





INITIAL ANALYSIS

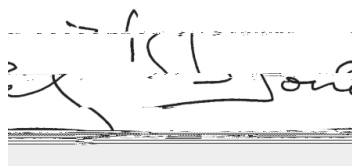
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Britain and the EU, on November 14th, published both the Draft Agreement on the withdrawal from the EU and Euratom, termed the Mutual Understanding, as well as secondly the Outline Political Declaration on the Future Relationship.

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

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A handwritten signature in black ink, appearing to read "John", is written over a horizontal line. The signature is somewhat stylized and includes a large initial "J".

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.

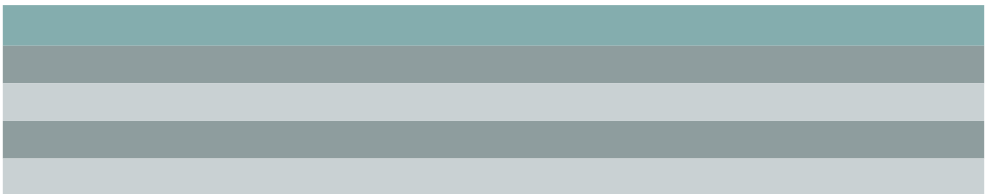
Any change to the deep and extensive relationship between Britain and the EU will inevitably provide new opportunities as well as precipitate fresh barriers, some of which can be identified, others unexpected and will only emerge later. The challenge to Birmingham, and the wider region, is to identify 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: W M a E a R a l a



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.

4. Existing Research

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,

Funding	
7. EU Funding	Birmingham alone has benefitted from over £1billion in EU funding and the loss of

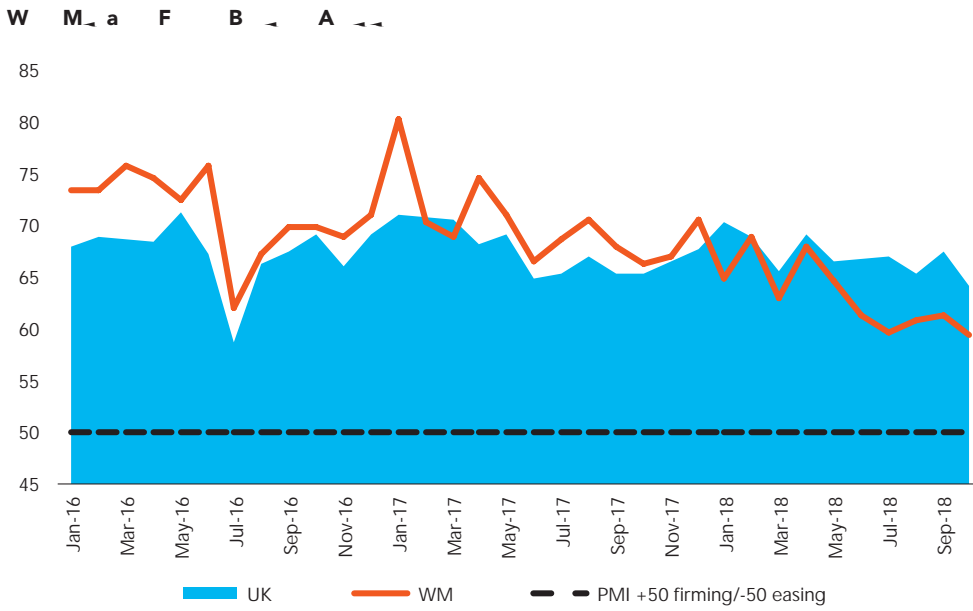
Exports by Region (2016)

	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



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 me-7(n c)-.

