McKinsey&Company

Productivity: The route to Brexit success

Discussion paper

Authored by:
Jonathan Dimson
Vivian Hunt
Daniel Mikkelsen
Jay Scanlan
James Solyom

Productivity: The route to Brexit success

The United Kingdom's post-Brexit future is uncertain. But one thing is clear: boosting economic growth will depend heavily on addressing long-standing productivity challenges.

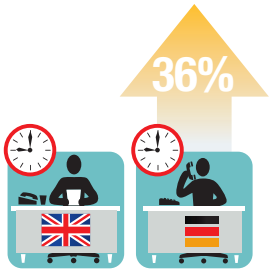
The UK government has committed itself to implementing the outcome of the June 23, 2016 referendum, when voters opted to leave the European Union. The big question is: what next? Most forecasts of how Brexit will affect the economy are pessimistic. Yet the economy has long faced challenges, such as weak growth, uneven wealth creation, and low productivity.

In this discussion paper, we examine the state of the British economy, especially its productivity record, before the Brexit vote. We then suggest six ways to improve the country's economic fundamentals, so that it can adapt as smoothly as possible to whatever agreement is reached on the United Kingdom's future relationship with the European Union.

The vote for Brexit was a shock and has led to a high level of uncertainty for business. Nonetheless, Brexit can be a catalyst for positive change if the challenges ahead are addressed with imagination and determination.

A two-speed economy

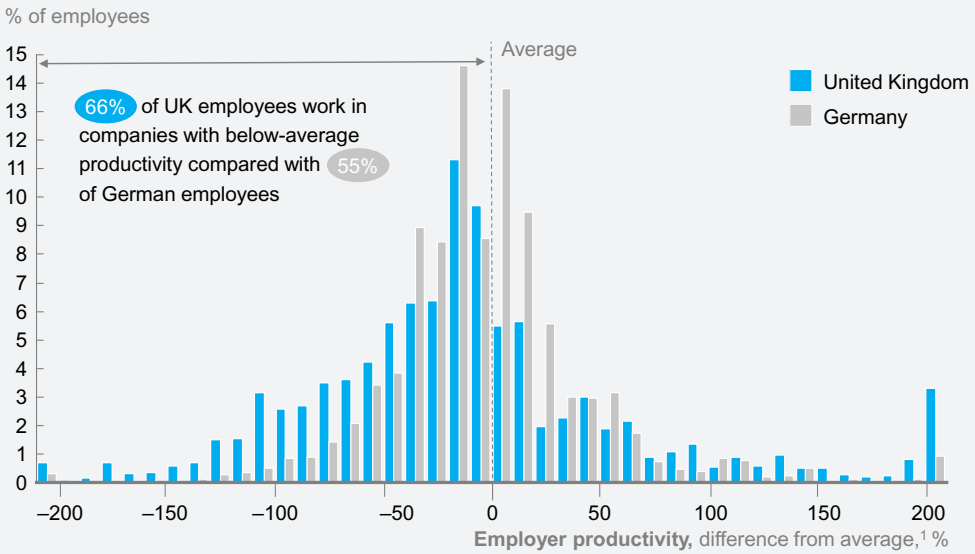
A survey of the country's regions and sectors shows an economic divide. On one side is London and high-productivity, traded sectors, such as pharmaceuticals, financial services, and technology. These sectors have accounted for the majority of GDP growth in the past decade. On the other side are slow-growing regions and lower-productivity industries, such as retail, construction, and government.



This division contributes to a large and growing "productivity gap" between the United Kingdom and other developed economies.[1] The United Kingdom has the second-lowest productivity among G-7 countries, well behind Germany and the United States. For every hour worked by a British worker, a German worker produces 36 percent more.[2] Much of this gap is due to the drag created by Britain's large cohort of low-performing companies. Two-thirds of UK employees work for companies whose productivity is below average, adjusted for industry and size of company (Exhibit 1). The productivity challenge is also a geographic one. There is a wide variation in productivity among different regions in the United Kingdom, and also within them.

Exhibit 1

A large majority of UK employees work in companies with below-average productivity.



1 Average is weighted based on subsector and size. Productivity is measured by estimated gross value added (GVA) [earnings before interest and taxes + employee costs] ÷ number of employees; estimated GVA is regressed on a range of variables to control for subsector and number of employees using a weighted-least-squares method (with employee numbers as the weighting).

