EU – both in the UK agricultural industry and the logistics industry.

Indicative Snapshot of Vehicle Movements at Birmingham Wholesale Markets

Country of Origin	Fish	Flowers	Fruit & Veg	Meat & Animal Products	Total
UK	11	1	119	15	146
Netherlands		3	13		16
Spain and Italy			7		7
Belgium			2	1	3
France	1		2		3
Poland			3		3
Germany			1		1
Romania			1		1
Total	**12**	**4**	**148**	**16**	**180**

Source: Birmingham Wholesale Markets & WMEF

A survey of vehicles arriving at the Wholesale Market in August shows that – even during the peak period of UK production – some 19% of vehicles originated from the EU. The majority of these imports used international vehicles, as well as some produce originating from the UK using international hauliers to transport the produce.

10. Future Business Environment

It is difficult to predict the final outcome of Brexit, and the impact this will have on the economy and business environment, until the outcome of the Brexit negotiations is known. WMEF forecasts are based on four possible outcomes; (1) a transitional arrangement, (2) ad hoc interim arrangements (3) reversion to WTO status and (4), unilateral trading position. It should be noted that these forecasts are nominal, and so include the effect of inflation, with the estimated national deflator below the figure for the West Midlands. It is also assumed that there is a limited response from government in terms of accommodative policies, and that local government continues to be constrained in its ability to facilitate a positive response. The West Midlands is expected to receive boosts from the construction of HS2 and associated infrastructure, and that reviving prospects in the USA and China provide a stimulus to export demand.

WMEF: West Midlands Nominal Growth Forecasts

	2016	2017e	2018e	2019f	2020f	2021f	2022f	2023f
WM GVA Growth (1)	3.9	3.8	3.4	3.6	3.5	3.3	3.3	3.1
National Deflator (1)	2.1	1.9	1.5	1.6	1.7	1.8	2.0	1.9
WM GVA Growth (2)	3.9	3.8	3.6	2.4	2.7	3.3	3.3	3.2
National Deflator (2)	2.1	1.9	1.7	1.7	1.8	1.9	1.8	1.7
WM GVA Growth (3)	3.9	3.8	3.7	2.1	2.5	3.1	3.3	3.7
National Deflator (3)	2.1	1.9	1.8	1.6	1.8	1.9	1.8	1.9
WM GVA Growth (4)	3.9	3.8	3.7	2.0	2.0	2.3	2.6	2.8
National Deflator (4)	2.1	1.9	1.8	2.3	2.1	2.0	1.9	1.8

Source: ONS, IMF, OECD & WMEF

In the case of an agreement being reached, resulting in a transition period until December 2020 (1), it is anticipated that the current growth trajectory would continue through the transition period. Indeed, BoE Governor Mark Carney has said that growth would outperform BoE forecasts if an agreement was reached on the terms of the Chequers arrangement. However, the nature of the future relationship between the UK and the EU would still need to be negotiated, and if these negotiations seem intractable by the end of the transition period, then there could be some deterioration in medium-term performance, and the likely subsequent currency pressures would probably also lead to an increase in inflation.

If the UK and the EU are unable to reach an agreement, then there are several possible options. There is also the issue of European Conference of Ministers of Transport (ECMT) Permits, which allow access to 43 countries including all EU countries (apart from Cyprus) as well as other countries such as Russia and Turkey. The UK has been allocated 3,816 ECMT permits (984 annual and 2,832 monthly permits), with in excess of 41,000 vehicles travelling overseas every year.

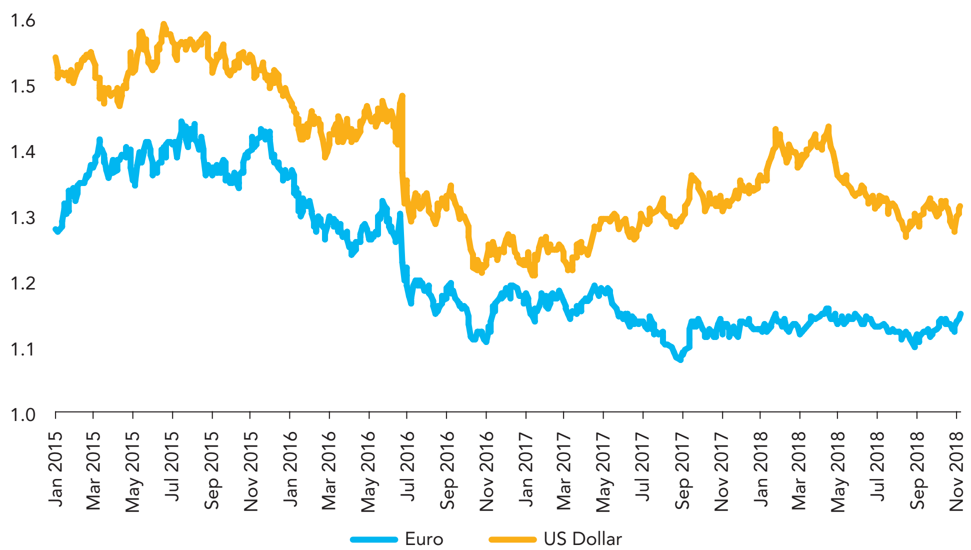
An ad hoc interim (2) outcome refers to a scenario forced by physical events rather than one based on negotiations. This could cause some serious disruption in the second and third quarters of 2019, including substantial inflationary pressures, with a recovery, although still below trend, in growth in 2020. Going forward after 2021, after some expected economic and policy adjustment, growth is forecast to be still below previously anticipated growth prospects, with inflation remaining elevated.

In the event of a reversion to WTO status (3), there is likely to be fairly significant compression to growth levels, as not only economic activity is affected, but also investment flows and levels of job creation as well as an uptick in inflation. It is likely to take 2-3 years for the economy to adjust, and over this period it is likely that growth levels will be modest, with inflation remaining above previous trends.

Given the time pressures of the current state of the Brexit negotiations, with less than six months until the Article 50 negotiations are due to conclude on 29th March 2019, it is unlikely that WTO trading status could be implemented in time for a Brexit where no deal was reached with the EU. This is due to the infrastructure and border controls which would need to be put in place, as well as the negotiation of the UK's terms of WTO membership. The recent trading tariff and quota schedules submitted to the WTO by the UK and the EU were rejected by some 20 countries, including the USA, China, Australia and New Zealand. If the UK is unable to reach a deal with the EU and has not the wherewithal to trade under WTO rules, without intervention from the EU (as would be seen in the ad hoc interim (2) scenario), then the UK would face significant disruption to trade flows. This could cause a recession as supply is constrained and hauliers face lengthy delays at borders – not just with the EU. It would take the economy a significant amount of time to recover from such a serious economic shock. It could also raise the possibility that the UK government may be forced to make significant concessions in order to expediate the UK's trading terms with the rest of the world.

One of the most obvious changes to the business environment since the Brexit referendum in 2016 has been the new trading range of Sterling, as it fell sharply against both the Euro and the US Dollar in June 2016, following the referendum result. This has fed into rising inflation for both consumers and producers, and has affected living standards through its impact on real wage growth.

Sterling Exchange Rate (Spot Daily)



Source: BoE & WMEF

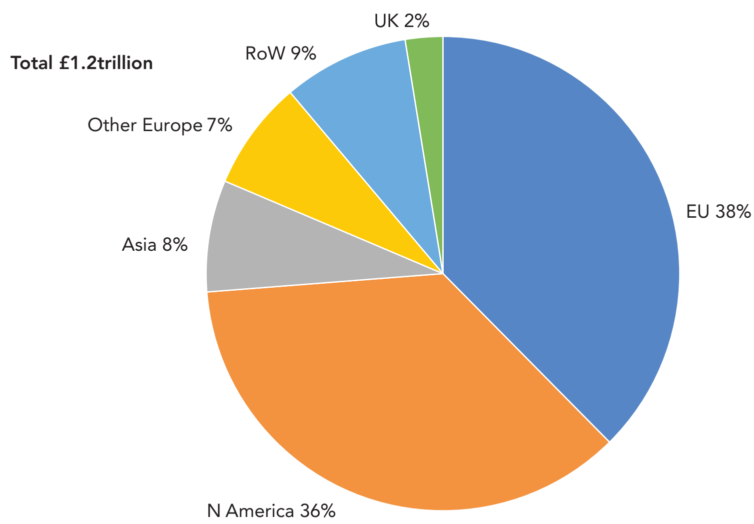
It has also provided a moderate boost to exports, particularly for manufacturers, whose goods will seem relatively cheaper in foreign countries. However, given the extent of relevant global supply chains, notably in industries such as the automotive and aerospace sectors, these gains have been offset by rising prices for imported components for many of these manufacturers.

The lower range of Sterling, as well as uncertainty surrounding the Brexit vote, has also contributed to new trends in FDI flows. Anecdotal evidence suggests that many businesses, both British and foreign, are putting off investment decisions until there is more certainty about the final outcome of the Brexit negotiations.

In De Propis and Bailey's paper 'Brexit and the Automotive Industry', they discuss the impact of uncertainty on FDI flows in the automotive industry, citing it as the biggest deterrent to FDI flows into a country. In particular, they note that co-ordinating global value-added supply chains involving the UK will be more complicated after Brexit, with the addition of import duties and the potential for different regulations to apply. They also note that FDI flows into the UK have been used as a platform to gain access to the Single Market, positing that EU membership has been the single biggest boost to UK FDI in recent history.

In 'Brexit, foreign investment and employment', Nigel Driffield outlines some of the issues which need to be addressed in terms of FDI post-Brexit. He notes the problems faced by investors in the UK, such as the warnings from Honda, from barriers to the Single Market, especially in cases where supply chains cross borders multiple times. He argues that government strategy must, instead of focusing on job creation, focus on the value of jobs created, in terms of value added and productivity.

FDI Stock of Liabilities: Ultimate Position (2016)



Source: ONS & MEF

The greatest proportion of FDI liabilities (38%) is held by EU entities, closely followed by North America at 36%. However, new data from the ONS which identifies the ultimate controlling company of FDI flows into the UK suggests that FDI from the EU may not be as important as previously thought. With the data indicating that the value from North America was 32.8% higher and 16.8% lower from the EU. It seems that many Non-EU-based companies using an EU base, such as financial centres in the Netherlands and Luxembourg, for investing funds in the UK. Indeed, stocks allocated to Belgium, Germany and France increased when calculated on an ultimate parent basis.

CASE STUDY
Trade Marks Potential Post-Brexit Frameworks

Since the UK joined the Madrid Protocol, a holder of a trade mark application or registration in another country can apply through the World Intellectual Property Organisation (WIPO) to "designate" the UK for protection of that trade mark. After Brexit, it will still be possible to obtain new registered trade mark protection in the UK by filing a new national UK trademark or by filing though WIPO. Protection for the rest of the EU will be possible by filing an EU Trade Mark (EUTM) as before. While nothing is certain yet, the expectation is that there will be some form of mechanism to ensure there is no loss of rights in the UK for owners of existing EUTMs.

Brexit will not prevent UK companies from applying for and owning EUTMs, since the system does not require the holder of an EUTM to be from the EU. As such, UK companies will still be able to cost-effectively protect their trademarks across the remaining Member States of the EU through a single EUTM application after Brexit. They will also still be able to enforce these rights against third parties. However, the costs to register a trade mark in the current 28 EU member states post-Brexit will inevitably be higher than now as it will be necessary to file a UK national application as well as an EU application.

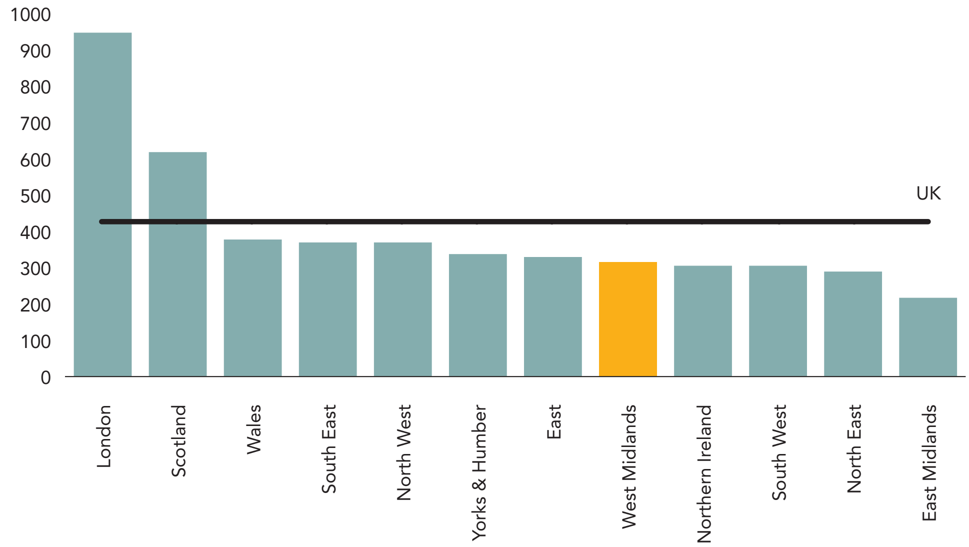
At present, genuine use of an EUTM in a single member state is potentially sufficient to maintain an EUTM registration. Post-Brexit, however, if an EUTM has not been used in the UK then any new UK trade mark that is created following any post-Brexit withdrawal from the EUTM could well be vulnerable to cancellation for non-use. The only way to safeguard the position in the UK would be to bring the trade mark into use or potentially file new national applications in the EU member states.

UK attorneys are likely to lose the ability to file EUTMs if UK-based attorneys fail to retain rights of representation, and if there is no accord specifically relating to trade marks. Even if this capacity is retained, non-UK businesses may ultimately prefer to instruct EU-27 based legal practices. Moreover, an EUTM application, whilst it encompasses all the EU via one application, could be held up or rejected, if an objection is raised in any of the current 27 EU member states. It may be more appropriate to register in all of the member states individually, although this may prove considerably more cumbersome and expensive.

