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Business Productivity Review
The Department for Business, Energy and
Industrial Strategy (4th Floor)
1 Victoria Street
London, SW1H 0ET

06 July 2018

Business Productivity Review

Dear Sir/Madam,

I am writing to you, in my capacity as Vice-Chair of the Royal Society of Edinburgh's (RSE) Business Innovation Forum, regarding the Call for Evidence on Business Productivity. This RSE Forum brings together key business stakeholders and a number of the Society's Fellows and is chaired by Professor Iain Gray of Cranfield University. The objectives of the Forum are to produce policy responses and to undertake work related to issues in business and the economy, while also supporting the Society's work to improve innovation and entrepreneurialism in Scotland through the RSE's very successful Enterprise Fellowships programme.

Currently the Forum is conducting work on analysing Scotland's economic prospects. Much of this work is closely connected to the contents of this Call for Evidence and will produce output on the 3 streams of Productivity, Commercialisation, & Innovation and Skills. I am chairing the productivity stream and the other two streams are chaired by Shonaig Macpherson and Professor David Bell respectively. In the initial stages of this work the RSE has been engaged with several key stakeholders across this area including the Scottish Government, the Economic and Social Research Council and the Scottish Nationalist Party's Sustainable Growth Commission chaired by Andrew Wilson. The publicity surrounding the Growth Commission has helped to put the economy and issues such as business productivity and the sustainability of public finances at the forefront of political debate in Scotland.

While the consultation explicitly states that the devolved nations have their own economic development powers and agencies, the RSE would argue that the policies set out in the UK Industrial Strategy are applicable to Scotland and have the potential to significantly and beneficially influence both the economy and business environment in Scotland. It is important that the UK and Scottish Governments determine how best to co-operate in a range of areas, given the complex split between devolved and reserved policy powers.

Due to the work that the Forum is undertaking in this area it has been agreed to provide a response in the form of this letter, which we hope will help to provide an informed but objective Scottish perspective on some of the issues and concerns regarding business productivity. We would very much like to maintain contact with BEIS, as well as the Scottish Government, as this debate unfolds.



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As the consultation states, the UK has relatively poor productivity growth in comparison to competitor countries in the OECD and the G7. The gap between the UK and some of these main competitor nations is considerable and could increase if problems are not addressed by government, their agencies and business. Despite our inability to maintain productivity growth to similar levels of our main competitors we should note that we have maintained a stable position in international rankings. From 1982 up to 2016 the UK has maintained a similar ranking in international comparisons. This can be viewed as to some extent positive, however it is critical that we achieve a notable enhancement in our performance to keep up with competitor nations as they gradually improve their productivity.

Analysing these rankings shows the key performers who have sharply enhanced their productivity over this time frame. For instance, Norway experienced a sharp increase from the middle of the rankings in 1982 to the top 5 in 1997 and has since maintained a strong position. Denmark has risen gradually up the charts since 1982 and similarly maintains a strong position in the top 10. The most notable improvement in productivity is shown in Ireland which initially experienced lower levels of productivity compared to the UK, but from 1997 rose sharply to the top 5 performing countries.

There will not be a simple solution to the productivity puzzle and attempting to replicate the experience of a single country will not be the answer to the UK. However, careful comparative analysis into the standout performing nations such as the ones mentioned above could help to identify possible interventions that should benefit the UK.

Specifically looking at the UK and Scotland in more detail, it is clear the recent UK productivity growth has been driven by only a small number of regions, such as London, the South East and Scotland – albeit in the most recent figures Scotland's productivity has declined. Despite this Scotland's productivity has maintained similar productivity growth with the rest of the UK throughout recent years, consistently being the 3rd best performing region/nation in the UK.

The recent report from the Bank of England on the UK Productivity Problem identified that productivity growth is dominated by the top 0.1 per cent and top 1 per cent of companies in the UK. However, this data does not say if companies are large or small in terms of turnover or number of employees. The long tail of companies in the 99% across the UK shows very little productivity growth, and there are also clear sectoral and regional differences which have the potential to create imbalances within the UK economy.