Source: Orbis, 2013 data

[1] In this report, all productivity references are to labor productivity, defined by the Organisation for Economic Co-operation and Development (OECD) as output per unit of labor input.

[2] According to "International comparisons of productivity - final estimates: 2014," UK Office for National Statistics (ONS), February 18, 2016, ons.gov.uk.

As American economist Paul Krugman puts it: "Productivity isn't everything, but in the long run it is almost everything."

Why does this matter? Productivity is the fundamental driver of national prosperity, and hence of personal incomes and tax revenues. The United Kingdom's weak productivity has already hit households: recent research suggests that a large majority of them had flat or falling income from 2005 to 2014, creating the possibility that children in Britain will grow up to be poorer than their parents.[3] Productive economies also generate strong export performance and pay their way in the world. As American economist Paul Krugman puts it, "Productivity isn't everything, but in the long run it is almost everything."[4]

Potential new challenges

Some forecasters have predicted that Brexit will lead to a slowing of the United Kingdom's GDP growth during the next few years, although early forecasts of a dramatic fall in 2016 or 2017 output have been scaled back. This shock could exacerbate existing weakness in demand, a phenomenon that is common across many Western economies.

The potential economic impact of Brexit in the medium term (until 2030) will vary significantly, depending on the terms of the exit. Joining the European Economic Area (the Norwegian model) is widely believed to be the least costly, while a Free Trade Agreement (the Canadian or Swiss model) is seen as better than reverting to World Trade Organization rules (the China model). In brief, the more difficult it is for UK companies to gain access to the single market, the greater the medium-term economic hit will be to the United Kingdom.[5]

Brexit will disproportionately harm the productive, traded sectors of the economy—Britain's economic lifelines.

The consequences are expected to include a reduction in trade (as a result of higher tariff and non-tariff barriers), reduced foreign direct investment (FDI), and lower availability of skills (due to changes to immigration policy). Only a small proportion of projected GDP losses, however, is forecast to come from these direct effects. The vast majority is expected to come from the knock-on effects on UK productivity.[6] Reduced trade, FDI, and the movement of people between the United Kingdom and the European Union could lead to less innovation, less investment, less competition, less access to talent, and fewer economies of scale. This will disproportionately harm the productive, traded sectors of the economy—Britain's economic lifelines.

[3] For more, see "Poorer than their parents? A new perspective on income inequality," McKinsey Global Institute, July 2016, on McKinsey.com.

[4] Paul Krugman, *The Age of Diminished Expectations*, first edition, Washington, DC: The Washington Post Company, 1990..

[5] The literature considering the economic impact of various post-Brexit scenarios is comprehensively reviewed in Carl Emmerson, Paul Johnson, and Ian Mitchell, *The EU single market: The value of membership versus access to the UK*, Institute for Fiscal Studies (IFS), August 10, 2016, ifs.org.uk.

[6] Ibid.

Brexit thus exacerbates the United Kingdom's productivity challenge. The historical challenge was how to lift up the less productive sectors, companies, and regions. This challenge could become more difficult, because a reduction in trade and a weakening of the currency could lower the competitive pressures on domestic businesses. The new challenge is to also support the most productive, traded sectors of the economy.

In short, Brexit could both compound the United Kingdom's demand-side weakness in the short term and broaden the United Kingdom's long-standing productivity problem in the medium term. While there will be a real need to address the demand-side issues, the economic shock of leaving the European Union means there is a more urgent need to address long-standing constraints on the supply side. In that regard, Brexit could provide policy makers with the impetus to boost productivity.

New freedoms

After the United Kingdom leaves the European Union, its greatest opportunity may lie in increasing economic engagement, especially trade, with the rest of the world. Britain could be released from Europe's common external tariff and be free to negotiate its own trade agreements. To date, the European Union has ratified trade deals with countries that account for less than a third of the value of the United Kingdom's trade with non-EU countries. That means a large proportion of UK imports and exports are not covered by a trade deal and are subject to tariff and non-tariff barriers. An International Monetary Fund study suggests that negotiating new free-trade agreements that reduce all tariffs to zero could lead to productivity gains worth more than 0.6 percent of GDP.[7] Interestingly, a significant proportion of the benefits could be delivered unilaterally, through the reduction of import tariffs. Unilateral reduction of import tariffs could provide UK consumers and businesses with lower-cost and better-quality imports, generate increased competition, and stimulate innovation.