11. Regional Transport Connectivity Constraints

On a regional level, one of the largest constraints faced by businesses is access to a globally competitive infrastructure. In terms of spending per capita, the West Midlands receives half of the expenditure in Scotland, and one third of the expenditure in London. Redressing the imbalances in transport spending would go a long way to addressing the constraints on regional infrastructure.

Per Capita Transport Expenditure in the UK 2016-17 (£)

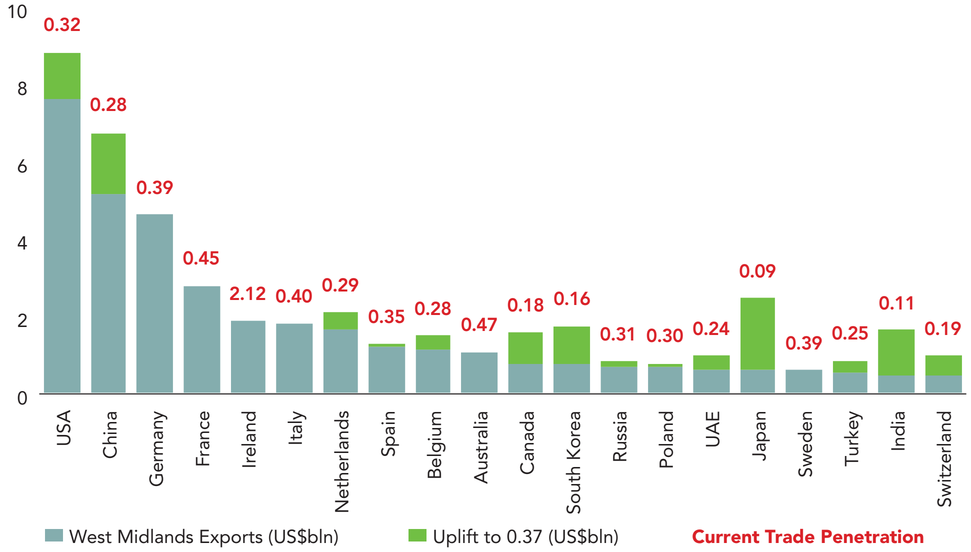


Source: HMRC & WMEF

Even given the current levels of infrastructure spending in the region, the West Midlands' export trade penetration has been calculated, measured as the percentage of total imports from the West Midlands to a given country. Globally, the West Midlands achieved an export trade penetration of 0.25 in 2017, although this was 0.37 in the EU. This higher level is assumed to be due to both closer economic ties with the EU, as well as more favourable trading conditions. The important factor is, therefore, sustaining these levels of trade penetration after Brexit. For the top 20 West Midlands' export markets, levels of trade penetration are at, or above, levels seen in the EU. The top 20 markets include many EU countries, but also China (0.28), the USA (0.32) and Australia (0.47). Taking the levels currently achieved in the EU as a target, it is therefore possible to calculate potential trade uplift. Given current levels of penetration, perceived possible export uplift is limited, at US$9.8bln on US$35.4bln worth of exports.

West Midlands Trade Penetration (2017)

Top 20 WM Export Markets Current Exports: US$35.4bln Potential Uplift: US$9.8bln

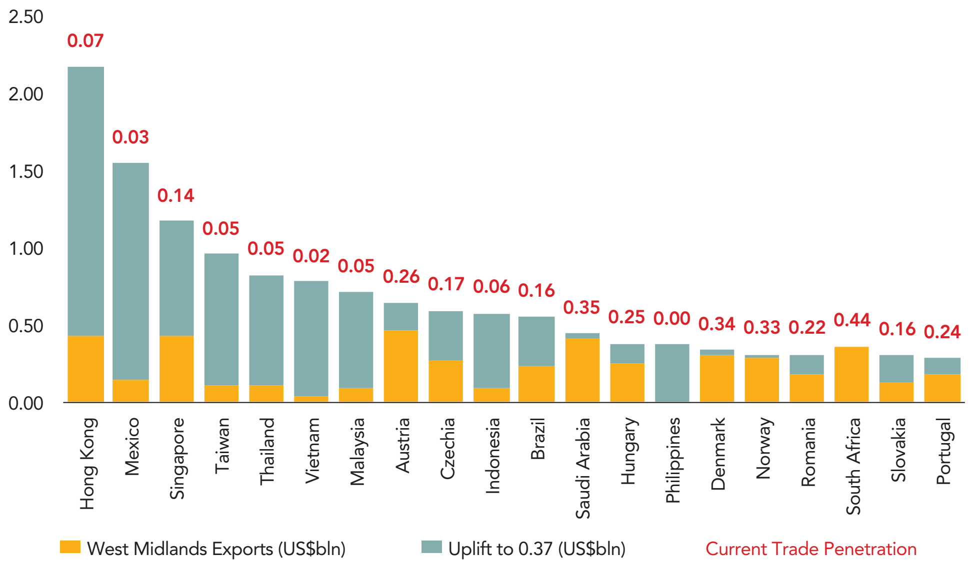


Source: UNCTAD, HMRC, OECD & WMEF

In the top 20 global importers, excluding those among the existing top 20 West Midlands' export markets, the potential for uplift is greater, US$17.2bln on US$21.2bln worth of exports. This group of countries includes many large established market economies.

West Midlands Trade Penetration (2017)

Top 20 World Importers excl. Top 20 WM Export Markets Current Exports: US$21.2bln Potential Uplift: US$17.2bln



Source: UNCTAD, HMRC, OECD & WMEF

However, if growth in exports to these countries is to be achieved, then strategies must be developed as to how to access a range of smaller, more culturally diverse, regulatory specific and sometimes unstable countries.

CASE STUDY
Aviation Connectivity

International connectivity, both in terms of passenger and freight movements, on a globally competitive basis will go some way to offsetting the negative impacts of Brexit on the region. Birmingham Airport's capacity to enable this is constrained by the lack of a comprehensive national aviation strategy and the continued focus on the perceived requirements of the South East. Given the predominance of manufacturing and the associated services sector enterprises, in the City and region, most especially in regard to the continuing progressive roll-out of Manufacturing 4.0 as it is widely described, lack of an internationally competitive connectivity infrastructure severely constrains the region's capacity to maximise its economic potential. These deficiencies will only be offset by a concerted regional strategy to harness the potential of Birmingham Airport through effective links to the local motors of economic growth. Birmingham Airport, in common with most of the business community, have adopted a pragmatic approach to Brexit, and have assumed the positive and negative aspects will ultimately balance.

As Britain leaves the EU and manufacturing enters its next iteration, what has been termed Intelligent Manufacturing, global connectivity will be a critical factor in determining both future economic expansion as well as access to new industries and technologies. With value-added supply-chains extending across the globe, speed and efficiency of delivery both of personnel and products to clients and customers, ensure that airport connectivity will be a key catalyst to generating growth. Birmingham Airport already provides solid and effective access to European, North American and Asian markets, providing foundation for further growth, with direct flights to over 2,700 destinations in 2017.

During 2017, Birmingham Airport hosted some 13 million passengers, with 119,456 commercial transport movements servicing global destinations. In addition, long-haul flights are providing a significant stimulus to air cargo movements. Most notably, close to a fifth of air travellers to Europe, the Middle East and North America are business orientated reflecting the airport's role as both a catalyst for sourcing new relationships, whilst at the same time effectively sustaining existing corporate links. Indeed, it has been estimated that globally connected regional gateways can reduce manufacturing and business costs by as much as one tenth. Furthermore, global airport connectivity has been proven to act as a stimulus for attracting and generating the location of digitally orientated innovation.

At a regional level, with the preponderance of production and related services sector enterprises (what WMEF has termed ManuServices), the basis for intelligent manufacturing has been established and is deepening. This emerging new iteration of manufacturing is a globalised phenomenon, and involves extensive and complex international value-added supply chains. Connectivity in the widest sense is essential, particularly via the "internet of things". Of equal importance is the capacity to market to potential customers, as well the ability to provide immediate technical and operational support to clients across the globe. Additionally, intelligent manufacturing often involves the production of software, specialised components and machinery that requires air-freight - usually within just-in-time frameworks.

Given the need to enhance both the core and national catchment areas' global connectivity, as a result of the new emerging global trading conditions, coupled with the development of intelligent manufacturing, enhancing both passenger and air freight capacity would appear to be a pre-requisite. The demands of intelligent manufacturing are for immediate access of technical staff and rapid freight turnaround times, often to enable next-day solutions and deliveries, ranging from IP agreements, legal contracts, product samples, and high-value components. Across the British economy, companies have increasingly had to adapt to the demand of lean management models and with it they require access to both expertise and products.

The proposed economic and trading structures that will emerge once Britain has finally exited the European Union - either by April 2019 or at the termination of a yet-to-be-agreed transitional phase - is currently still being negotiated. Nevertheless, whilst there remains considerable risk that future trade flows may be impaired, any new structure will undoubtedly throw up new opportunities. Identifying what fresh opportunities are likely to emerge and how Birmingham Airport can identify and effectively capitalise on these will be crucial to a successful post-Brexit future.

Through its existing membership of the European Single Market and the European Customs Union, Britain enjoys largely tariff-free access to the EU economy, with comparatively light non-tariff barriers on trade. Currently, given the apparent tenor of British-EU negotiations, it does not seem feasible that, upon exiting the EU, such a favourable level of access will continue, although in economic terms over time it is ultimately in the interest of both parties to secure mutually beneficial arrangements. It is in this context that a Trade Promotion Zone (TPZ) centred on Birmingham Airport becomes a viable addition to the national capabilities for expanding and sustaining British trade penetration, of both services and merchandise products, to the EU as well as to the wider global economy.

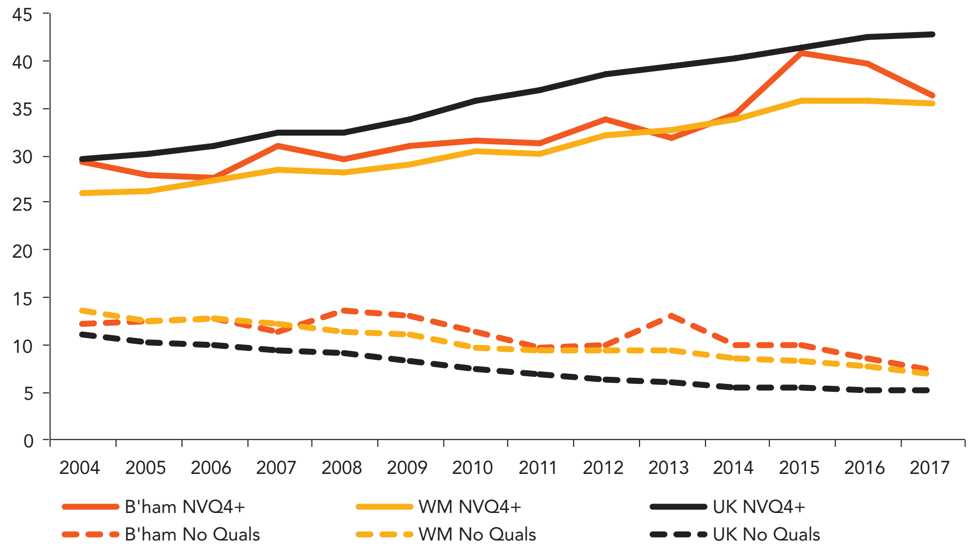
One solution to the issues arising with Brexit is the creation of a TPZ, a distinctive definition of what could be considered a Free Trade Zone (FTZ). There is, however, no single authoritative definition of what constitutes an FTZ or export processing zone. There are, nevertheless, a range of common objectives shared by such zones. These include providing an enabling environment for business, through the reduction of transactions costs, investment promotion and boosting employment demand through expanding exports. Additionally, these zones can be utilised to test new economic strategies and trade reforms.

Currently, and based on largely anecdotal evidence, business users prefer to use Schiphol, Frankfurt and Dublin, rather than Heathrow, for connecting flights (via long-haul flights) to their clients and customers. According to the latest data, some 160,000 BHX two-way passengers used Schiphol as a hub, and a further 245,000 are utilising either Frankfurt or Munich as international hubs. Dublin, with its visa preferential access to the USA, is also developing significant demand originating at BHX, currently an estimated 55,000 two-way passengers. Obviously, there are considerable numbers flying from other hubs such as Paris, Brussels and Copenhagen. Increased visa requirements that are likely to these EU destinations conceivably provide an opportunity for Birmingham Airport to consolidate its role as the real regional aviation gateway. This however obviously demands a national aviation strategy that accommodates such regional aspirations.

12. Future Labour Market Structure

Skills levels in Birmingham are lower than in the UK overall, with a higher proportion of the economically active population having no skills, and a lower percentage having NVQ4 or higher. Although Birmingham does perform marginally better compared to the West Midlands as a whole in terms of highly skilled workers, it does not perform as well in terms of numbers with no skills.

Skills Levels (% of Economically Active Ages 16-64)



Source: Nomis & WMEF

In their evidence to the Home Affairs Select Committee on Post-Brexit Migration Policy, the Immigration Law Practitioners' Association highlighted the need to avoid short-term disruption in the UK labour market, as well as to allow businesses to access the skills they need from abroad, and suggested that the current targets using net migration were too blunt an instrument. Instead, they suggest that immigration policy is devolved to different departments, for example, the Department of Health could oversee migrant forces working in the health sector and the Department for Education could oversee the administration of student visas. Given the varied regional and national structure of the British economy, it is more appropriate to extend the allocation of visa administration, if not allocation, to the component parts of the UK, including the English regions.

It is important to note the distinctive forms that migration takes, essentially, though not exclusively, there are four key forms of migration, namely:

- resident migrants
- students
- seasonal migrants (such as for agricultural or tourism work)
- transit migrants (those staying for very short but regular periods, such as HGV drivers or airline crews)

The impact of potential migration barriers to HGV transportation could be significant to export and import logistics capabilities. From a cursory examination of DfT statistics, in 2015, 87.4% of powered road vehicles entering mainland Europe from the UK were foreign registered, and 12.5% were UK registered, rising from approximately equal proportions in 1983.