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. **January**

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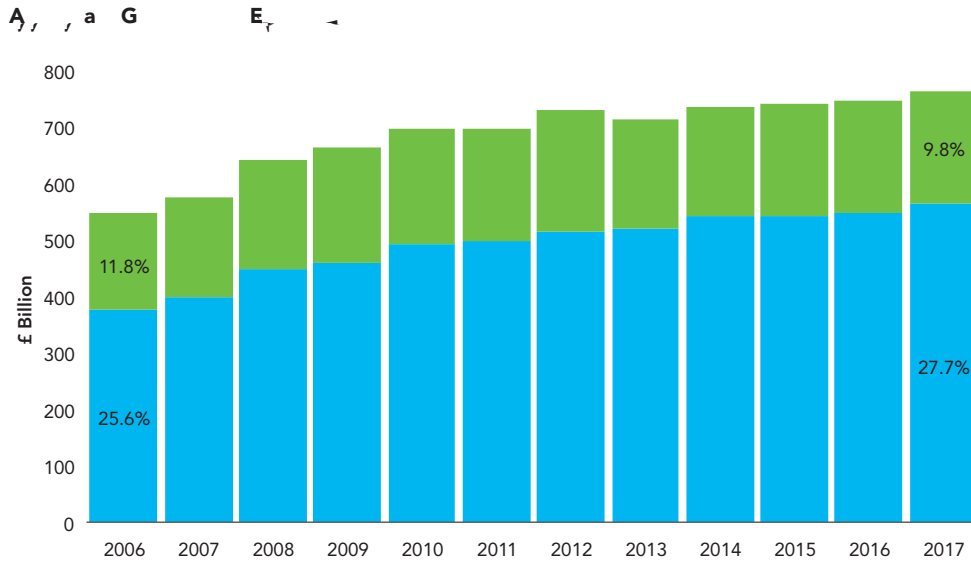
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The deepening of the relationship between business and academia has continued apace, with regional institutions particularly successful. EU collaborative funding flows for academic institutions, such as Horizon 2020 which was worth €4.98bn to the UK in 2015,

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



4.5. Public Services

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 providers, as well as data from ONS indicate a significant fall in these numbers,

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.

RESEARCH FINDINGS

5. T B C

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

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.

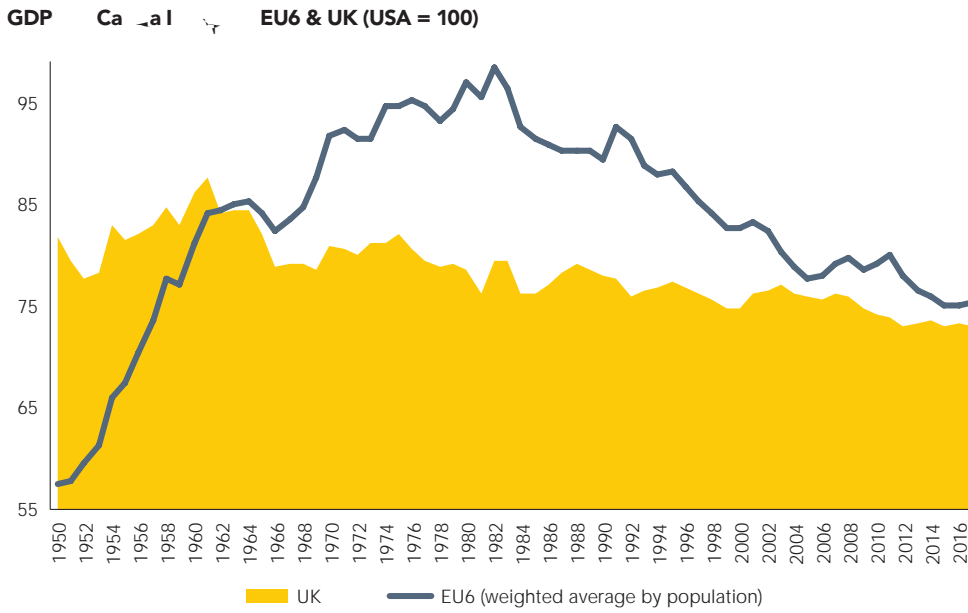
It has been argued that Britain's membership of the EU has enabled it to become the largest recipient of FDI within the EU, largely attributed to Britain being able to act as a gateway to the EU. This role has also been aided by some other EU members, notably Germany, adopting more restrictive, less 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