The bigger prize rests in reducing non-tariff barriers, for example, by harmonising product standards, licensing, or other regulations, with non-EU trading partners. A detailed study examining the non-tariff barriers between the European Union and United States estimated they are equivalent to a 10 percent tariff.[8] For the United Kingdom, this suggests that removing them could translate into a 0.9 percent boost to GDP. Given that UK trade with non-US, non-EU trading partners is almost double its trade with the United States, the total potential gain could be significantly larger. However, negotiating a reduction in these barriers could be challenging and time consuming.

After leaving the European Union, the greatest opportunity can be found in increasing the United Kingdom's economic engagement, especially trade, with the rest of the world.

[7] JaeBin Ahn et al., *Reassessing the productivity gains from trade liberalization*, International Monetary Fund working paper number 16/77, March 2016, imf.org.

[8] Koen G. Berden and Joseph Francois, *Non-tariff measures in EU-US trade and investment—An economic analysis*, ECORYS, 2009, trade.ec.europa.eu.

Further post-Brexit benefits could be realised through targeted deregulation. To a great extent, this will depend on the political viability of deregulation and the extent to which equivalent regulation is required to retain access to EU markets. Analysts have highlighted potential opportunities in relaxing the Working Time Directive as well as environmental, climate-change, and energy-efficiency regulations, such as the Renewable Energy Strategy.[9] Other UK regulations, including restrictions on state aid, government procurement, value-added tax, and competition law, are more stringent than those set by the European Union. Since these regulations were "gold plated" voluntarily, there may be limited appetite to change them after Brexit.

Thus, there are potential benefits available to the United Kingdom from these new freedoms, especially for the traded sectors. However, even when taking an optimistic view, most commentators believe these will not outweigh, with respect to GDP, the costs of Brexit. Making up the shortfall will require addressing the United Kingdom's long-standing productivity challenge. Based on research and analysis that McKinsey has undertaken in the past few years, we have identified three medium-term and three long-term priorities. All of these are important, and all have been discussed at length over recent years. The prospect of Brexit makes them more urgent, but no easier to deliver. A renewed focus on all six priorities will likely be needed to generate significant productivity gains. Individually many of these priorities could contribute more than £100 billion per year to the UK economy. We believe that collectively that there is an opportunity worth at least £250 billion per year, or more than 10 percent of the United Kingdom's GDP.

[9] *"Top 100 EU rules cost Britain £33.3bn,"* Open Europe, March 16, 2015, openeurope.org.uk.

Making Brexit work for business: Six areas of focus

Although UK companies may feel a financial impact from Brexit, it could also create opportunities. We have identified six areas of focus for UK companies:

1) Prepare for an intense war for talent. Most analysts believe Brexit will be followed with restrictions on migration. This perception is already prompting changes in the attitudes of potential new hires. Companies must refine their hiring practices and answer recruits' concerns, including the pound sterling's depreciation.

2) Improve workforce productivity to mitigate upward wage pressures. After Brexit, a reduction in immigration is likely to make labour more expensive. To counter this, companies should streamline their operations and deploy talent carefully. Companies can gauge their productivity and look for improvements using the "How Good Is Your Business Really" tool, developed by the Sir Charlie Mayfield productivity movement.[1]

3) Improve competitiveness to counteract the impact of trade barriers. Potential tariffs and non-tariff barriers with EU trading partners will increase costs and transit times. Trade barriers may also protect some domestic companies from foreign competition, which may drive up prices and lower the quality of goods and services available. Businesses need to become more competitive by lowering costs and pursuing innovations, and use the current depreciation of the pound sterling as an opportunity to take action.

4) Re-orient international trading strategies to the world beyond Europe and re-assess strategies for trading with the European Union. Brexit makes it important for UK companies to deepen their trading relationships outside the European Union while managing the increased costs of trading with partners in the European Union. Businesses can adjust by shifting their imports (including supply chains) and exports toward emerging and developed markets other than Europe.