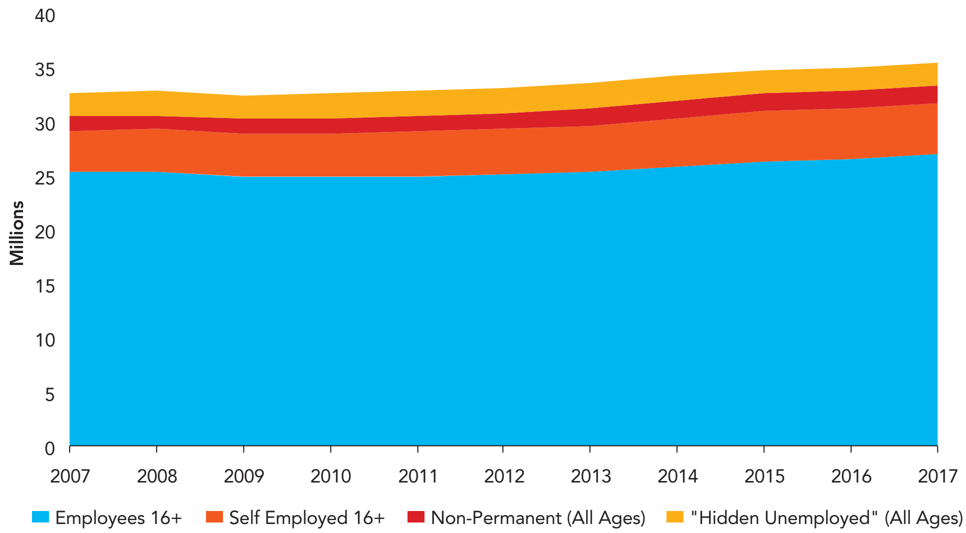
In this evidence to the Home Affairs Select Committee, as well as in Jon Bloomfield's paper 'The Left and Brexit: facing up to the realities of an interdependent world' it is suggested that the UK adopt immigration practices in use across the EU, for example whereby migrants are sent home if they haven't got a job in three months, or if they don't meet certain language criteria. The Immigration Law Practitioners' Association also suggested relaxing some of the current rules around immigration, for example allowing asylum seekers the right to work.

The EU legislation surrounding workers' rights has also been investigated. In Jon Bloomfield's paper, as part of his argument for remaining in the Single Market, he suggests introducing a "migration impact" fund for schools, housing and health services for areas where migration is causing the most strain on these services. As well as improving working conditions through increased inspections to ensure that minimum wage and health and safety requirements are being met. He argues that this would stop migration being used as a scapegoat for poor working conditions and stop immigrants effectively undercutting the lower skilled parts of the domestic workforce, while at the same time allowing the skills the economy needs into the country. In the Government's paper 'Workplace rights if there's no Brexit deal', the Withdrawal Bill will transpose all existing EU law into British law surrounding workers' rights, and the government notes that in many cases, UK law already offers higher levels of protection to workers than EU law does.

Shortage of skills across the country, and particularly in the West Midlands, has been highlighted by many stakeholders across the region as a major concern for businesses, which has been amplified by Brexit. In the Local Government Association's report 'Brexit: moving the conversation on' the need for a regional skills policy is discussed, with some industries - such as construction in particular - noted as having a reliance on EU workers, with one third of members of the Federation of Master Builders employing EU workers, rising to 70% in London and the South East.

At a macroeconomic level, the fact that despite near record employment and low unemployment, wage-levels have stagnated. This would suggest that employers are not raising pay rates to attract skilled workers, despite claims of lack availability of such personnel. However perhaps the problem is more nuanced that a simple lack of available personnel, but that potential staff are locked into employment in less productive sectors, and without further training are unable to access the more productive areas. There have also been subtle shifts in the structure of the labour market.

Labour Market Evolution



Source: Nomis & WMEF

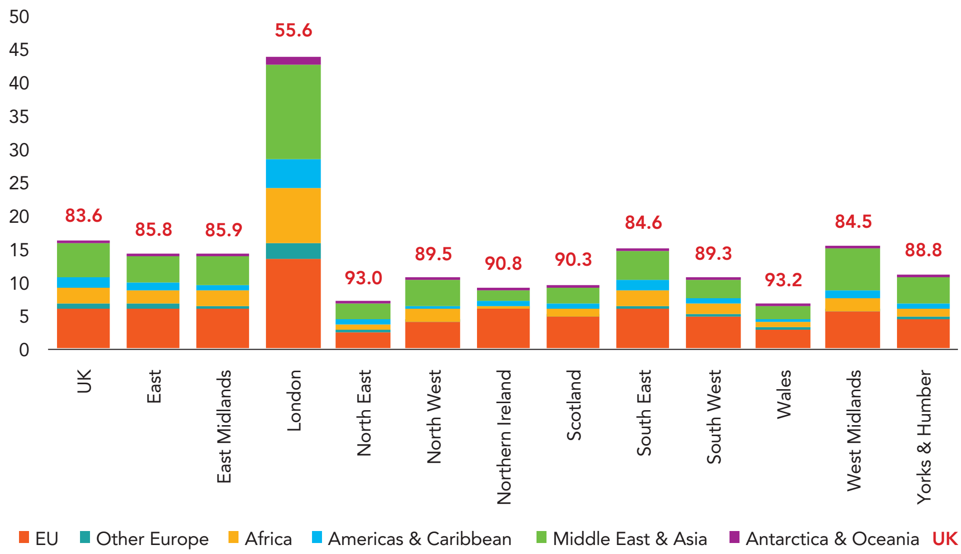
Although overall labour has increased by about 9% over the ten-year period 2007-17 full-time permanent employment increased by 6.6%, whereas the number of self-employed increased by over a quarter and the numbers employed on so-called zero-hours contracts increased more than fivefold. This would seem to suggest that the growth in these forms of employment has supressed wage rates. Accordingly, any strategy to address reported skills shortages will have to account for these rigidities in the labour market structure, and facilitate the transfer of workers to more productive sectors, where the apparent skill shortages are acute. A further problem is the ageing and increasing retirement of skilled competent (or experienced) technical staff. Thus, although the new age cohorts entering the labour market from the education sector might be the most qualified historically, they are obviously lacking in applied experience. The larger OEMs have attempted to resolve this problem by recruiting from their own supply-chains, essentially cannibalising them. For the SMEs in the supply-chain, however, recruiting apprentices effectively may prove problematic for them, as must firms number less than 50 employees and many less than 20, ensuring apprentices are a sizeable proportion of their staff establishment.

In terms of tackling the localised pockets of structural unemployment, which appears to be particularly persistent (at some 6% of the total labour force) notwithstanding strong demand in the formal economy, simple supply-side solutions, such as training and education policies seem to have proved insufficient. In these areas, a Keynesian approach would suggest that in the communities that training in new skills alone will not ameliorate. Critics of the Single Market project have argued that it was intellectually muddled, developed during the extended period of pre-crisis market fundamentalism. From this stance the Single Market project could not address regional imbalances simply by relying on market-determined movement of labour and capital. Non-market institutions were needed.

In their paper 'Integration: from national rhetoric to local reality', Katwala et al discuss how integration will be key after Brexit, given the divides in society over such political issues, as well as stark divisions of wealth. They suggest that the government adopt an integration strategy, and that integration is particularly important in the West Midlands, given the wide range of backgrounds and cultures present in the region. The "hollowing out" of the labour market is also a significant problem as skilled factory jobs are being replaced by low-skilled work in the services sector. The promotion of English language is one of the most important factors, and they posit that responsibility should be given to businesses, as the key beneficiaries of migrants coming to fill low-skilled and low-paid jobs.

The most recent complete data on European migration by Local Authority in the West Midlands is from the 2011 Census data. This shows that in the West Midlands, 2.4% of residents were born in the EU, compared to 3.7% nationally. This may be due to a higher resident population originating from the Middle East and Asia – the West Midlands had the largest proportion of the population born in this area outside London in 2011.

Country of Birth of Residents by Region - March 2018

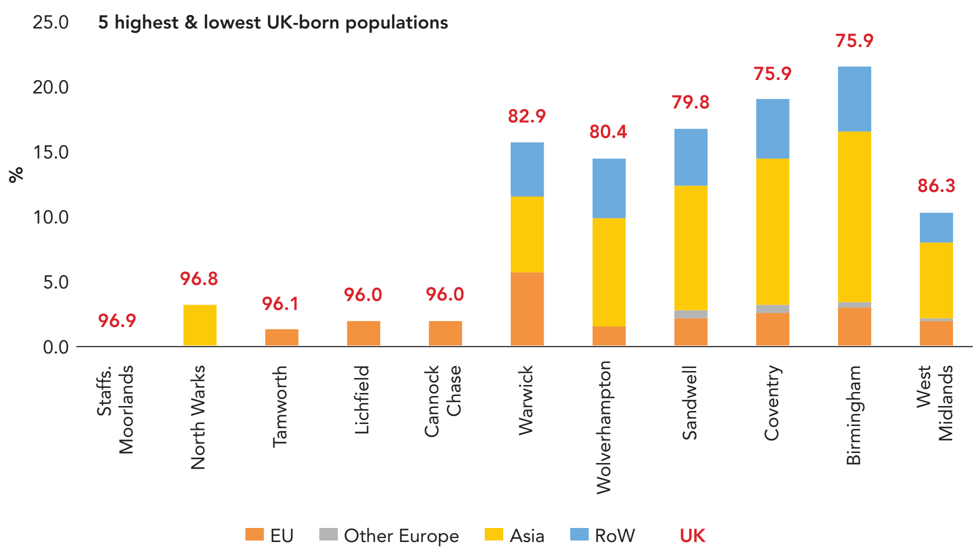


Source: Nomis & WMEF

However, there is a wide variation between the areas within the West Midlands. Areas such as Staffordshire Moorlands, Cannock Chase and South Staffordshire have experienced very little immigration, with around 97% of the population born in the UK in these areas. In contrast, Birmingham, Coventry and Wolverhampton have around 80% of the population born in the UK, which is lower than the UK average of 87%.

The majority of foreign-born residents of Local Authorities in the West Midlands are from the Middle East and Asia, especially India, Pakistan and Bangladesh – making up 12.1% of Birmingham's resident population in 2011. However, there are still some significant areas of EU immigration, with Poland, Ireland and Germany being the three most common countries of birth for EU migrants to the region.

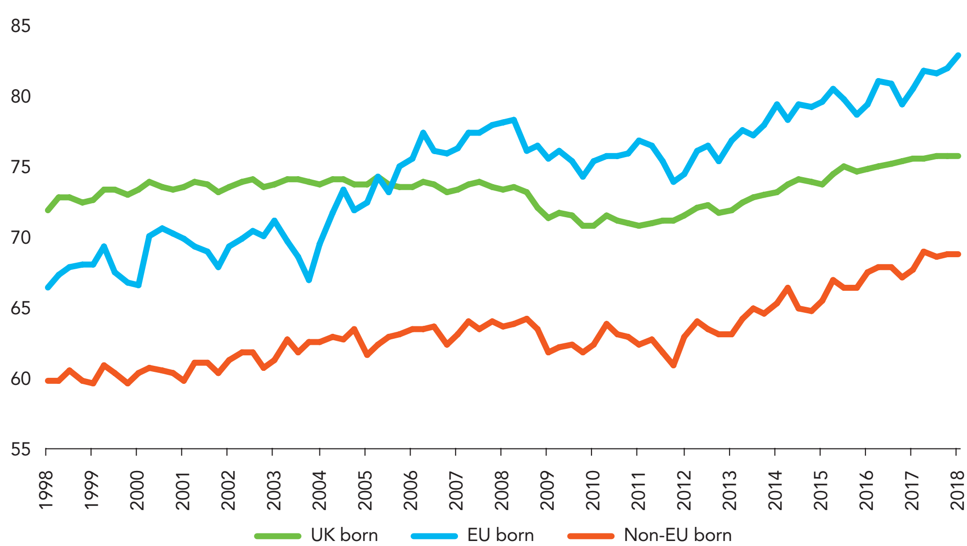
Country of Birth of West Midlands LAs



Source: ONS & WMEF

Data on employment rates by country of birth is also available, and in the UK, employment rates of EU migrants have been higher than those of the UK and Non-EU born populations since 2006. The main driver behind this has been the EU Accession countries, after the expansion of the EU in 2004.