Compared to the other regions of the UK, Scotland's performance is around the average with the top 0.1 percent growing productivity by 13 percent and the top 1 percent by 7 percent from 2004 and 2014, while 99 percent of companies failed to achieve any growth over the same period. Notably, there is a clear difference in the performance of sectors which ultimately influences the overall performance of the regions. The top 0.1 percent and 1 percent of companies in the East Midlands achieved by far the highest productivity growth over the period, growing 30 percent and 15 percent respectively. This may be down to companies in pharmaceutical, automotive and manufacturing being based in the region – some of the sectors that have achieved high productivity growth are manufacturing, transport, and professional and scientific services¹. This illustrates that productivity does vary between sectors which consequently affects productivity in places. To address this more needs to be done throughout government and businesses to help smaller business take the next step and improve their productivity. At the same time, it will be important in analysis and policy consideration to distinguish between the low productivity

¹ Haldane, A (2018). 'The UK's Productivity Performance Problem: Hub No Spokes'. Bank of England, London.



experience of new companies and that of many companies, large and small, across such sectors as retail, hospitality and construction.

To achieve significant productivity growth across the whole of the UK we need to improve the performance of the 99 percent of companies. The creation of new businesses will add to the long tail of small low productivity firms, as the consultation states most new businesses appear to begin their life with poor productivity. From the evidence provided it is notable that businesses struggle to take the next step to expand; and we believe that this is more notable in Scotland than the norm. As in our initial work and discussions with stakeholders we understand that a lack of dynamic and ambitious leadership and risk taking to be the main reasons.

To help identify and differentiate the problems and possible opportunities in Scotland more and/or improved data may be necessary. The currently available data allows us to examine Scotland's performance as compared to the sub regions of England. While this is a useful indicator of the overall performance, we ideally need a greater amount of data which breaks down the regions of Scotland. With more data on the regional breakdowns of productivity then we can measure the distribution of productivity across the country, relating perhaps to sectoral differences. It is most welcome that the new Strategic Board for Enterprise and Skills Agencies in Scotland is now looking to produce more data that will help identify the distribution of productivity and the main problems. It is hoped that with more data will come improved analysis and greater opportunities for the creation of policies that will address our disappointing productivity performance.

Growth in productivity can help rebalance the UK economy, and there are doubtless many opportunities to improve productivity in Scotland. The political discussion is now more firmly focused on inclusive economic growth and there are several developments which be viewed as opportunities for productivity growth. The new regional focus of improving city regions and rural regions through their respective growth deals presents one such opportunity. Currently all 7 cities in Scotland are covered within city region growth deals and rural areas such as Ayrshire and the Borders will also receive money through their own respective growth deals. These growth deals bring investment but also the opportunity for cooperation between public sector, academia and business to collectively improve productivity across the region and stimulate investment.

There are opportunities within research and development in Scotland. Consistently Higher Education Research and Development spending (HERD) has been significantly high, as compared to most other parts of the UK. However, Business Enterprise Research and Development spending (BERD) has been considerably lower as compared to BERD in the UK and other competitor nations. The causes of this long-standing HERD/BERD conundrum need to be better identified and addressed.

There are doubtless opportunities to improve relations between Higher Education and business, and thereby to help make the most of current investments in HERD and stimulate further BERD. Initiatives such as the University of Strathclyde new Advanced Forming Research Centre (AFRC) and its Business School programme 'Productivity Through People' are examples of how academia and business are working together to maximise output and stimulate investment. There are also opportunities to improve the commercialisation of technology through universities. Currently Glasgow and Edinburgh universities achieve the highest number of patents in Scotland with Glasgow being 36th and Edinburgh 45th in Reuters patent rankings. With focused interventions, improved cooperation between Scottish universities and increased investment, Scotland could become as successful a destination in commercialisation as the 'golden triangle' of Cambridge, London and Oxford.



The consultation document fails to mention some key concepts that are crucial to an understanding of productivity growth. For example, experience from Scottish Enterprise and elsewhere indicates that the internationalisation of businesses is increasingly important to productivity growth. Internationalisation stimulates competitiveness and if successful helps drive business growth by opening opportunities to new markets and investors. Businesses that export tend, perforce, to be more productive through having greater opportunities for growth and innovation, and from experience in new markets.

Scotland has several sectors which have strong exports, most notably food and drink and services. Over recent years exporting numbers have gradually improved; the latest data from HMRC shows that exports have risen for the last three years. Exports of goods improved by 19 percent over the last year to almost £29bn; this meant that Scotland was the only region in the UK that recorded a surplus in trade goods. However, outside the main sectors, Scotland performs poorly as not enough companies are striving to export and thereby expand their business. This inability for other sectors to achieve exports, results in Scotland's overall exports being notably worse than some other UK regions, as Scotland has the 5th highest exports in the UK².