5) Play a part in shaping the future. The political and regulatory decisions that are made over the next few years will shape the future for a long time to come. Businesses should decide what positions to take on matters affecting their industry, and how to express them. For example, is it favourable for a company if UK regulations match EU regulations or if UK regulations are less stringent?

6) Assess immediate opportunities to invest in the UK. The current pound sterling depreciation may create opportunities for businesses with balance sheets outside of the United Kingdom to invest in the country. This could be through increasing existing investments, looking for new ones, or deepening collaboration with British organisations.

---

[1] "How Good Is Your Business Really" tool, Productivity Leadership Group, howgoodisyourbusinessreally.co.uk

Medium-term priorities

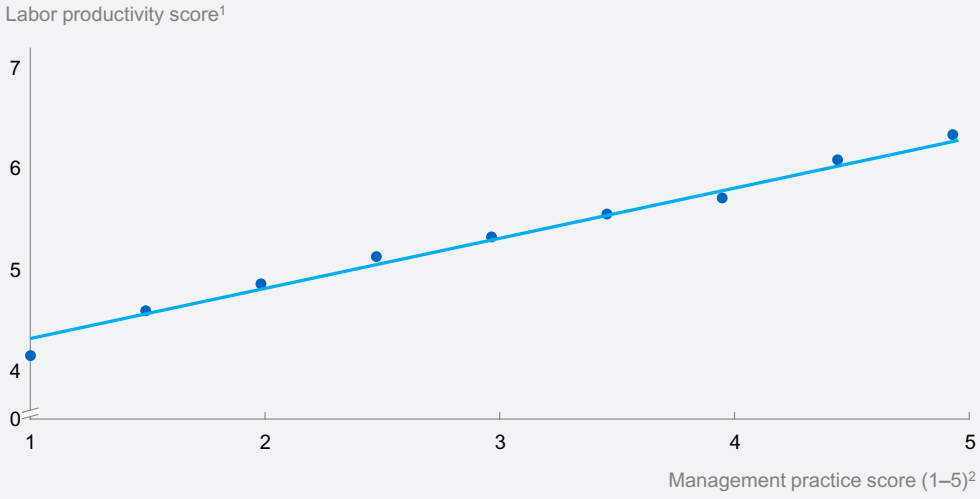
Three policy priorities could help increase the United Kingdom's productivity in the medium term.

Improve business and management practices.

In conjunction with the Centre for Economic Performance at the London School of Economics and partners from Stanford and Harvard universities, McKinsey has studied 14,000 organisations in more than 30 countries for more than ten years.[10] This research has assessed and scored a wide range of management practices and has found that higher-scoring companies have higher productivity, market value, growth, and resilience (Exhibit 2). In short—and unsurprisingly—good management is strongly linked to good performance. We also found that there was little to no correlation between executives' own assessment of their management and the assessments that came out of the study, suggesting that the businesses that are falling short don't know it.

Exhibit 2

Among companies, good management practices are associated with high labour productivity.



1 Based on sales per employee. Data are based on a survey of 4,000 companies globally.
2 Management practice score based on interview-based assessment of 18 topics in 3 broad areas: shop-floor operations, performance management, and talent management. Companies are grouped in 0.5 increments of management practice score.

Source: Nick Bloom, Stephen Dorgan, John Dowdy, and John Van Reenen, *Management practice & productivity: Why they matter*, a joint report from Centre for Economic Performance and McKinsey, July 2007, cep.lse.ac.uk.

Improving the performance of low performing firms may be the single most effective way of improving Britain's economic performance: worth £130 billion or 7% of GDP.

With respect to overall performance, the study placed the United Kingdom behind Germany, Japan, Sweden, and the United States, but slightly ahead of France, Italy, and

[10] Nick Bloom, Stephen Dorgan, John Dowdy, and John Van Reenen, Management practice & productivity: Why they matter, a joint report from Centre for Economic Performance and McKinsey, July 2007, cep.lse.ac.uk.

Poland. In Britain, evidence from the Productivity Leadership Group (an initiative led by prominent business leaders to boost business productivity) shows that a large number of low performers drags down overall performance.[11] Improving the performance of these companies may be the single most effective way of improving Britain's economic performance. Leaving aside the top 25 percent of companies, if the other 75 percent were each able to match the performance of businesses ranked 10 percent above them, then in 2013 they could have produced an additional £130 billion in goods and services—equivalent to 7 percent of GDP.