Employment Rate (16-64) for People Working in the UK



Source: ONS & WMEF

% of Residents whose Country of Birth is in Europe (2011)

Country of Birth	UK	EU Countries	Ireland	Poland	Germany	Romania	Lithuania	Other EU
West Midlands	88.8	2.4	0.8	0.9	0.3	0.1	0.1	1.0
Birmingham	77.8	2.8	1.5	0.9	0.3	0.1	0.1	1.4
Bromsgrove	96.0	0.9	0.7	0.1	0.3	0.0	0.0	0.5
Cannock Chase	97.5	1.0	0.3	0.3	0.3	0.0	0.0	0.4
Coventry	78.8	4.7	1.8	2.0	0.4	0.3	0.1	1.8
Dudley	94.7	0.9	0.3	0.3	0.2	0.0	0.0	0.4
East Staffordshire	91.3	3.6	0.4	1.8	0.3	0.0	0.1	1.3
Herefordshire	93.3	3.8	0.3	1.6	0.5	0.1	0.3	1.3
Lichfield	96.2	1.4	0.5	0.4	0.3	0.0	0.1	0.6
Malvern Hills	95.0	1.7	0.4	0.3	0.6	0.0	0.0	0.8
Newcastle-under-Lyme	95.0	1.3	0.3	0.4	0.3	0.0	0.0	0.6
North Warwickshire	97.1	1.1	0.5	0.4	0.2	0.0	0.0	0.4
Nuneaton and Bedworth	93.2	1.8	0.5	0.9	0.3	0.0	0.0	0.5
Redditch	92.0	3.7	0.6	2.3	0.3	0.0	0.1	1.0
Rugby	88.3	4.8	0.8	2.3	0.4	0.1	0.1	1.9
Sandwell	84.1	3.2	0.5	1.8	0.2	0.1	0.2	1.0
Shropshire	95.3	2.0	0.4	0.6	0.5	0.0	0.0	0.8
Solihull	92.6	1.2	1.3	0.2	0.2	0.0	0.0	0.7
South Staffordshire	97.2	0.7	0.3	0.1	0.2	0.0	0.0	0.4
Stafford	93.9	1.9	0.5	0.6	0.5	0.1	0.0	0.8
Staffordshire Moorlands	97.7	1.0	0.2	0.3	0.2	0.0	0.0	0.4
Stoke-on-Trent	91.7	1.9	0.2	0.7	0.3	0.0	0.0	0.8
Stratford-on-Avon	93.8	2.5	0.6	0.9	0.4	0.1	0.0	1.0
Tamworth	96.3	1.7	0.6	0.8	0.3	0.0	0.1	0.5
Telford and Wrekin	92.7	3.0	0.4	1.3	0.7	0.0	0.1	0.8
Walsall	90.1	1.5	0.3	0.6	0.2	0.0	0.0	0.6
Warwick	88.4	3.5	1.2	0.8	0.5	0.1	0.0	2.0
	83.6	2.8	0.5	1.1	0.3	0.0	0.4	1.1
Worcester	91.8	3.4	0.5	1.3	0.5	0.1	0.1	1.4
Wychavon	94.4	2.9	0.4	1.4	0.3	0.1	0.1	1.0
Wyre Forest	96.1	1.7	0.4	0.6	0.3	0.0	0.0	0.7

Source: 2011 Census & WMEF

CASE STUDY
Health and Social Care in the West Midlands

In the event of a 'No-deal Brexit', the effects on social care and health could be significant. There are as yet no concrete, detailed studies showing the repercussions of a no-deal Brexit on social care and health, but there are several outline reports and opinion pieces that are useful, from the Local Government Association, ADASS and Skills for Care amongst others.

Analysis of the social care workforce in the West Midlands

In the event of a no-deal withdrawal from the EU, one of the key potential impacts on social care is that of workforce. Nationally, there are more than 1.3 million staff working in the social care sector. In 2017, 7% of the social care workforce were from a country within the EU.

Citizens from EU countries, including those working in the social care and health sectors, could find their legal citizenship status in an uncertain state in the event of a no-deal Brexit. There is a current proposal for a Withdrawal Treaty which sets out a reciprocal agreement between the UK and the EU providing 'settled status' for EU citizens living in the UK; however in the event of No Deal, the Withdrawal Treaty will not be enacted, meaning the legal status of EU citizens working in the social care sector will be in an anomalous state, with their rights to live and work in the UK uncertain.

The other major impact of a no-deal Brexit would be on the supply of medicines, food and other items (for example equipment). This has the potential for severely impacting both the adequacy of supply for social care settings, and also may drive up the cost of essential supplies.

The following analysis shows the number of staff in different roles and sectors of the social care market in the West Midlands, who are of a European Union (but non-UK) nationality. The data is drawn from the National Minimum Dataset for Social Care (NMDS-SC), 2017, with the analysis carried out by Birmingham City Council.

Workers of EU nationality in social care roles in the West Midlands

Sector	West Midlands		England (%)	West Midlands compared to national average
	No.	of sector workforce		
Residential and Nursing homes	3,500	4.9	8.4	-3.5
Domiciliary Care	2,100	3.7	6.5	-2.8
Day Centres	50	1.9	6.5	-4.6
Community Care	250	2.1	3.6	-1.5
Local Authority workers	150	1.3	2.2	-0.9
Independent Sector	5,700	4.4	7.6	-3.2
Managerial roles	150	1.6	3.9	-2.3
Social workers	25	1.4	3.1	-1.7
Registered nurses	475	10.0	16.5	-6.5
Other	10	1.4	4.4	-3.0
Direct care providers	4,600	4.4	7.3	-2.9

Source: HMRC, UNCTAD, World Bank & WMEF

The above table shows the number and proportion of EU nationals working in each sector of social care within the West Midlands. Birmingham specific figures for nationality are not available at present, however this gives a good indication of the local picture.

The table also shows England's national proportion of EU nationals in each sector, showing a comparison between the local and national picture.

- The most significantly affected part of the social care workforce is registered nurses. Typically, these would be nurses in settings such as older adult nursing homes. The significant figure here is that 10% of the registered nurses in West Midlands care settings are of an EU nationality; far higher than the proportion in any other setting or job role. This could cause great difficulty in the event of a no-deal Brexit, particularly against a backdrop of already high vacancy and low staff retention of nursing staff.
- For all social care settings and jobs, it is worth highlighting that the West Midlands is less reliant on EU nationals than the rest of England as a whole (shown in the right-hand column).
- Local Authorities in the West Midlands only directly employ 150 EU nationals in their social care workforces, accounting for just over 1% of staff. There are relatively few EU nationals working as social workers. This proportion is higher in the independent sector however, where almost 4 and a half percent of staff are EU nationals.
- 3.7% of the domiciliary care (home care) workforce is made up of EU nationals, and this accounts to a high number of staff due to the size of the sector. Across the midlands, there are over 2,000 EU domiciliary care workers; a very significant number of staff providing essential care to people in their own homes.

Other key impacts and considerations

If a formal treaty is not signed by the March 2019 deadline, then all EU rules and regulations will cease to apply to the UK. This includes things like customs, trade, travel and citizen (and employment) rights.

It would also mean that there would be no transition period from March 2019 to December 2020; without a formal treaty the transition period (and the proposed Withdrawal Treaty) may become void. This would mean that local authorities and businesses would have no additional time to prepare or respond to legislative changes.

It is however possible that the negotiation period for Brexit could be extended in certain circumstances, if an agreement is within sight at the March 2019 deadline. Additionally, the EU and UK could sign some more basic arrangements quickly, or on an interim basis to mitigate some aspects of a No Deal Brexit.

Upon exiting the EU with no treaty, Britain would revert to World Trade Organisation (WTO) rules. For health and social care, this would be likely to increase the cost of some goods, such as medication, food and general supplies for places like care homes and hospitals. Crucially, this could also lead to shortages of supply, and delays in importing essential goods and equipment.

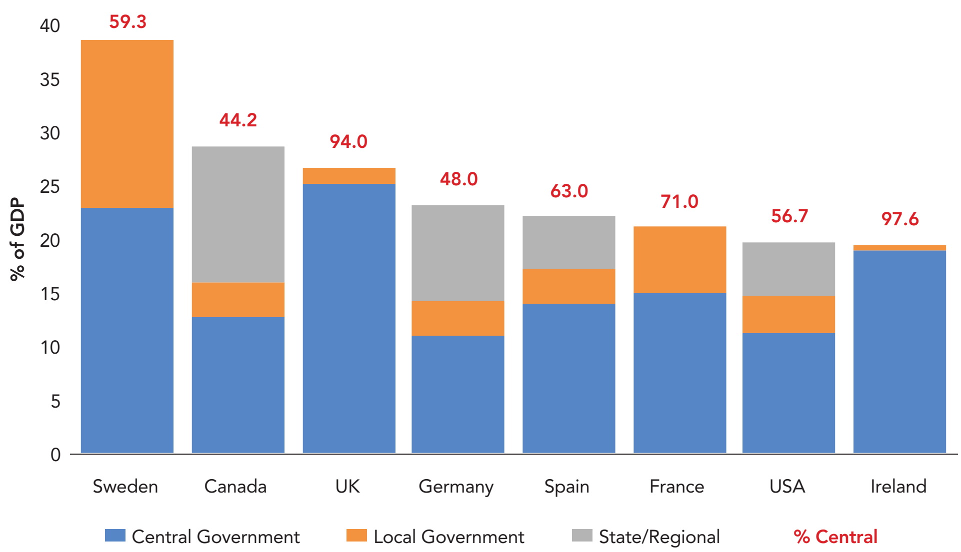
In relation to laws regulating Local Government services, procurement rules would, under the Withdrawal Act 2018, continue to follow EU laws under a no-deal scenario. However, there are issues around transition to consider. If a Local Authority is halfway through a major procurement exercise when the UK leaves the EU, there is no certainty that the council would still have access to EU systems under a no-deal scenario. Unless UK systems are in place by 29th March 2019 to take over the relevant regulatory roles, procurement processes could be set back and costs increase.

13. Future Funding Structures

The potential loss of EU funding after the current EU Multiannual Financial Framework for 2014-20 concludes, or perhaps before, poses considerable threat to the sustainability of a range of regional sectoral initiatives and programmes. That this takes place at a time of continued government austerity measures increases the pressure the on local government finance and the capacity of deliver key programmes. There are a number of potential responses that could be adopted, however the central government appears to be adopting a piecemeal approach rather than consider local government finance issues in the round. Initiatives such as the reform of Business Rates demonstrate a pre-occupation with fiscal issues rather than available resource capacity to deliver services. Indeed, the current business rates administrative structure actually further limits resource availability, as discussed in the WMEF Briefing Note on Business Rates.

Although not within the purview of this report, perhaps a more fundamental review of both the funding of devolution and of the funding of local government needs to be undertaken, possibly by a Royal Commission. Not only does the current Barnet formula effectively curb English regional capital and current expenditure, but London continues to receive a disproportionate level of public sector provision with some 31% of regional GVA in the capital derived from it. Indeed, the UK government administration continues to be a grossly over-centralised process, especially when considering revenue harvests compared to comparable economies.

Comparative Government Revenue Structures (2016)



Source: OECD & WMEF

This issue can only really be addressed if a real transfer of resources, based on both expenditure need and revenue capacity is considered. A radical approach could be to transfer national insurance contributions to the local government areas where employment is taking place, which could conceivably transfer up to 10% of central government revenue to the regions. Similarly, as discussed in the MEF Discussion Paper: 'Funding Regional

Infrastructure', March 2018 new forms of capital fund raising measures could be considered, such as tax credit bonds for funding regional infrastructure.

In terms of EU funding flows, funding to Birmingham is currently delivered through the European Regional Development Fund and the European Social Fund, of which England will receive around €6.9bln over the period 2014-2020. This is distributed among LEPs, with Greater Birmingham and Solihull LEP receiving approximately €254.8m, the Black Country €176.6m and Coventry and Warwickshire €135.5m.

This funding also comes under a seven-year budget programme as part of the EU Multiannual Financial Framework, meaning that there is more stability for local and regional bodies than under a local, or indeed national, parliamentary term.

Much of the funding available from the EU does not have a nationally-based equivalent for the UK Government, and, as such, could lead to a serious fall in revenue streams for cities and regions after Brexit, as no non-EU country has access to these funding streams, a fact highlighted in Distinctly Birmingham's report 'The Benefits of Being in Europe for Birmingham'. It could also lead to local issues not being met, as currently domestic skills and employment policy is nationally driven. One example of this is the use of the ESF to assist those being made redundant after the closure of MG Rover in 2005. The loss of these funding streams is not just of concern to councils and LEPs, but also to institutions such as chambers of commerce, who also make use of EU funding to support local businesses, especially with regard to trading with the EU, and opens up local authorities to being less well-equipped to deal with economic shocks.

Under the current Multiannual Financial Framework, this EU funding will continue until 2020, and many institutions are calling for a successor to EU funding to continue from 2021 onwards. Concerns have been raised about the increased political nature of this national funding, and how it could lead to less security for local projects if there is a more short-term approach dominated by the parliamentary cycle.

A range of EU funding is available for local government and other institutions to bid for, such as Horizon 2020. There is a possibility that the UK might still be able to continue to benefit from these programmes if it continued to pay into the budget, as, for example, Norway does now. In one of its documents published on preparing for a No Deal Brexit scenario, the government pledged to underwrite all EU funding for the lifetime of the project, as well as for certain projects where funding is secured during the transition period. The Government is seeking to retain its links with the EU in terms of funding for science and research and development after Brexit, for example to retain ties with the International Thermonuclear Experimental Reactor.

Exit from the EU could also affect the soft power that some of the larger British cities, such as Birmingham, hold within the EU and Europe more widely. In an Aston Centre for Europe publication 'The English regions in the EU: Is the 'Westminster bypass' now blocked?' Carolyn Rowe argues that the English Regions will no longer be able to directly lobby the EU, but must return to connecting with the world through Whitehall and Westminster. Although continued membership of organisations such as EUROCITIES (of which Birmingham is a founding member) could mitigate this effect, it will undoubtedly have an impact on local and regional institutions – and their ability to access funding.

The Core Cities (comprising Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield) separately and in concert with London and Cornwall as the Intermediate Bodies grouping, have suggested a comprehensive approach to replacing EU funding streams. The government proposal for a Shared Prosperity Fund is more circumspect and for an as yet undefined time period.

The Core Cities have proposed that the Shared Prosperity Fund should be equivalent to current EU funding flows of approximately £10 billion, at current foreign exchange rates, over an equivalent programme period of 7 years. The link with GDP growth was not made explicit; and should the economy grow, the funding would decline as a proportion of GDP, which is in itself a limited amount. The Key Cities (a group of mid-sized cities including Coventry and Wolverhampton) has echoed this point, suggesting a budget of £3bln per annum for the Shared Prosperity Fund in their response to the APPG on the Shared Prosperity Fund

The Core Cities have indicated that the Shared Prosperity Fund should:

- be a multi-year (minimum 7 years), fully devolved funding programme, aligned to each region's strategic economic framework;
- start by 2020/2021 to ensure continuity in activity;
- be a flexible fund which avoids a restrictive siloed approach, funding activities in the fields of innovation, skills, business support, regeneration, and employment support, to fit the needs of each area;
- support the aim to reduce disparities between and within regions; with a shift towards more broadly defined growth benefits (e.g. 'quality GVA');
- be targeted to reflect economic conditions, recognising the latent potential in many currently underperforming areas, and not allocated on a competitive basis;
- have the flexibility to lever in private funds or other public funds where this is suitable or offer a wholly-financed approach where appropriate;
- have the flexibility to fund both revenue and capital projects, or a combination of these;
- increase the accessibility of funds currently restricted by setting arbitrary minimum levels of match;
- have simple, clear and concise guidance that allows projects to be delivered with maximum benefit and not impacted by unnecessary administration duties.