We would suggest that Brexit has affected business confidence in exporting, with a quarter of firms choosing to focus on the UK market rather than explore opportunities in new markets. Business concern about the possible post-Brexit outcome is particularly high in Scotland, as businesses in Scotland have the 3rd highest concern of the possible outcome³. Exchange rate uncertainty was the biggest factor as over a quarter of companies cited this as a barrier to trading overseas. This was followed by rising tariffs. Nevertheless, Scotland's performance in this area has been historically poor. It is critical that more businesses strive to export for our productivity to improve. Efforts such as the UK Government's 'Exporting is Great' campaign are supported by the RSE but a more coordinated approach to driving enhanced exports needs to be developed, with efforts involving both the Scottish and UK Government and their associated agencies.

The relationship between productivity and inclusive growth/equality should not go unnoticed. These concepts are to an extent inter-related and effect one another in separate ways. We note that there are strong similarities in the international rankings for both productivity and inclusivity, with Denmark, Norway, Iceland and Luxemburg all in the top ten of both rankings. While improved productivity results in higher wages, the increasing productivity gap within the UK could translate into a more skewed income distribution.

The long tail analysis highlights that the most productive companies are thriving and the least productive ones (which are the majority) are failing to keep up⁴⁵. This gap between firms and in the case of the UK, locations, is causing a wage gap between sectors and places. This is evident through the latest ONS data showing that London and the South East have significantly higher average wages per week, the 7 highest earning locations are all in the South East⁶. 'Place' is one of the 5 foundations of the UK Industrial Strategy, as strongly supported by the RSE, but it is important that improvements in productivity are inclusive to help address the imbalance in the UK economy.

² Office of National Statistics (2018). 'UK Regional Trade Statistics Commentary'.

³ Lloyds Banking Group, (2018). 'Business in Britain'.

⁴ OECD, (2017). 'The great divergence(s)'.

⁵ Berlingieri, G; Blanchenay, P; Criscuolo. (2017) 'A Study of 16 Countries Shows That the Most Productive Firms (and Their Employees) Are Pulling Away from Everyone Else'. Harvard Business Review.

⁶ Office of National Statistics, (2018). 'Annual Survey of Hours & Earnings'.



As mentioned above Brexit is having and will continue to have an influence on business productivity. Post-Brexit, the competitiveness of the UK as an entity will be increasingly important. The RSE would strongly support the notion that UK policies should work for the whole of the UK. The potential effect on business productivity of Brexit must be identified by the UK Government and others - preferably when we know the shape of trading relationships likely to be in place post-Brexit. Although there remains a distinct lack of clarity on this front, it seems likely that Brexit will lead to higher costs for businesses due to new trading tariffs and other constraints and/or further decline in the value of sterling. The RSE understands why business is underscoring the urgency of the need for greater certainty on Brexit for businesses, particularly on what the future relationship with the EU will be. Once more is known about the possible UK-EU (and UK-Rest of World) relationships post-Brexit, the UK Government should identify businesses and areas which may be disproportionately affected and develop possible interventions which would mitigate any affect. We envisage that the "Shared Prosperity Fund" will play a key role in this respect. For those in trading sectors the aim should be to encourage innovation, enhanced productivity, enhanced competitiveness and a desire to compete in global markets.

We appreciate that these thoughts still lack clarity as to the best way forward to enhance competitiveness. Our work is incomplete but continues. However, we do wish to stress that generally the RSE will support efforts by the UK Government (and of course the Scottish Government) to understand more about the productivity challenge and to collect evidence from individual businesses – large and small. We recently met with BEIS representatives and we are keen to work with and support BEIS in obtaining clarity over the possible linkages between the Industrial Strategy and policies and programmes in Scotland. We are also keenly aware of the need to improve the quality and quantity of education and training at all levels, since higher productivity is only possible if there is a supportive and skilled workforce. We would also draw attention to the importance of collaboration between the UK and Scottish Governments as well as any other key stakeholders, such as the enterprise and skills agencies and business organisations. Achieving the answers to the productivity challenge and balancing the UK economy will require a significant level of cooperation and collaboration which the RSE strongly encourages. With policy work through the Forum and Education Committee as well as Enterprise Fellowships and other related worked the RSE brings together stakeholders across all the relevant areas that can collaborate to address the productivity puzzle. We stand ready to assist your department in any way that seems appropriate and is consistent with the ethos, comparative advantage and objectives of the Royal Society. This could include working to assist co-operation between BEIS and the Scottish Government and its agencies and helping to reach out in consultation across Scotland – to business, academia, young people and other interested parties.

Yours sincerely



Jeremy A. Peat OBE FRSE

Vice-Chair of RSE Business Innovation Forum

c.c Professor Iain Gray CBE FRSE

Professor David Bell CBE FRSE

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