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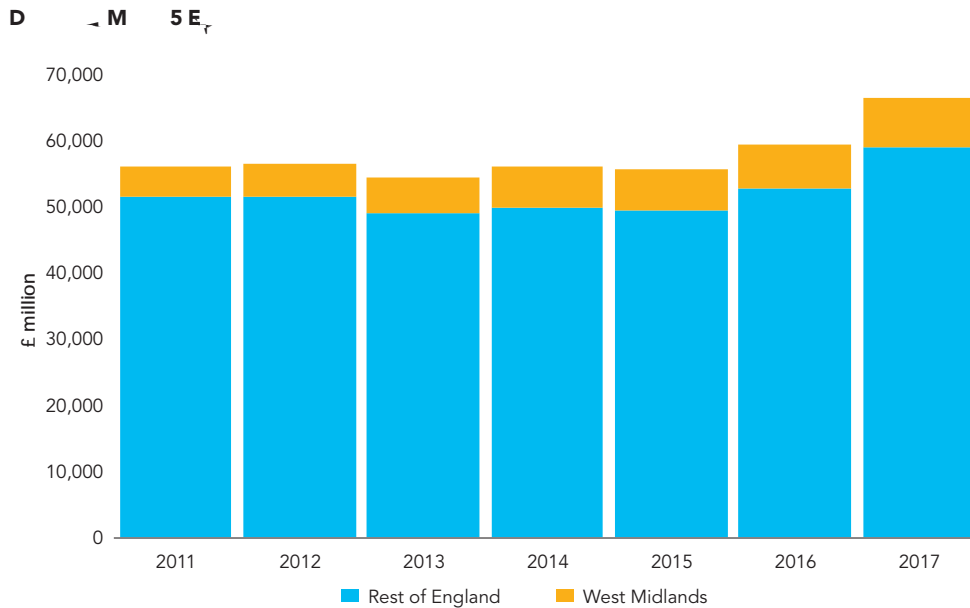
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Source: US Conference Board, CBM & WMEF

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.

7.1 WMCA



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.

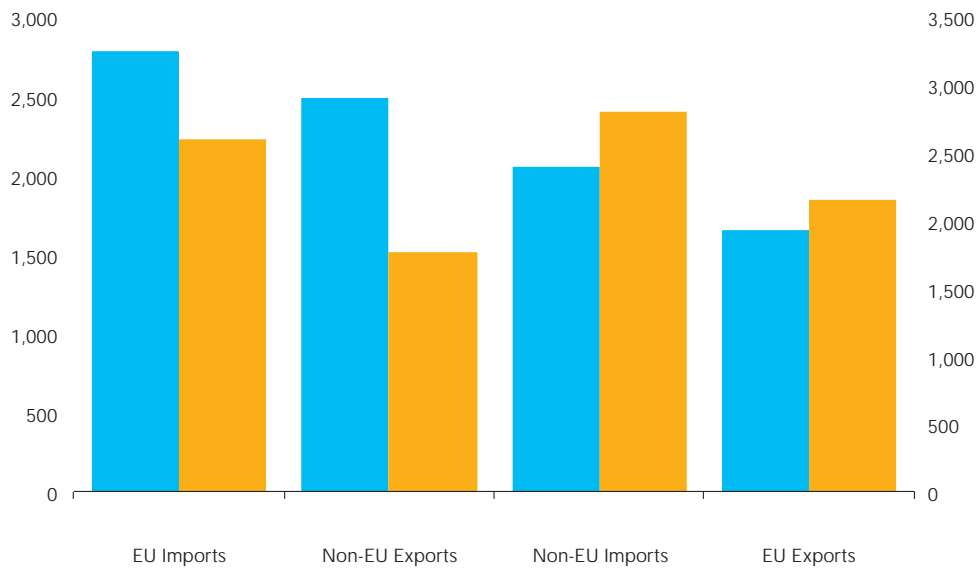
8. Manufacturing

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.

9.F Trade

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 Trade by Region (2016)



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

- 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

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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.

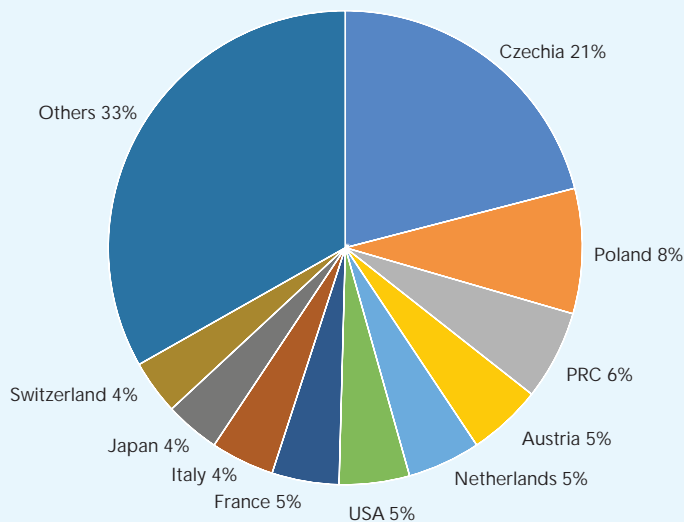
The objectives of the Initiative are founded on the recognition that, whilst Britain may be leaving the EU, although the form of which remains indeterminate, after Brexit, Saxony and the Midlands will continue to occupy the same geographic and cultural space. Moreover, they will continue to enjoy economic 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

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.