The Core Cities also recognised that replacing EU funding streams is only one aspect that needs addressing, but that the delivery of Industry Strategy needs to be effectively devolved and properly funded. Both issues highlight the need to develop not just funding flows, but to secure them over the longer-term and on a ring-fenced basis. The Barnett Formula, which provides for funding to the devolved nations, provides both a potential model, but also in its current format constrains financing of public sector flows in the English regions outside London. Perhaps a funding structure devised by Gladstone's Chancellor to deal with proposed Irish Home Rule in the 1880s needs to be updated to accommodate the structure of modern British economy and its asymmetric constitutional settlement.

The Shared Prosperity Fund is expected to replace EU Structural and Investment Funds (ESIF) in the UK. ESIF funds come in two parts: the European Regional Development Fund (ERDF) and the European Social Fund (ESF). A majority of funds are targeted at regions whose GDP per capita (calculated from GVA per capita) is below 75% of the European average, of which the UK has two – Cornwall & Scilly and West Wales & The Valleys. Additionally, so-called "transition" regions with GDP per capita of under 90% of the EU average have greater flexibility in terms of how they can spend such monies and, in practice, applications under the schemes are often looked upon more favourably than many "more developed" regions.

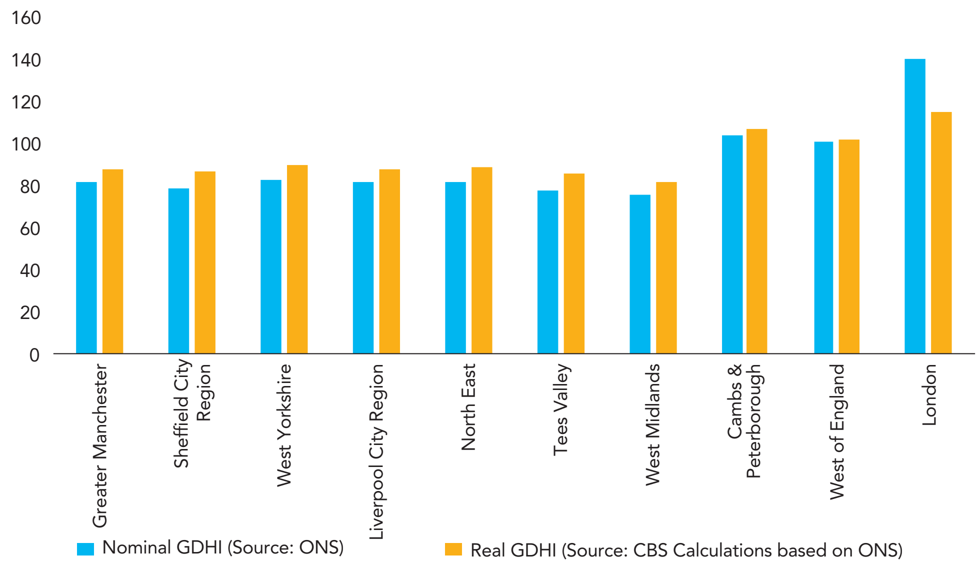
The Centre for Brexit Studies is examining this metric in detail and suggest better alternatives. GVA/capita is a flawed metric and the Shared Prosperity Fund offers the chance to move to something better (irrespective of what happens with Brexit – these themes are fundamental). The analysis can be split into three parts:

1. "Thinking inside the box: A review of work already done critiquing GVA/capita. We show it is a nonsense measure because it divides the amount produced by people working in a region by the number living in a region. In the West Midlands, the West Midlands Combined Authority (coterminous with the old West Midlands metropolitan county) attracts commuters and this artificially inflates its GVA/capita. London experiences the same phenomenon writ large. Better measures already produced by the ONS are:
    a. GDHI/Capita (total income per capita of residents)
    b. GVA/Hour (the amount produced per hour worked – i.e. productivity)
2. Thinking outside the box: Even these official data are not appropriate when examining regional disparities. Why? Prices differ across the UK. International comparisons (including within the EU) take this into account: proper regional measures should do the same. After a discussion of how best to do this, we show that:
    a. After adjusting for price differences, incomes per person are actually lower in many parts of the Midlands than in the North. For example, incomes in the West Midlands Combined Authority (WMCA) are considerably lower than any other comparable city-region using our data. In fact, if this were the eligibility criteria used, the WMCA would receive the most funding (by a margin) of any NUTS2 region in the UK, rather than being treated as a "more developed" region as it currently is.
    b. London's towering productivity advantage over other regions is much smaller than hitherto believed. By this measure, workers in the North East and North West don't perform badly. Some areas exhibit a substantial disparity between productivity and income, which is driven by:
    i. Low employment levels of residents
    ii. High-productivity, high-skill individuals commuting into the city-region from surrounding areas (think Warwick, Lichfield etc.)

3. A consideration of the policy ramifications of the above. Specifically,

   a. The need for a targeted "social fund" to – at a minimum – replace the ESF. This would include measures that address the issues that cause (and are associated with) poverty and low incomes with a particular focus on employability and precarious employment.

GDHI per Capita in Combined Authorities (UK = 100)



Source: Centre for Brexit Studies

   b. The need to redirect investment funding away from London and the Golden Triangle. Traditionally, London has been seen as hyper-successful and therefore investment in publicly-funded infrastructure has responded to perceived economic need. Our figures fundamentally undermine this, suggesting that other regions are underfunded relative to London. Specifically, we criticise thinking based on nominal productivity differences when real productivity differences are what should be of interest."

CASE STUDY
Universities & Brexit

With some 32,000 staff employed across 12 universities in the West Midlands, the universities sector is a key source of innovation for the region. Some universities have seen little decline in EU students since Brexit, with the increase in fees having more of an impact on European students as university remains free in some parts of the EU. Leading universities continue to be able to attract the post-graduate students. Some universities have, however, noticed a fall in applicants through the European Joint Research Council.

Brexit has had some impact on European staff, some feel no longer welcome in the UK and so have moved out of the country. Others are still attracted to the UK by the opportunities offered by UK universities which are not afforded in other parts of the EU – especially for more junior staff members. Some universities are assisting their staff members with visa and indefinite leave to remain applications.

One of the most obvious impacts on universities will be the potential loss of EU funding streams which not only funds academic research, but also fund collaboration between business and universities; what government schemes will replace these will be critical. Some universities are hoping that the UK will be able to maintain its membership of the Horizon 2020 Scheme after Brexit, although obviously this will require a continued financial obligation.

14 Public Sector Impact

Membership of the EU has influenced the way public services are delivered. The EU's ambitions for an integrated Europe with a harmonised Single Market have led to a raft of EU legal instruments having relevance on a wide range of areas affecting public service delivery. This comprises trading standards, including health and environmental concerns; regulation and legal issues such as procurement and state aid. A cornerstone of EU citizenship has been the right to freedom of movement across borders within the EU. The workforce has been a net beneficiary of this with many non-UK EU nationals working in critical areas of public service delivery, such as social care and health. Public service delivery also encompasses resilience and security issues, including police and security co-operation, the effect of Brexit upon this is still unclear. In addition, local government has a role in supporting business and responding to economic impacts in its areas, including trade and travel, regulation and potential impacts on infrastructure projects. Furthermore, the EU has developed an extensive regional framework in an attempt to promote growth and expansion across the EU, albeit one that is mediated by differing member-states approaches. As a result, EU funding streams, as well as best-practice knowledge diffusion have been heavily integrated into British local authority strategies. Birmingham alone has been a net benefactor of over £1bn of funding over the past 30 years and is currently delivering £103 million of EU funded programmes.

Regardless of the final form of disengagement, the impact on public services, is likely to be profound. Currently, many core services such as employment & skills, business support and developing low carbon infrastructure are resourced through EU funding. England is in receipt of €€6.9bn from the European Structural and Investment Fund in the current funding period (2014-2020). This is distributed among LEPs, with Greater Birmingham and Solihull LEP receiving approximately €254.8m, the Black Country €176.6m and Coventry and Warwickshire €135.5m. As detailed in the previous section on funding flows, withdrawal of this funding would threaten the delivery of such services. To sustain the current, if not adequate level of public service provision, it is critical that a major reassessment of funding flows is delivered. The Shared Prosperity Fund proposal if adopted would alleviate much of the current uncertainty.

This issue can only be really addressed if there is a real transfer of power and funding resources. Government should use Brexit as an opportunity to shape the future economic and social landscape by accelerating the devolution of powers, funding and responsibilities to the region. By linking devolution to the Industrial Strategy, the region will have an enhanced opportunity to enhance skills, boost exports and invest in infrastructure and growth sectors, which in turn will provide better jobs, life chances and fuutre prosperity.

Under the current multiannual framework, this EU funding will continue until 2020, and many institutions are calling for a successor to EU funding to continue immediately thereafter. Concerns have been raised about the increased political nature of this national funding, and how it could lead to less security for local projects if there is a more short-term approach dominated by the parliamentary cycle.

Exit from the EU could also affect the soft power that some of the larger British cities, such as Birmingham, hold within the EU and Europe more widely. In an Aston Centre for Europe publication 'The English regions in the EU: Is the 'Westminster bypass' now blocked?' Carolyn Rowe argues that the English Regions will no longer be able to directly lobby the EU but must return to connecting with the world through Whitehall and Westminster. Although continued membership of organisations such as EUROCITIES (of which Birmingham is a founding member) could mitigate this effect, it will undoubtedly have an impact on local and regional institutions – and their ability to access funding.

Notwithstanding the increased moves by central government to decentralise policy and responsibility, with some key success in the devolution agenda for Birmingham and the West Midlands, the corresponding provision of funding has been piecemeal. A comprehensive review of the funding of English local government is urgently required, with the excessive concentration of revenue powers at a central level one of the highest globally. The highly centralised nature of the British government could also lead to a diminution of the voice of British regions and cities on a European and global stage. Instead of being able to secure funding and lobbying power on a European stage, these regional bodies will now have to communicate their needs through Whitehall.

Local Authorities have become highly dependent on EU funding streams, for example in areas employment, skills development, business support and developing low-carbon infrastructure, and any loss of these resources will have a detrimental impact on local government services. In this regard, future funding streams made available by central government will be critical.

Despite the prevailing focus on free movement, control over borders, trade relationships, access to both the Single Market and Customs Union amongst others, are numerous significant aspects in regard to the public sector that remain undetermined and unquantified.

In the event that free movement ends, issues to be resolved would include:

- rules around EEA citizens already in the UK;
- the cut-off date(s) which would apply;
- whether there would be a transitional period with more limited immigration with, therefore fewer people eligible for housing and related services;
- a plan for the long-term: would the same rules apply to all EU countries or might the future be a number of bespoke agreements?

The effects of the Brexit vote on the public sector workforce is clear; hospitals, nursing homes and other adult care services already show staff losses, according to unions, and NHS and social care providers.

Over the last eight years the number of non-British EU nationals in health and social care has risen significantly. In 2016, 209,000 people working in the UK sector were EU nationals, a rise of 72%, according to ONS. However, ONS figures show that the number of non-British EU nationals saying they worked in the public sector fell by 27,000 between January and March 2017.

Although early days, this decline is already being felt by public services affected by staff shortages and the increased dependency on EU migrant labour to fill vacancies. In the last three years the number of EU nationals working in the social care system increased by more than 40%, while the Royal College of Nursing warned earlier this year of a worst-case scenario shortage of more than 40,000 nurses by 2026.

Digging a little deeper into the reported figures, EU nationals make up 7% of the adult social care workforce (90,000) in England, with the highest proportion in London (13%), the South East (10%) and the East of England (8%), according to figures published by Skills for Care. They are most prevalent in care worker roles (7%) and as registered nurses in nursing homes (13%), with 5% in social work. A record number of EU nationals are also working in hospital and community health services (61,934), up from 57,604 twelve months before, according to NHS Digital figures for March 2017.

As clearly illustrated in the section on the future social care labour market structure, the most significantly affected part of the social care workforce in the West Midlands is registered nurses. Typically, these would be nurses in settings such as older adult nursing homes. The significant figure here is that 10% of the registered nurses in West Midlands care settings are of an EU-27 nationality; far higher than the proportion in any other setting or job role. This could cause great difficulty in the event of a no-deal Brexit, particularly against a backdrop of already high vacancy and low staff retention of nursing staff. A further area of concern is that 3.7% of the domiciliary care (home care) workforce is made up of EU nationals, and this accounts to a high number of staff due to the size of the sector. Across the Midlands, there are over 2,000 EU-27 domiciliary care workers; a significant number of staff providing essential care to people in their own homes.

In July 2017 figures from the Nursing and Midwifery Council 5 showed that for the first time in recent history, far more nurses and midwives are leaving the profession in the UK than joining. The numbers of EU registrants leaving has also increased, with Brexit one of the top three reasons cited for leaving. The number of EU nurses registering to work in the UK has also plummeted by 96% and while stringent new language tests may not have helped, it seems very likely that a major part of that drop is due to short-term concerns and uncertainties around the detail of rights to remain post-Brexit, notwithstanding Government commitments around 'settled status'.

Analysis from NHS Digital shows that despite this drop in official registrations with the nursing regulator and the increase in EU nurses leaving, there are actually more EU staff working in the NHS. While 9,419 EU workers have left the NHS since March 2016, 13,480 have joined. This apparent contradiction could be explained by the fact that while more EU nationals are leaving nursing and fewer people are registering, those staying are switching from agencies to direct employment with NHS bodies, helping hospitals cut their own staff costs. What is clear is that more human capital rather than less is required, now and in the future, in the health and social care arenas.