The Productivity Leadership Group's research identifies six areas in which companies can make productivity-enhancing improvements: digitisation, commercial excellence, talent management, planning for the future, leadership, and operational efficiency. Policy makers can play a part in encouraging better management by having a strong competition and consumer-protection regime, encouraging companies to export, reducing restrictions on imports, promoting the adoption of digital and other new technologies, and supporting training programmes for workers.

Increase female participation in the economy.

If women participated in the British economy as much as men, it could add £600 billion to GDP in 2025. More realistically, if each region were to add women to the workforce at the fastest pace it achieved during the past decade, then the United Kingdom would add £150 billion to its GDP in 2025.[12] This is equivalent to 0.7 percent additional GDP growth per year for the next ten years. While every region in the United Kingdom could make gains in this respect, the largest opportunities are in London and in northwestern and southeastern England.[13] Realising those opportunities would require looking at policies such as flexible working schemes, child care, and "returnships" to help women return to work after time away.

If each region matched the fastest pace of improvement in female participation, the United Kingdom could add £150 billion to GDP in 2025.

Boost public-sector productivity.

Since 1997, public-sector productivity growth (as measured by the Office for National Statistics) has been flat, falling behind the rest of the economy.[14] A 10 percent productivity improvement across government could yield £50 billion per year. Money could be better spent through more rigorous, evidence-based prioritisation of policy and funding, and more strategic management of the government's balance sheet, including property and asset disposals. Government departments could improve efficiency by promoting a more flexible workforce, both within and across departments. When it comes to functional capabilities, the public sector should develop private sector–style procurement and supply-chain expertise, strengthen the management of capital projects, and invest in big data and advanced analytics to streamline operations and inform decisions.

A 10 percent productivity improvement across government could yield £50 billion per year.

[11] *How good is your business really? Raising our ambitions for business performance*, Productivity Leadership Group, howgoodisyourbusiness really.co.uk.

[12] For more, see "How advancing women's equality can add $12 trillion to global growth," McKinsey Global Institute, September 2015, on McKinsey.com.

[13] This calculation is a supply-side estimate of the size of the additional UK GDP available from closing the gender gap by increasing female participation in the labor force, increasing the number of female hours worked, and moving women into more productive sectors. It does not assess the demand outlook for this labor.

[14] Although public-sector productivity is hard to measure, *Atkinson Review: Final Report*, New York, NY: Palgrave Macmillan, 2005, recommends methods and approaches that could be used to measure UK government output.

Long-term priorities

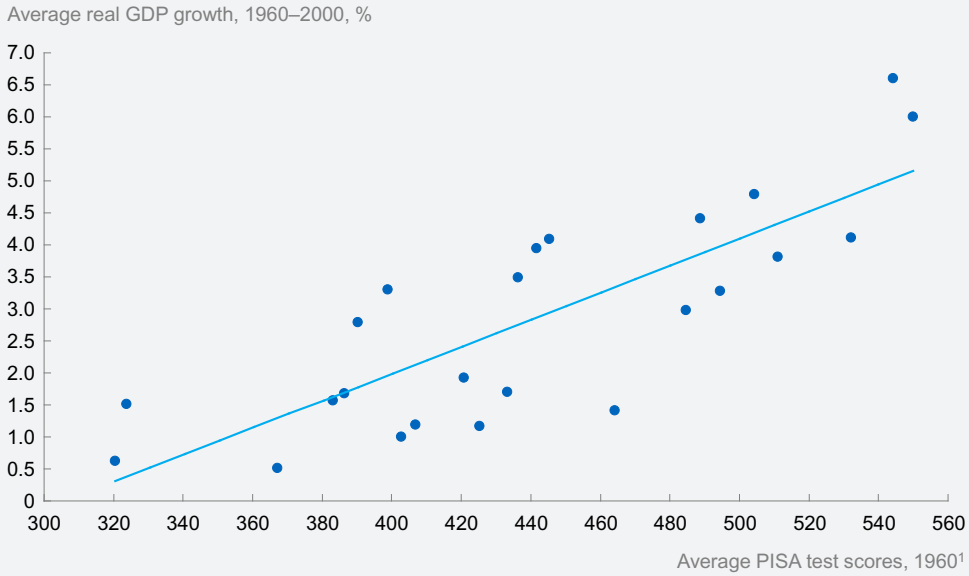
Improving education, reducing skills mismatches, and increasing the housing stock are all important to improving UK productivity. Together and separately, these priorities would also help increase social mobility and could help correct regional imbalances. They will likely take more than a decade to deliver results.