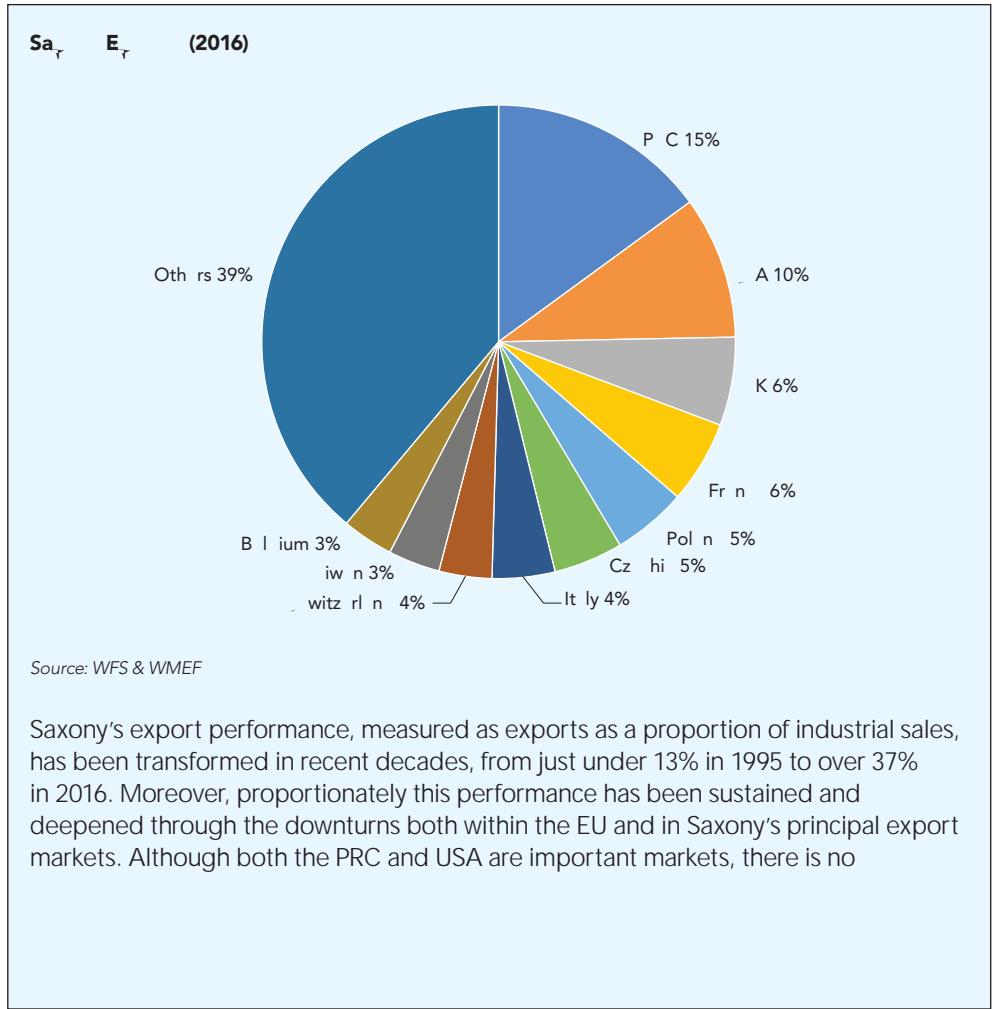
In the 15-years ending 2008, economic growth was robust averaging 9.4% in nominal terms annually. Subsequently, however there was a protracted period of uneven growth encompassing the severe downturn of 2009 and the weakening associated with the EU contraction in 2012-13. Since then, in the 3-years ending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



10. F E B

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: W M a N a G F a



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

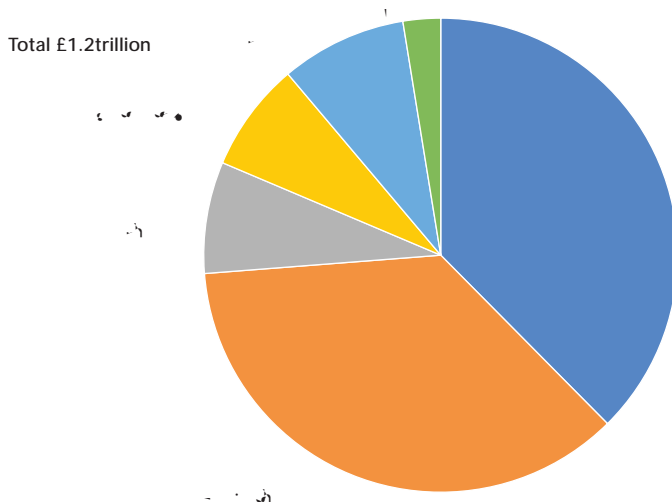
It has also provided a moderate boost to exports, particularly for manufacturers, whose goods will seem relatively cheaper in foreign countries. However, given the extent of relevant global supply chains, notably in industries such as the automotive and aerospace sectors, these gains have been offset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