The public services interface with the business community is are hugely important across the public sector and beyond. As with everything else which is affected by Brexit, the detail will only be known when the nature of the final deal is concluded, disseminated and understood. Factors relating to shared services which may be affected include:

- business structure: depending on what Brexit looks like, businesses may restructure, with changes to locations and supply chains, among others;
- economic uncertainty could also impact on business confidence, which in turn could affect investment in both capital and improvement projects;
- immigration (perhaps the greatest source of uncertainty);
- procurement, state aid, workers rights and environmental health;
- the extent to which the UK's tax and regulatory environments will diverge from the EU are also unclear.

All the factors identified above could affect the relationship between public services and business. The pound's deflation could undermine the benefits of services delivered to UK customers from overseas, while domestic inflation, lack of availability of human capital and potential changes to tax and regulatory structures could also have significant effects. A relatively consistent tax structure has meant that cross charging of services between entities within the EU has been fairly straightforward, however if that changes, UK users of outsourcing where pricing has not been contracted in pounds, may need to look again at contracts. Potential redesign of processes and systems should also be considered in view of prospective moves away from standard EU procedures and practices. Even though the detail and consequent effects are unclear at the moment, it really is not too early to start thinking about these issues now.

An example of this is the Public Contracts Regulations 2015 which govern the way in which Contracting Authorities procures their services, supplies and works. It is hugely important both for Contracting Authorities and supply markets alike that there is as to what rules will apply, including any transitional arrangements and implications for potential variations in processes. Lack of such clarity could lead to costly delays and challenges that would focus already stretched resources into abortive work.

Indeed, in broader terms, this issue can only really be addressed if there is a real transfer of competencies to local authorities as it is one way of building local wealth. The purchasing power in terms of local authorities creating local investment provides additional social value for local citizens, often those who are most vulnerable.

An alternative view, provided by The Centre for Local and Economic Strategies is as an opportunity to improve upon the procurement processes as they currently stand. Their hope is that wider factors around human rights, local economic development and environmental sustainability can be addressed in future procurement legislation. However, as Andrew Millross, Anthony Collins Solicitors points out, even if we withdraw from the Single Market, we will need to identify other global trading partners as well as negotiate a more limited deal with the EU. If we had a deal similar to the Comprehensive Economic and Trade Agreement with Canada, the public procurement principals would in any case be similar to similar to the EU rules.

Furthermore he notes that 'even if we just sign up to the World Trade Organisation's Government Procurement Agreement, which we have applied to do already, on exactly the terms that apply now through our membership of the EU, public procurement will still be regulated. If Britain does not continue to be a signatory to the GPA, UK companies will face the risk of exclusion from Government markets worldwide.'

Of all the EU regulations, environmental directives have been some of the most significant, particularly around the key themes of green energy, recycling and air quality. On green energy, the EU Renewable Energy Directive (RED) requires the UK to generate 15% of its energy from renewable sources by 2020, up from 3% in 2009 when the directive was adopted. To meet this, it is anticipated that the UK needs to generate 30% of its electricity and 12% of its heating energy from renewable sources. The UK resisted efforts to continue with binding targets for renewable energy sources to 2030 and the EU has instead agreed a target for cutting European carbon emissions by at least 40% from 1990 levels by 2030.

In heating and transport the UK's ability to reach the targets, or the overall RED target, seems less certain. Renewable heating typically involves replacing gas boilers with biomass burners, or pump systems that draw heat from the air or ground. In transport, around 5% of road fuels currently come from biofuels. The Government has been considering an increase, but is also pursuing electrification policies. Longer term, the 2030 targets will need both a continued move to low-carbon energy sources and greater efficiency.

While not needing to meet RED targets may appear to make life easier post-Brexit, long lead-times to build new wind farms mean that most of the projects required to hit the renewable electricity 30% goal have already been granted planning permission and subsidy contracts. Local authorities have been involved in community green energy projects since 2010 and are investing in renewable energy businesses to create new income streams, so will hope for some stability from existing legislation. It seems unlikely that Brexit will make much difference to energy policy as the Climate Change Act 2008 mandates tougher requirements for cutting carbon emissions. Under the Act the UK must cut its carbon emissions by 80% on 1990 levels by 2050.

On recycling all EU states have a target of recycling 50% of household waste by 2020. The EU is considering imposing recycling targets of 65% by 2030, about which the UK Government expressed reservations. In England, recycling has increased from around 10% in 2000 to about 44%. This increase has slowed more recently however, impacted by an unstable waste market. It is anticipated that local authorities will be required to do more, with increased waste separation. The Brexit effect would have little effect in Wales and Scotland as both devolved governments have already set even more challenging targets than the EU ones. In England, however, leaving the EU could mean less stringent targets.

The EU's Ambient Air Quality Directive set a series of targets to limit the levels of dangerous air pollutants. These targets require a major reduction of air pollution in British urban areas, many of which exceed legal pollution limits. This will happen through cleaner specifications of new vehicles as well as restrictions on the most polluting old ones. As well as setting the targets, EU laws also empower campaigners to challenge the UK Government in the courts over its failure to meet those targets. Following a legal challenge by Client Earth, the Department for Environment, Food and Rural Affairs implemented a new strategy to try to improve air quality with new clean air zones in five UK cities. London already has a similar plan under which old diesel lorries, vans and taxis will face charges for driving in these zones, with further clean air action promised by the Mayor.

Due to The Great Repeal Bill, EU air targets would at least initially remain in UK law, having been incorporated through air quality standards regulations, but the EU would no longer have an enforcement role. The Government could repeal those laws, as it could with any EU legislation transferred into UK.

Trading Standards work both as a regulator and as business advisor and is heavily influenced by harmonised EU wide legislation. There are 250 different pieces of legislation that places a statutory duty on the Council/ Local Authorities. Trading Standards Officers are authorised to enforce that legislation. However much of the legislation is derived from the EU.

The Government has indicated its ambition to maintain 'high regulatory standards'. However, questions remain regarding how the Government will be able to reciprocate high standards of consumer protection.

In the field of Consumer Product Safety for example, whether it be electrical goods, toys, or other household goods, the majority of laws that dictate the safety of products are EU in origin. Businesses producing or importing goods will require answers as to how they can maintain compliance. Currently there is one set of EU regulations, it is unclear whether in the future businesses will have to meet two separate sets of regulations.

In the field of consumer protection in terms of consumer rights and business obligations, again much of the legislation is derived from EU Directives. A clear challenge remains: how will Government maintain high standards of consumer protection and how will the UK continue to operate reciprocal arrangements with the EU as it does with E-Commerce for example.

An immediate matter for the consumer may regard Travel Law, particularly concerning EU Protection for package travel and freedom from mobile phone roaming charges.

Since 2010 Birmingham Trading Standards front line staffing resources have been reduced by over two thirds from 57.6 FTE to 18.3 in 2018/19. It is likely that the uncertainty around Brexit will generate increased demands from businesses concerned about how to market their goods both in the UK and in the EU.

One of the most challenging aspects, even 18 months since the vote to leave and now just 15 months until the date by which, barring truly exceptional circumstances, we will leave the European Union, is the fact that so much of the detail around what the UK will look like outside the EU – and hence the real, tangible effects and implications that will flow from that blueprint – remains unclear. Planning for the future is difficult, a future that currently resembles a jigsaw with perhaps just a third of the pieces in the right places and joined together. Notwithstanding this uncertainty, it is vital that local government and its partners do what they can to most effectively prepare for the consequent impacts, whether positive or negative.

Whilst it is appropriate to explore where we can secure benefits and opportunities from Brexit, it is also prudent that we plan for a 'no deal' scenario.

15 WMCA Overview

15.1 Birmingham

Top 20 Location Quotients for Birmingham (2016)

	SIC Code	SIC Description	Location Quotient
1	321	Manufacture of jewellery, bijouterie & related articles	9.77
2	255	Forging, pressing, stamping & roll-forming of metal	5.70
3	293	Manufacture of parts & accessories for motor vehicles	3.55
4	478	Retail sale via stalls & markets	3.30
5	244	Manufacture of basic precious & other non-ferrous metals	3.07
6	491	Passenger rail transport	2.76
7	291	Manufacture of motor vehicles	2.52
8	024	Support services to forestry	2.51
9	221	Manufacture of rubber products	2.38
10	325	Manufacture of medical & dental instruments & supplies	2.27
11	822	Activities of call centres	2.21
12	257	Manufacture of cutlery, tools & general hardware	2.05
13	322	Manufacture of musical instruments	2.05
14	642	Activities of holding companies	1.97
15	465	Wholesale of information & communication equipment	1.96
16	243	Manufacture of other products of first processing of steel	1.95
17	390	Remediation activities & other waste management services	1.92
18	869	Other human health activities	1.84
19	691	Legal activities	1.83
20	854	Higher education	1.81

Great Britain = 1

Source: Nomis & WMEF

The most specialised industry in Birmingham is the manufacture of jewellery, with the presence of the Jewellery Quarter – one of Europe's largest concentration of jewellery manufacturers. Other, more niche, manufacturing areas are also present, such as the manufacture of musical instruments, as well as more traditional manufacturing industries including metal manufacture and the automotive industry. However, there is also a growing Advanced Manufacturing presence, with concentrations of ICT and precision medical equipment also present. Birmingham also has a thriving services sector, reflected in the concentration of retail sale, head offices and legal activities in the city. Higher education is also more concentrated in Birmingham than in Great Britain overall, with the presence of the city's five universities.

15.2 Coventry

Top 20 Location Quotients for Coventry (2016)

	SIC Code	SIC Description	Location Quotient
1	291	Manufacture of motor vehicles	14.17
2	360	Water collection, treatment & supply	12.03
3	293	Manufacture of parts & accessories for motor vehicles	10.86
4	284	Manufacture of metal forming machinery & machine tools	8.10
5	304	Manufacture of military fighting vehicles	8.02
6	255	Forging, pressing, stamping & roll-forming of metal	7.48
7	257	Manufacture of cutlery, tools & general hardware	5.77
8	262	Manufacture of computers & peripheral equipment	4.12
9	854	Higher education	3.97
10	823	Organisation of conventions & trade shows	3.56
11	289	Manufacture of other special-purpose machinery	2.96
12	281	Manufacture of general purpose machinery	2.92
13	453	Sale of motor vehicle parts & accessories	2.82
14	701	Activities of head offices	2.69
15	244	Manufacture of basic precious & other non-ferrous metals	2.68
16	821	Office administrative & support activities	2.44
17	941	Activities of professional membership organisations	2.33
18	952	Repair of personal & household goods	2.30
19	732	Market research & public opinion polling	2.14
20	856	Educational support activities	1.99

Great Britain = 1

Source: Nomis & WMEF

The strong presence of the automotive industry is clear in Coventry's most specialised industries, with many of the city's top specialisations relating to the automotive industry and its wider supply chain. Additionally, Coventry has a strong services sector, with event organisation, head offices and office support activities also important. Education is also important to the area, with strong concentrations of higher education and educational support activities. Utilities are also important to the city, with Severn Trent Water headquartered in Coventry.

15.3 Dudley

Top 20 Location Quotients for Dudley (2016)

	SIC Code	SIC Description	Location Quotient
1	242	Manufacture of hollow profiles & related fittings, of steel	13.18
2	811	Combined facilities support activities	9.46
3	245	Casting of metals	7.72
4	232	Manufacture of refractory products	7.03
5	309	Manufacture of transport equipment	6.59
6	310	Manufacture of furniture	6.36
7	282	Manufacture of other general-purpose machinery	5.99
8	243	Manufacture of other products of first processing of steel	5.27
9	259	Manufacture of other fabricated metal products	5.22
10	843	Compulsory social security activities	5.16
11	255	Forging, pressing, stamping & roll-forming of metal	4.76
12	203	Manufacture of paints, varnishes, printing ink & mastics	4.56
13	221	Manufacture of rubber products	4.27
14	454	Sale & maintenance of motorcycles & related parts	3.61
15	952	Repair of personal & household goods	3.44
16	467	Other specialised wholesale	3.42
17	241	Manufacture of basic iron & steel & of ferro-alloys	3.37
18	257	Manufacture of cutlery, tools & general hardware	3.29
19	279	Manufacture of other electrical equipment	3.22
20	332	Installation of industrial machinery & equipment	2.80

Great Britain = 1

Source: Nomis & WMEF

Many of the Black Country's traditional industries still have a strong presence in Dudley, with metals manufacture, notably steel and steel products, more prominent in Dudley than in Great Britain overall. However, these industries have evolved from the "metal bashing" of the industrial revolution to include the manufacture of high-quality metals and precision components – with the strong regional presence of the automotive industry supply chain also apparent in the location quotients.

15.4 Sandwell

Top 20 Location Quotients for Sandwell (2016)

	SIC Code	SIC Description	Location Quotient
1	243	Manufacture of other products of first processing of steel	28.59
2	352	Manufacture & distribtuion of gas	20.11
3	245	Casting of metals	10.25
4	532	Other postal & courier activities	9.86
5	257	Manufacture of cutlery, tools & general hardware	6.86
6	642	Activities of holding companies	6.74
7	949	Activities of other membership organisations	6.71
8	293	Manufacture of parts & accessories for motor vehicles	6.46
9	255	Forging, pressing, stamping & roll-forming of metal	6.35
10	101	Processing, preserving & production of meat products	5.86
11	141	Manufacture of wearing apparel, except fur apparel	5.28
12	383	Materials recovery	5.15
13	242	Manufacture of hollow profiles & related fittings, of steel	4.86
14	241	Manufacture of basic iron & steel & of ferro-alloys	4.52
15	201	Manufacture of basic chemicals, fertilisers & plastics	4.50
16	492	Freight rail transport	4.40
17	856	Educational support activities	4.34
18	282	Manufacture of other general-purpose machinery	4.33
19	811	Combined facilities support activities	4.11
20	259	Manufacture of other fabricated metal products	4.05

Great Britain = 1

Source: Nomis & WMEF

Sandwell also has strong specialisms in manufacturing, especially metals and automotive. Linked to this, as well as the region's strong exporting base, there are also concentrations of distribution industries in Sandwell, including postal and courier and rail freight. As well as manufacturing, there are strong concentrations among some services activities such as holding companies, membership organisations, educational support and business support.