Improve educational quality.

In the 2012 Programme for International Student Assessment (PISA) test of 65 countries, the United Kingdom performed slightly above the average of Organisation for Economic Co-operation and Development (OECD) countries. As with businesses, however, there is a "long tail" of low-achieving students who fall behind early and never catch up. Among those children who qualify for free school meals in England, the proportion reaching the expected level in maths falls to 67 percent at age 12 from 81 percent at age 7. There is a strong statistical link between economic growth and PISA scores (Exhibit 3). A 50-point rise in the average PISA score is associated with a 0.93 percent higher annual growth rate. Assuming the United Kingdom could achieve a 25-point PISA improvement—something several countries have done—that could bring a 6.0 percent GDP increase after 50 years (£110 billion) or a 0.5 percent increase in long-run annual GDP growth.

Exhibit 3

A country's level of educational attainment is strongly correlated with its economic growth.



[1] Based on Hanushek and Woessmann (2012) economic modeling of educational attainment, measured through Programme for International Student Assessment (PISA) scores and economic growth. From historical analysis, they find a 50-point higher average PISA score is associated with a 0.93% higher annual growth rate.

Source: Confederation of British Industry, 2012; Hanushek and Woessmann, 2012

As with businesses, there is a "long tail" of low-achieving students who fall behind early and never catch up.

McKinsey has supported the Confederation of British Industry in understanding how best to approach education reform.[15] The recommendations that emerged from this work emphasise having a clear sense of the skills and behaviours that schools are expected to produce, and then ensuring that school leaders are held accountable for delivering them. It is also important to engage parents and the community, especially in the early years; to devolve power at the school level; and to create a culture of rigour.

Reduce skills mismatches.

Relative to its OECD peers, the United Kingdom has a high rate of mismatch between workers' existing skills and those required for their job. Overall, 24 percent of workers have mismatched skills, with 10 percent having a level of proficiency lower than is required. This phenomenon is partly linked to a generally poor awareness of the returns to education. Only 26 percent of UK secondary-school graduates knew which disciplines led to strong job prospects when beginning to study at university, compared with 42 percent in Germany. Despite a shift toward industries with a greater proportion of higher-skill jobs, 4.5 million people in the United Kingdom remain stuck in low-paid, low-potential occupations. A disproportionate number of those working in low-pay sectors are young. When the OECD simulated the gains to labour productivity from reducing skills mismatches to OECD best-practice levels, it estimated the economic benefits to the United Kingdom at £90 billion per year.

Closing the skills gap starts with data, ensuring that education providers and prospective students have the information and incentives they require to match skills with near-term demand, especially for middle- and high-skilled occupations. Industry, education providers, and students need to collaborate more effectively. Improving the way companies work with local providers, combined with a national modularised syllabus linked directly to employer needs, would improve and integrate skills development. It is also important to create pathways out of low-paid employment by supporting adult retraining and improving how jobs and vacancies are publicised.

Relative to its OECD peers, the United Kingdom has a high rate of mismatch between workers' existing skills and those required for their job. Overall, 24 percent of workers have mismatched skills, with 10 percent having a level of proficiency lower than is required for their job.

[15] *First steps: A new approach for our schools*, Confederation of British Industry, November 1, 2012, cbi.org.uk.

Increase the stock of affordable housing.

The lack of affordable housing is a global problem, but it is particularly acute in the United Kingdom. The McKinsey Global Institute has identified four approaches that can help tackle it: unlocking land supply, reducing construction costs, improving operations and maintenance, and lowering finance costs.[16] All these approaches can be applied in the United Kingdom. London First, a not-for-profit group that includes many leading businesses and universities, researches long-term issues related to London and has identified housing and effective transport as critical factors for the city to continue to attract the talent it needs to stay competitive and dynamic.

The challenge is pressing. Creation of new homes has decreased steadily while average real house prices in England and Wales have doubled since 2002.