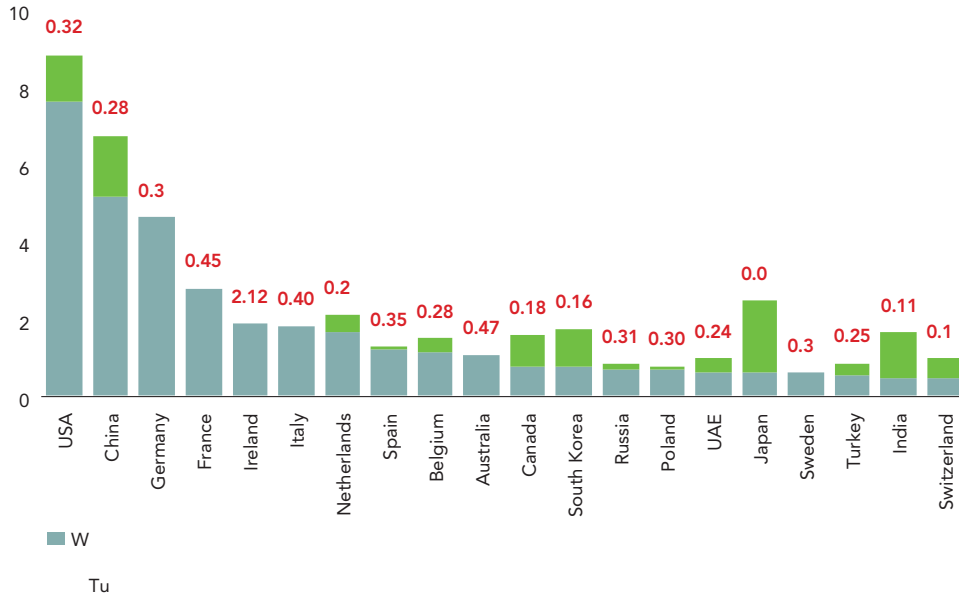
FDI S **Lab** : **U** a **P** (2016)



Source: ONS & MEF

W M_a T a P a _ (2017)

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



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. F S Lab Ma

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.

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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.