15.5 Solihull

Top 20 Location Quotients for Solihull (2016)

	SIC Code	SIC Description	Location Quotient
1	291	Manufacture of motor vehicles	31.25
2	823	Organisation of conventions & trade shows	8.86
3	264	Manufacture of consumer electronics	6.37
4	352	Manufacture & distribtuion of gas	6.30
5	511	Passenger air transport	4.76
6	272	Manufacture of batteries and accumulators	4.37
7	649	Other financial service activities, except insurance & pensions	3.75
8	521	Warehousing & storage	3.29
9	951	Repair of computers & communication equipment	3.14
10	292	Manufacture of motor vehicle bodies, trailers & semitrailers	2.83
11	872	Residential care activities except for the elderly	2.72
12	461	Wholesale on a fee or contract basis	2.64
13	370	Sewerage	2.49
14	522	Support activities for transportation	2.49
15	712	Technical testing & analysis	2.43
16	265	Manufacture of instruments for measuring, watches and clocks	2.36
17	811	Combined facilities support activities	2.29
18	771	Renting & leasing of motor vehicles	2.15
19	360	Water collection, treatment & supply	2.12
20	801	Private security activities	1.86

Great Britain = 1

Source: Nomis & WMEF

The location of Birmingham Airport in Solihull is apparent in the area's specialisms, with air transport and support activities for transport, as well as the organisation of events concentrated in Solihull. The presence of the automotive industry, most notably JLR, can also be seen with automotive manufacture the most comparatively concentrated industry in the area. Other industries are present though, with finance, wholesale and technical testing activities all present – some of which are linked to the presence of the automotive industry. Public utilities are also a specialism of Solihull, including gas distribution and water treatment.

15.6 Walsall

Top 20 Location Quotients for Walsall (2016)

	SIC Code	SIC Description	Location Quotient
1	151	Dressing & manufacture of leather & fur products	59.98
2	245	Casting of metals	18.56
3	257	Manufacture of cutlery, tools & general hardware	14.16
4	243	Manufacture of other products of first processing of steel	9.44
5	192	Manufacture of refined petroleum products	8.85
6	242	Manufacture of hollow profiles & related fittings, of steel	7.79
7	233	Manufacture of clay building materials	7.72
8	253	Manufacture of steam generators, except central heating boilers	7.08
9	274	Manufacture of electric lighting equipment	6.07
10	141	Manufacture of wearing apparel, except fur apparel	4.90
11	532	Other postal & courier activities	4.48
12	651	Insurance	4.19
13	284	Manufacture of metal forming machinery & machine tools	3.88
14	256	Treatment and coating of metals; machining	3.82
15	522	Support activities for transportation	3.69
16	773	Renting & leasing of other machinery & equipment	3.64
17	309	Manufacture of transport equipment	3.54
18	383	Materials recovery	3.26
19	259	Manufacture of other fabricated metal products	3.25
20	255	Forging, pressing, stamping & roll-forming of metal	2.99

Great Britain = 1

Source: Nomis & WMEF

The clearest specialisation of Walsall is leather products – notably saddlery – with Walsall being a European centre for fine leatherwork. As well as this, many other manufacturing industries are present in Walsall, including metals manufacture, especially steel, and machinery. Services firms are also present, especially those supporting the manufacturing sector, such as postal activities, transportation support activities and the leasing of machinery and equipment.

15.7 Wolverhampton

Top 20 Location Quotients for Wolverhampton (2016)

	SIC Code	SIC Description	Location Quotient
1	243	Manufacture of other products of first processing of steel	20.10
2	324	Manufacture of games & toys	14.19
3	133	Finishing of textiles	12.06
4	383	Materials recovery	9.05
5	255	Forging, pressing, stamping & roll-forming of metal	6.70
6	242	Manufacture of hollow profiles & related fittings, of steel	6.41
7	171	Manufacture of pulp, paper & paperboard	5.65
8	390	Remediation activities & other waste management services	5.48
9	259	Manufacture of other fabricated metal products	5.34
10	303	Manufacture of air & spacecraft & related machinery	4.24
11	478	Retail sale via stalls and markets	4.15
12	110	Manufacture of beverages	4.13
13	141	Manufacture of wearing apparel, except fur apparel	4.06
14	257	Manufacture of cutlery, tools & general hardware	3.77
15	802	Security systems service activities	3.73
16	244	Manufacture of basic precious & other non-ferrous metals	3.16
17	221	Manufacture of rubber products	3.10
18	106	Manufacture of grain mill products, starches & starch products	3.02
19	253	Manufacture of steam generators, except central heating boilers	3.02
20	491	Passenger rail transport, interurban	2.99

Great Britain = 1

Source: Nomis & WMEF

Manufacturing is also a concentrated industry for Wolverhampton, especially metals, steel and paper, as well as the influence of the automotive and aerospace industries and their supply chains. The toys and games industry are also concentrated in Wolverhampton. The manufacture of beverages is also a specialism of the city, possibly due to the presence of Marston's brewery. Services industries are also present, such as retail sales and transport, as well as security systems – possibly linked to the development of advanced manufacturing and industry 4.0.

16. Basic Data

Economic Output (2016)					
Variable	Unit	Source	WMCA	West Midlands	UK
GVA	£bln	ONS	61.0	126.6	1,747.6
Annual Growth	%	ONS	3.6	3.9	3.7
GVA per Capita	£	ONS	21,296	21,823	26,621
GVA per Economically Active	£	ONS	48,026	47,108	54,827
Economic Structure:					
Production	%	ONS	24.4	26.1	20.8
Distribution	%	ONS	22.4	24.5	24.5
Services	%	ONS	28.1	26.7	32.8
Societal	%	ONS	25.0	22.7	21.9

Population (2016)					
Variable	Unit	Source	WMCA	West Midlands	UK
Total Population	No.	ONS	2,897,300	5,860,700	64,169,400
Males	No.	ONS	1,434,500	2,904,300	31,661,600
Females	No.	ONS	1,462,800	2,956,400	32,509,800
Population Aged 16-64	%	ONS	63.1	62.1	62.9
Males	%	ONS	63.7	62.8	63.6
Females	%	ONS	62.5	61.3	62.2

Labour Market (16-64 Population, March 2017)					
Variable	Unit	Source	WMCA	West Midlands	UK
Economically Active	%	APS	72.3	76.6	78.4
Employees	%	APS	59.2	62.9	64.0
Unemployed	%	APS	7.0	5.0	4.3
Student	%	APS	27.7	23.4	21.6
NVQ4+ (2017)	%	APS	29.6	31.8	38.6
No Qualifications (2017)	%	APS	13.1	10.4	7.7
Jobs Density (2016)	Ratio	ONS	0.76	0.79	0.84

Employment (16+ population, March 2017)					
Variable	Unit	Source	WMCA	West Midlands	UK
Managers, Directors & Senior	%	APS	9.0	10.4	10.8
Professional	%	APS	17.9	18.1	20.3
Associate Professional & Technical	%	APS	12.6	13.2	14.5
Admin & Secretarial	%	APS	10.4	10.4	10.3
Skilled Trades	%	APS	10.7	11.2	10.2
Caring, Leisure & Other Services	%	APS	9.4	9.3	9.0
Sales & Customer Service	%	APS	7.9	7.1	7.6
Process Plant & Machine Operatives	%	APS	8.8	7.8	6.3
Elementary	%	APS	12.8	12.2	10.5

Businesses (2016)					
Variable	Unit	Source	WMCA	West Midlands	UK
Enterprises	No.	BASL	88,965	213,455	2,668,805
Micro	%	BASL	88.6	89.1	89.4
Small	%	BASL	9.3	9.0	8.7
Medium	%	BASL	1.7	1.5	1.5
Large	%	BASL	0.4	0.4	0.4

West Midlands Merchandise Trade Performance (2017)

Rank	£m	Exports (£m)	Trade Balance (£m)	% Change 2013-17	% of Total		Trade Penetration
1	USA	5,949.9	4,033	60.9	17.8		0.32
2	China	3,996.3	162	12.5	11.9		0.28
3	***Germany***	3,595.7	-3,290	51.0	10.7		0.39
4	***France***	2,182.1	-106	25.9	6.5		0.45
5	***Ireland***	1,457.6	518	37.6	4.4		2.12
6	***Italy***	1,410.4	-346	72.2	4.2		0.40
7	***Netherlands***	1,317.1	-933	14.6	3.9		0.29
8	***Spain***	956.1	-250	61.1	2.9		0.35
9	***Belgium***	882.6	-881	27.7	2.6		0.28
10	Australia	837.8	702	67.0	2.5	Top 10 = 67.5	0.47
11	Canada	609.7	224	55.5	1.8		0.18
12	South Korea	609.6	325	117.9	1.8		0.16
13	Russia	545.7	265	-35.4	1.6		0.31
14	***Poland***	514.9	-535	87.0	1.5		0.30
15	United Arab Emirates	508.6	371	-6.5	1.5		0.24
16	Japan	483.0	-280	67.9	1.4		0.09
17	***Sweden***	469.1	-353	7.2	1.4		0.39
18	Turkey	446.9	-300	30.6	1.3		0.25
19	India	392.1	-321	20.3	1.2		0.11
20	Switzerland	392.0	53	32.6	1.2	Top 20 = 82.4	0.19
21	***Austria***	355.3	-87	40.6	1.1		0.26
22	Singapore	340.3	196	49.5	1.0		0.14
23	Hong Kong	334.2	-205	34.1	1.0		0.07
24	Saudi Arabia	327.0	280	39.9	1.0		0.35
25	South Africa	281.4	75	-22.6	0.8		0.44
26	***Denmark***	243.4	-84	-2.8	0.7		0.34
27	Norway	220.5	-140	11.5	0.7		0.33
28	***Czechia***	210.8	-502	27.0	0.6		0.17
29	***Hungary***	198.8	-208	109.2	0.6		0.25
30	Brazil	188.4	-3	-44.7	0.6	Top 30 = 90.4	0.16
31	***Finland***	157.8	-85	24.2	0.5		0.29
32	***Romania***	147.5	-288	69.7	0.4		0.22
33	***Portugal***	143.7	-530	31.2	0.4		0.24
34	Kuwait	129.6	95	18.3	0.4		0.50
35	Gibraltar	127.3	127	91.9	0.4		21.85
36	New Zealand	124.4	68	87.2	0.4		0.40
37	Qatar	123.1	101	-8.0	0.4		0.53
38	Mexico	109.5	3	2.3	0.3		0.03
39	***Slovakia***	102.8	-124	82.8	0.3		0.16
40	Israel	96.7	-7	3.5	0.3	Top 40 = 94.2	0.18
41	Taiwan	91.1	-316	76.1	0.3		0.05
42	Thailand	88.0	-232	1.9	0.3		0.05
43	Indonesia	77.3	-4	44.4	0.2		0.06
44	Oman	68.9	61	-2.6	0.2		0.33
45	Malaysia	68.0	-149	-38.5	0.2		0.05
46	Morocco	67.6	-75	17.4	0.2		0.19
47	Chile	66.8	14	9.5	0.2		0.13
48	***Greece***	65.9	26	62.9	0.2		0.15
49	Nigeria	65.5	61	-0.5	0.2		0.19
50	Egypt	63.8	-78	35.2	0.2	Top 50 = 96.4	0.12
51	Ukraine	61.9	48	-38.1	0.2		0.16
52	Iraq	51.2	48	21.2	0.2		0.16
53	***Slovenia***	48.8	12	47.9	0.1		0.17
54	***Bulgaria***	47.2	24	49.9	0.1		0.18
55	Jordan	47.0	43	110.7	0.1		0.30

Rank	£m	Exports (£m)	Trade Balance (£m)	% Change 2013-17	% of Total		Trade Penetration
56	Lebanon	45.7	42	-9.3	0.1		0.31
57	Pakistan	41.2	-40	8.7	0.1		0.09
58	Iceland	40.0	34	253.5	0.1		0.74
59	***Malta***	35.4	26	42.9	0.1		0.79
60	Colombia	35.2	-23	51.6	0.1	Top 60 = 97.7	0.10
61	Ghana	35.0	34	-10.9	0.1		0.36
62	***Cyprus***	34.8	27	-29.6	0.1		0.48
63	Bahrain	33.5	28	1.1	0.1		0.41
64	***Lithuania***	30.9	12	54.3	0.1		0.12
65	Argentina	28.6	-24	19.4	0.1		0.06
66	Vietnam	28.4	-191	123.5	0.1		0.02
67	***Estonia***	28.1	14	-9.4	0.1		0.21
68	Algeria	20.4	10	-74.6	0.1		0.06
69	***Luxembourg***	19.6	-73	-62.7	0.1		0.12
70	Peru	18.9	-7	1.0	0.1	Top 70 = 98.6	0.06
71	Kazakhstan	18.7	15	89.9	0.1		0.08
72	Costa Rica	17.1	-6	23.6	0.1		0.14
73	Georgia	16.6	16	495.8	0.0		0.27
74	Kenya	16.0	-6	-50.2	0.0		0.12
75	***Latvia***	14.0	-15	18.7	0.0		0.11
76	Sri Lanka	12.5	-37	58.9	0.0		0.08
77	Bangladesh	12.1	-200	9.2	0.0		0.03
78	***Croatia***	11.5	-4	61.8	0.0		0.06
79	Ivory Coast	10.1	10	279.5	0.0		0.13
80	Azerbaijan	9.2	9	-64.9	0.0	Top 80 = 99.0	0.13
81	Mauritius	8.8	-4	79.8	0.0		0.22
82	Panama	8.2	6	-39.0	0.0		0.05
83	Guatemala	7.5	1	21.1	0.0		0.05
84	Serbia	7.2	-84	-5.5	0.0		0.04
85	Tanzania	7.0	6	-56.2	0.0		0.09
86	Trinidad and Tobago	6.9	4	-24.8	0.0		0.15
87	Senegal	6.6	1	-49.0	0.0		0.13
88	Ethiopia	6.0	-2	38.6	0.0		0.05
89	Angola	5.0	4	-77.9	0.0		0.03
90	Falkland Islands	4.1	4	-33.0	0.0	Top 90 = 99.2	2.13
91	Ecuador	4.1	-1	-54.3	0.0		0.03
92	Dominican Republic	3.8	-13	-31.6	0.0		0.03
93	Cameroon	3.4	3	-27.4	0.0		0.09
94	Uruguay	3.1	2	-52.5	0.0		0.05
95	Trinidad and Tobago	2.0	2	155.1	0.0		0.15
96	Honduras	1.9	-41	191.1	0.0		0.02
97	Trinidad and Tobago	1.5	-7	-84.3	0.0		0.15
98	Republic of Congo	1.0	1	-26.5	0.0		0.00
99	Venezuela	0.4	-2	-90.6	0.0		0.01
	Total	33,458.3	-3,210.9	31.5	100.0	100.0	0.25