The challenge is pressing. Creation of new homes has decreased steadily (to 156,000 in 2015 from 360,000 a year in 1970), while average real house prices in England and Wales have doubled since 2002. Increasing the housing supply and reducing the cost of housing could help increase productivity by enhancing labour-market flexibility, reducing mortgage spending, and redirecting domestic and foreign investment to more productive activities.

■ ■ ■

Leaving the European Union is a leap into an uncertain future. It may well exact an economic cost. To cushion the blow—indeed, maybe even to do better than before—the United Kingdom needs to use Brexit as a catalyst to tackle its long-standing productivity problem. This cannot be achieved through government interventions alone. It must be a shared responsibility, requiring commitment and partnership between government and businesses, large and small.

Vivian Hunt and **Daniel Mikkelsen** are senior partners in McKinsey's London office, where **Jay Scanlan** and **Jonathan Dimson** are partners, and **James Solyom** is a consultant.

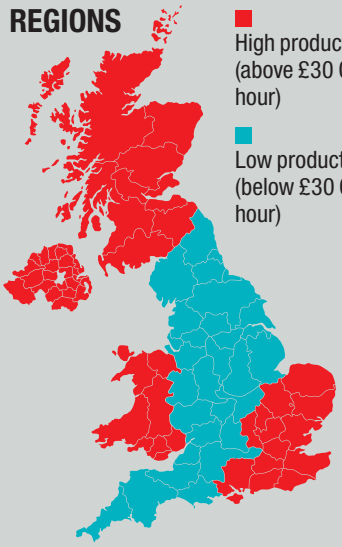
The authors wish to thank Tera Allas, Kate Aquila, Ella Flaye, Ian Gleeson, Dhara Shah and Jordan Ward for their contributions to this discussion paper.

[16] For more, see "Tackling the world's affordable housing challenge," McKinsey Global Institute, October 2014, on McKinsey.com.

Productivity: The route to Brexit success

The productivity challenge: a two speed economy

REGIONS



- High productivity (above £30 GVA / hour)
- Low productivity (below £30 GVA / hour)

SECTORS

Lower-productivity domestic industries
such as retail, construction, and government

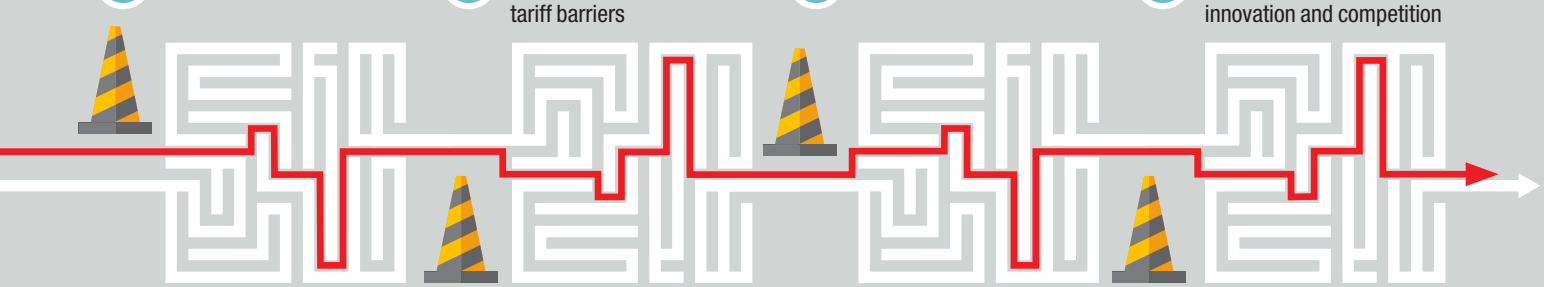
Higher-productivity traded sectors
such as pharmaceuticals, financial services, and technology

COMPANIES

Two-thirds of UK employees work in companies with below average productivity

Potential new challenges

1. Reduced **European immigration**
2. Reduced **trade** due to new tariff and non-tariff barriers
3. Lower **foreign direct investment**
4. **Knock-on effects on productivity**, such as less innovation and competition



Six priorities for the UK to boost productivity

The opportunity across these six priorities is at least £250bn (over 10%) of GDP

November 2016

Design contact: VME Europe
www.mckinsey.com