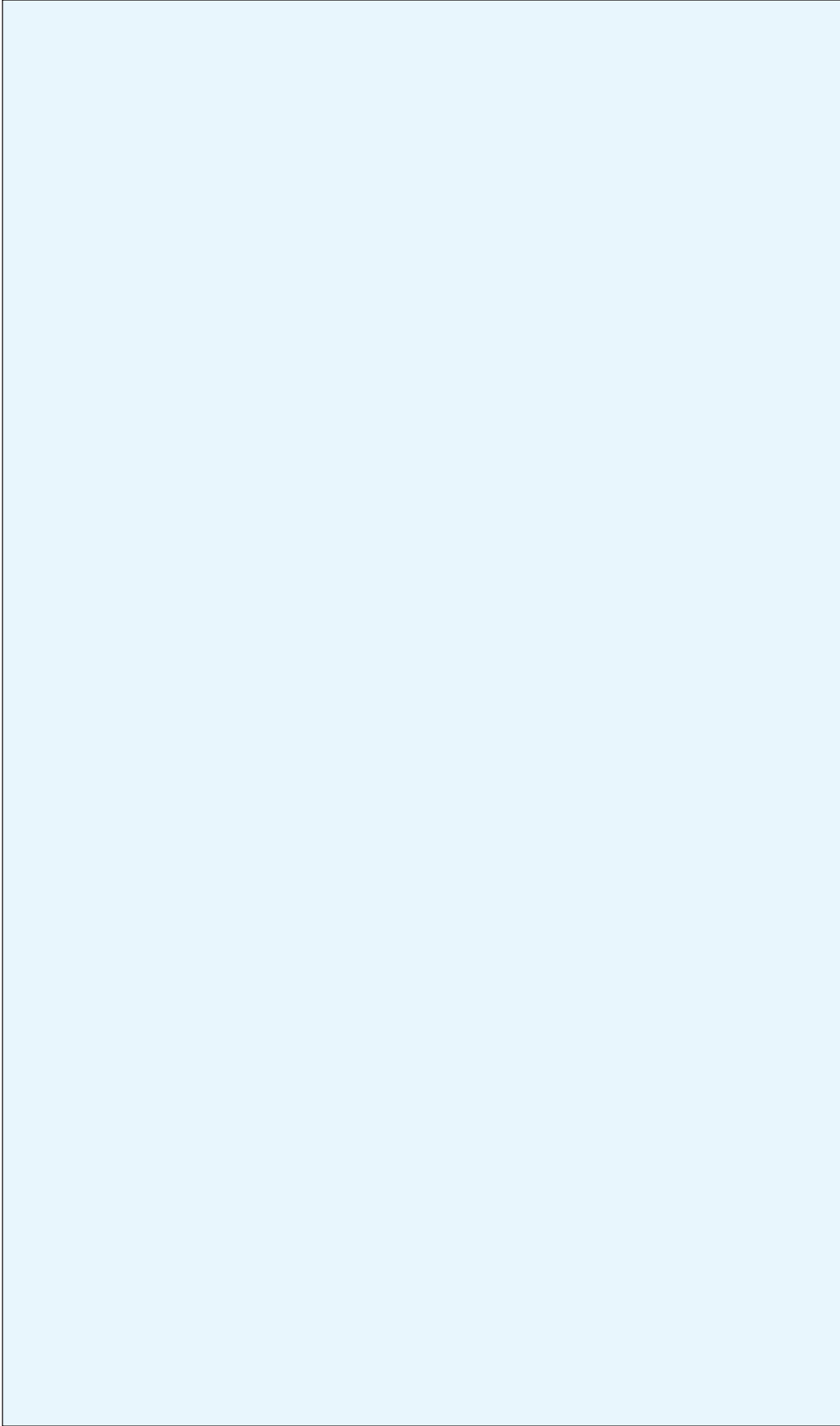
Shortage of skills across the country, and particularly in the West Midlands, has been highlighted by many stakeholders across the region as a major concern for businesses, which has been amplified by Brexit. In the Local Government Association's report 'Brexit: moving the conversation on' the need for 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 than a simple lack of available

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

% Registered Electors by Country of Birth (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
West Midlands	83.6	2.8	0.5	1.1	0.3	0.0	0.4	1.1
Worcester	1.7							



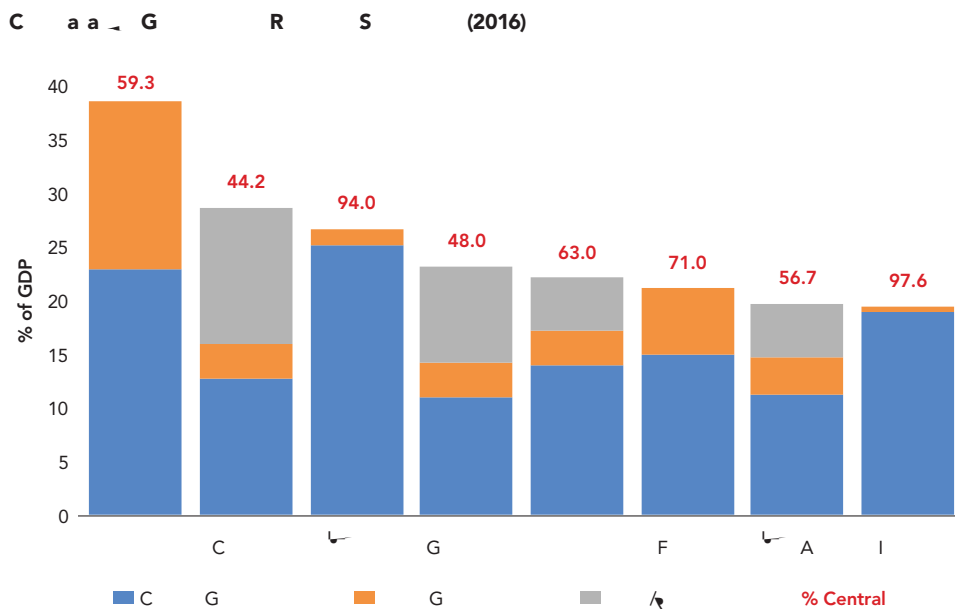
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If a formal treaty is not signed by the March 2019 deadline, then all EU rules and

13. Funding Sustainability

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 on local government finance and the capacity to 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 Barnett 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.