Source: HMRC, UNCTAD, OECD & WMEF

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18 Glossary

2011 Census	UK Census undertaken by the ONS in 2011
APPG	All-party parliamentary group
APS	Annual Population Survey
Article 49	Refers to Article 49 of the Treaty of Lisbon which outlines the process by which a nation state can become a member of the EU
Article 50	Refers to Article 50 of the Treaty of Lisbon which outlines the process by which a nation state can leave the EU
Barnett Formula	The mechanism by which funding is allocated to the four constituent nations of the UK
BASL	Business activity size and location
BCU	Birmingham City University
BFPG	British Foreign Policy Group
Brexit	The exit of the UK from the EU
Brexit Referendum	The United Kingdom European Union membership referendum in June 2016
Budget Cycle	The EU multilateral financial framework covering the period 2014-2020 with the new period coming into force in 2021-2027
Business Rates	A tax on non-domestic properties
CBR	Centre for Business Research, Cambridge University
CBS	Centre for Brexit Studies, Birmingham City University
Chequers Agreement	Proposed future relationship between the UK and the EU by the British Government
City REDI	City Region Economic and Development Institute
Core Cities	An advocacy group of 10 key urban areas of the UK excluding London, comprising Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield
Customs Union	The EU Customs Union which means that the 28-member states of the EU, as well as Turkey, Monaco, Guernsey, Isle of Man, Jersey, Akrotiri and Dhekelia, Andorra and San Marino, form a single territory for customs purposes
EC	European Commission
ECJ	Court of Justice of the European Union
Economic Operator	Authorised Economic Operator
EEA	European Economic Area
EFTA	European Free Trade Area
ERDF	European Regional Development Fund
ESF	European Structural Fund
EU	European Union
EUROCITIES	Network of Major European Cities
FDI	Foreign Direct Investment
Fitch	Fitch Ratings
FTA	Free Trade Agreement
FTZ	Free Trade Zone

Future Partnership	The negotiations of the future arrangement between the EU and the UK will begin after the implementations of the Withdrawal Agreement.
GDHI	Gross Domestic Household Income
GDP	Gross Domestic Product
GVA	Gross Value Added
HGV	Heavy Goods Vehicle
HMRC	Her Majesty's Revenue and Customs
Horizon 2020	EU research and innovation funding programme covering 2014-2020
IMF	International Monetary Fund
Intermediate bodies	The Core Cities plus London and Cornwall
Key Cities	A group of mid-sized UK cities, including Coventry and Wolverhampton.
LA	Local Authority
LEP	Local Enterprise Partnership
LGA	Local Government Association
Nomis	ONS Source of Labour Market Statistics
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
ONS	Office for National Statistics
PMI	Purchasing Managers Index, a monthly survey of businesses carried out by IHS Markit, which produces a diffusion index where above 50 signals expansion and below 50 signals contraction.
Single Market	The EU as one territory without any internal borders of obstacles to the free movement of goods, services, capital and labour
The European Council	The European Council of Ministers
Treaty of Lisbon	The Treaty which forms the constitutional basis of the EU, which came into force on 1st December 2009
UNCTAD	United Nations Conference on Trade and Development
US Conference Board	The Conference Board is a global, independent business membership and research association working in the public interest in the USA
West Midlands	West Midlands Region, comprising the WMCA and the counties of Herefordshire, Shropshire, the City of Stoke-on-Trent, the Borough of Telford & Wrekin, Warwickshire, Staffordshire and Worcestershire
WFS	Wirtschaftsförderung Sachsen GmbH, the Saxony Economic Development Corporation
Withdrawal Agreement	The agreement between the EU and the UK on the terms of the UK's exit from the EU, currently encompassed by the Mutual Understanding.
WMCA	West Midlands Combined Authority, Metropolitan Area, full membership of which comprises Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton
WMEF	West Midlands Economic Forum
World Bank	The International Bank for Reconstruction and Development
WTO	World Trade Organisation

Appendix A: List of EU Funding Initiatives that are important to councils (non-ESIF)

Funding Stream	Total Fund Amount 2014-20 (€, EU-wide)	UK Share (€)	Description of Fund's Purpose
Asylum, migration and integration fund (AMIF)	3.1bln	370m (2014-2020)	Funds actions that promote the efficient management of migration flows
City Vitality Sustainability Initiative (CIVITAS)	200m	2-4m for Aberdeen project (2016-20)	Funds implementation of ambition, integrated, sustainable urban strategies. CIVITAS also funds the evaluation of these strategies.
	2.3bln	0.97m (2015)	Aims to improve SMEs access to finance, access to markets, create better conditions for competitiveness and encourage entrepreneurship.
Connecting Europe Facility (CEF)	1.9bln	144.44m (2015)	Investing in trans-European networks and infrastructures in the sectors of transport, telecommunications and energy.
Consumer Programme 2014-20	189m	3.02m (2015)	The consumer programme helps citizens to fully enjoy their consumer rights and to actively participate in the Single Market. The programme focuses on four areas: monitoring and enforcing product safety; consumer information and education; consumer rights and effective redress; and strengthening cross-border enforcement.
Creative Europe	1.5bln	32.5m (2015)	Supports the cultural and creative sectors, enabling them to reach new audiences, develop skills for the digital age and safeguard cultural and linguistic diversity.
Education, Training, Youth and Sport (Erasmus+)	14.77bln	57.6m (2015)	Erasmus+ aims at boosting skills and employability. The programme will increase the quality and relevance of Europe's education systems by providing funding for the professional development of education and training staff, as well as youth workers, and for cooperation between universities, colleges, schools, enterprises and NGOs.
Employment and Social Innovation Programme (EaSI)	919m	10.39m (2015)	EaSI is a European-level financing instrument that supports employment, social policy and labour mobility in line with the objectives of Europe 2020 (the EU's growth strategy). It aims to promote a high level of quality and sustainable employment, guaranteeing adequate and decent social protection, combating social exclusion and poverty and improving working conditions.

Funding Stream	Total Fund Amount 2014-20 (€, EU-wide)	UK Share (€)	Description of Fund's Purpose
Environment and Climate Change Action (LIFE)	3.4bln	52m (2015)	The 'Climate Action' strand covers climate change mitigation; climate change adaptation; and climate governance and information.
Europe for Citizens	185m	21.7m (2015)	Funds promotion of European remembrance, democratic engagement and civic participation.
European Fund for Strategic Investments (EFSI)	33.9bln from EU/EIB	4.13	Manufacture of beverages
315bln including investor funding	7.9bln (2015)	4.06	Provides loans or loan guarantees (not grants) for projects in areas such as: infrastructure, education, research, innovation, renewable energy and energy efficiency.
European Local Energy Assistance (ELENA)	1.6bln including investment	N/A	Supports councils in preparing and implementing sustainable energy plans for their area.
European Union Programme for Employment and Social Innovation	919.47m	10.3m (2015)	The Employment and Social Innovation Programme supports employment and social policies across the EU. The programme supports member states' efforts in the design and implementation of employment and social reforms at European, national, as well as regional and local levels by means of policy coordination and the identification, analysis and sharing of best practices.
Horizon 2020 Funding Research and Innovation	79.4bln	4.98bln (2015)	Horizon 2020 is the EU Framework Programme for Research and Innovation for 2014-20. It helps bodies such as universities and research laboratories to leverage additional research, development and innovation funding and contribute to attaining research and development targets. This funding usually takes the form of grants, to part-finance a broad range of research projects. Councils are unlikely to be lead research organisations, but can help with testing activities and citizen feedback on issues such as ICT, environmental projects and new transport technologies. Councils have therefore been part of such EU-funded research projects in the past. UK organisations including universities have access to up to €80bn between 2014-20 Funding for Research and Innovation. Over the period 2007-13, the UK received €8.8 billion in direct EU funding for research, development and innovation activities. NOTE: The Treasury will underwrite all successful 2020 bids for Horizon 2020 that are approved by the Commission, even when specific projects continue beyond the departure from the EU. The long-term future of UK participation in European science programmes will be decided as part of the UK's exit negotiations.
Natura 2000	Share of 3.4bln LIFE Budget		Funds Special Areas of Conservation (SAC) to protect the EU's most valuable and threatened species and habitats.

Funding Stream	Total Fund Amount 2014-20 (€, EU-wide)	UK Share (€)	Description of Fund's Purpose
Rights, Equality and Citizenship Programme (REC)	439m	12.18m	Funds the promotion and protection of human rights in the EU
European Maritime Affairs and Fisheries Fund (EMFF)	7.4bln	7.5m	The European Maritime and Fisheries Fund supports the implementation of the CFP with the necessary financial resources. The fund focuses on funding projects that promote a sustainable future for the European fishing industry and coastal communities, with particular focus on the rebuilding of fish stocks, reducing the impact of fisheries on the marine environment and the progressive elimination of wasteful discarding practices.
European Investment Bank (EIB)	Lent 84.5bln in 2015	EIB investments in the UK economy came to €7.8bn in 2015, the Bank's largest ever engagement in the country.	EIB provides financial instruments, such as loan and guarantee funds, for largescale investments. The UK Government currently has a 16 per cent shareholding in the Bank.
Joint European Resources for Micro-to-Medium Enterprises (JEREMIE)			An initiative developed together with the European Investment Fund. It promotes the use of financial engineering instruments to improve access to finance for SMEs via Structural Funds interventions.
Joint European Support for Sustainable Investment in City Areas (JESSICA)			An initiative developed in cooperation with the European Investment Bank (EIB) and the Council of Europe Development Bank (CEB). It supports sustainable urban development and regeneration through financial engineering mechanisms.

Funding Stream	Total Fund Amount 2014-20 (€, EU-wide)	UK Share (€)	Description of Fund's Purpose
European Agricultural Guarantee Fund (EAGF)/ Common Agricultural Policy (CAP)	CAP funding is worth approximately €28b into the UK farming sector and rural areas in the 2014-2020 period.		CAP is a system of agricultural subsidies and programmes covering farming, environmental measures and rural development. CAP direct payments to farmers are known as 'Pillar 1' and are administered in England via DEFRA's 'Basic Payment Scheme' which accounts for around 80% of total payments) In the UK, the Government moves some Pillar 1 funds into Pillar 2, via a budgetary process known as modulation. This helps to ensure sufficient funds are available for agri-environment measures, increasing the productivity of farming and forestry, and growing the rural economy (Pillar 2 of the CAP). Treasury has provided a guarantee to the agricultural sector that it will receive the same level of funding that it would have received under Pillar 1 of CAP until the end of the Multiannual Financial Framework in 2020. (HM Government, 2016) In the June 2017 Queen's Speech, the Government announced an 'Agriculture Bill'. The main element of the Bill are "Measures to ensure that after we leave the EU, and therefore the Common Agricultural Policy, we have an effective system in place to support UK farmers and protect our natural environment." (HM Government(h), 2017)
European Territorial Cooperation programmes	Across Europe, the total budget for these programmes is approximately €9.2 billion, covering 107 programmes. The UK does not participate in all of these programmes, but there are 16 programmes that cover all or parts of the UK. While it is not possible to determine the total amount of funding from these programmes for the UK over the 2014-20 period, EU expenditure and revenue data reveals that €78 million was spent on 'European territorial cooperation' in the UK in 2015. (Parliament UK, 2016).		European Territorial Cooperation programmes, which are sometimes known as Interreg programmes, are designed to promote cooperation between member states on shared challenges and opportunities to support the effective functioning of the Single Market. INTERREG programmes involving the UK include the €257 million Two Seas Programme, covering England, France, the Netherlands and Belgium (Flanders) and the €396 million North West Europe Programme covering six other Member States and Switzerland. Nine of these involve England, and these are overseen by the Department for Communities and Local Government (DCLG).

Brexit Commission Membership

1. Birmingham City Council
2. Greater Birmingham Chamber of Commerce
3. West Midlands Combined Authority
4. Aston University
5. Birmingham City University
6. University of Birmingham
7. University of Warwick
8. Black Country Local Enterprise Partnership
9. Coventry and Warwickshire Local Enterprise Partnership
10. Greater Birmingham and Solihull Local Enterprise Partnership
11. Coventry City Council
12. Dudley Metropolitan Borough Council
13. Sandwell Metropolitan Borough Council
14. Solihull Metropolitan Borough Council
15. Walsall Metropolitan Borough Council
16. Wolverhampton Council
17. West Midlands Economic Forum

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Disclaimers

The West Midlands Economic Forum is a neutral, independent forum bringing together representatives of the public, private and voluntary sectors to evaluate real trends in the local economy.

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