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

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.

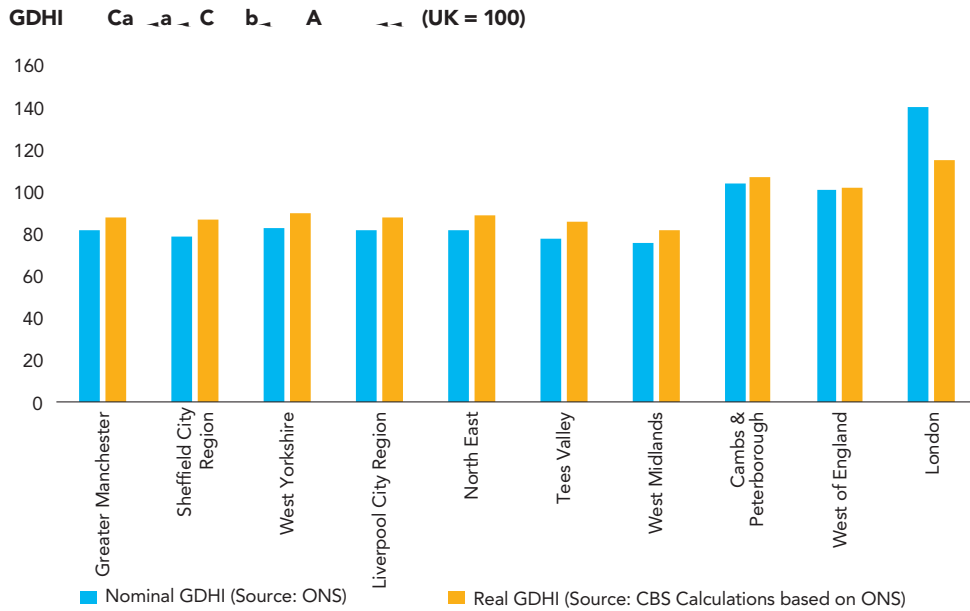
The Core Cities have proposed that the Shared Prosperity Fund should be equivalent to current EU funding flows of approximately £10 billion, at current foreign exchange rates, over an equivalent programme period of 7 years. The link with GDP growth was not made explicit; and should the economy grow, 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 £3bn 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

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.



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

U & **B**

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.

14 Public Services

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 link63 Td(e)- 12(n)6(. B15(h)1(i)-6(s i)-6(s d)8)-10(d r)ticroowe(e)-8(r)-5(e i)11(u)-2(l)-5 Tc 10(d) 57.404 0 Td(2)4(TJ-0.025

(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

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.

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 procure 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. 4 6d-419d t̄ ̄retc6n43(c)-15(d)125()̄676(o)

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.

Since 2010 Birmingham Trading Standards front line staffing resources have been reduced

15 WMCA O

15.1 Birmingham

Table 15.1: 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

15.2 C

T 20 L a Q C (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 D

T 20 L a Q D (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

15.6 Wa a

T 20 L a Q Wa a (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 d(l)4(n)nntnaf948	
		8	
		9ltampingoa-formingfiel	

15.7 W a

T 20 L a Q W a (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.

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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

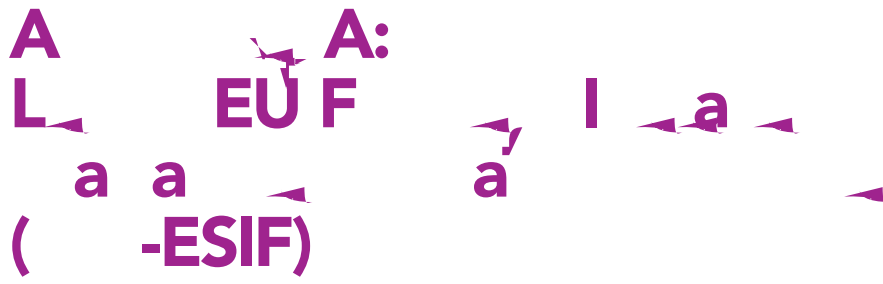
HGV Heavy Goods Vehicle

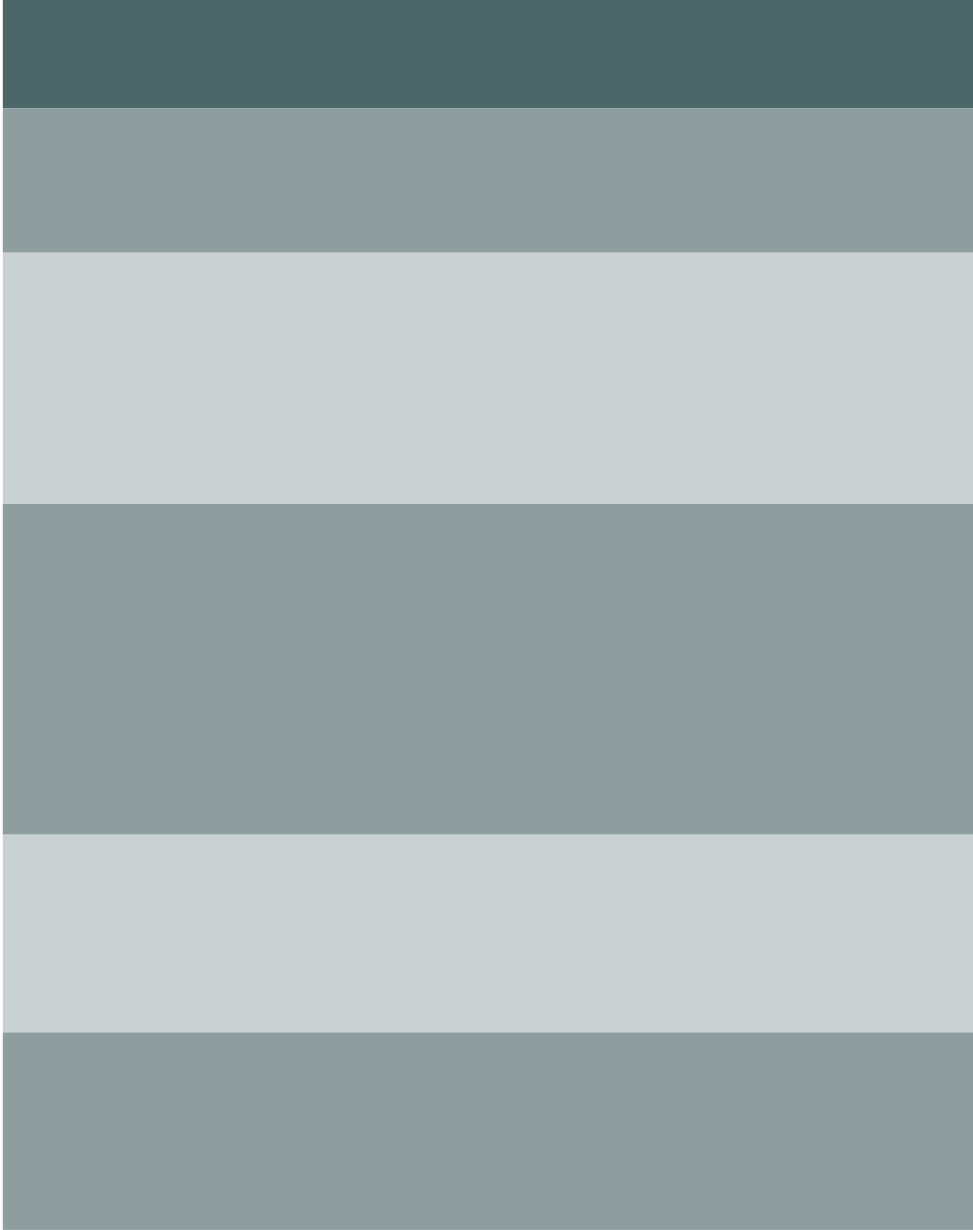
HMRC Her Majesty's Revenue and Customs

Horizon 2020 EU research and innovation funding programme covering 2014-2020

IMF International Monetary Fund

Intermediary (d C)--1(e)-2(d)-1(i)2(c)9(Ho)5GR)7--1(e)-2(d)-1(i)2(c)9(Ho)5GR)7--1((p)-11(l)-8(e6(s -9(na) spanActualTextREF0009)





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 F50.0.785eurp23vu1(q 1 0 0 -7(u31(l)-2a)/T1287(u)-16(n)-16(d)-5(p)-19(04 0 Td (i)--10(w a)-16(d8sl04 0l (e)8sJ -)-12(l Tf -) 3)-18(9(vi)8Td f)- pert4-er(t)-th rmin6(0)3C(l222o(l i)m 1 7(mc)1/T1_41)-2 Ael subsidin th P 26(o)(t4-l7(87(u)-21(b)472y /T1, w a-25 h28(



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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b \leftarrow \leftarrow **a** \leftarrow \leftarrow **j** \leftarrow \leftarrow **.**