Cities and The National Productivity Problem
Evidence Submitted to the UK Government’s Industrial Strategy Green Paper Consultation

Professor Ron Martin (University of Cambridge), Professor Peter Tyler (University of Cambridge), Professor Peter Sunley (University of Southampton), Professor Andy Pike (Newcastle University), Professor David Bailey (Aston Business School), Dr Emil Evenhuis (University of Cambridge), Mr Ben Gardiner (Cambridge Econometrics), Paul Swinney (Centre for Cities)

April 2017

Acknowledgments: This research for this paper was undertaken as part of a project funded by the ESRC (ES/N006135/1) into Structural Transformation, Adaptability and City Economic Evolutions, as part of its Urban Transformations Programme. We are grateful to the ESRC for its support.
(This submission is based on research carried out by the listed team as part of the above ESRC grant funded project. All of the charts and figures draw on the data sets constructed as part of that project)

Some Key Policy Points

• **Place should be the overarching and integrating theme in the industrial strategy**, not simply one of 10 pillars. The varying performance of the *same* industry across cities suggests that it is ‘place’ that is the biggest factor in the varying performance of cities across the country, not sectors.

• **Skills should have a central role in any strategy.** Those cities that have been able to attract high-skilled jobs are those that have high-skilled workforces for businesses to recruit from.

• **Greatly enhanced (rail and road) connectivity between and among northern cities would help them function as an integrated ‘regional system of clustered cities’**. Such improved connectivity would confer positive externalities associated with labour supply, knowledge spillover and interfirm supply chains.

• **Policy should give explicit priority to promoting the export (tradable) base of cities.** Northern cities especially need to increase the
export competitiveness of their activities, including knowledge-based services.

- A stable, properly resourced and long-term policy framework is needed to help improve the fortunes of struggling cities. This requires an appropriate nation-wide geographical network of regional or urban-region economic/industrial bodies.

Evidence and Arguments

1. We welcome the Industrial Strategy Green Paper. There are several key, interrelated, issues facing the UK economy: a slowdown in productivity growth since the early-1970s; a worsening trade balance over the past two decades; a low rate of innovation by international standards; the challenge posed by Brexit; a persistent spatial imbalance in economic prosperity and performance, incomes and employment opportunities; and an overly centralised system of economic, fiscal and policy governance. A purposive, coherent and nation-wide industrial strategy could make a valuable contribution to resolving these interrelated issues.

2. We especially welcome the recognition in the Green Paper that such a strategy should be place-based. Potentially, a place-based approach could not only build on and foster the different specific capacities and competences that exist in the different regions and cities across the nation, but could at last have a major impact on the need to spatially rebalance the national economy. All government policy is necessarily geographical in its outcomes – whether intended or not. It is better to design in geography from the outset. Also, a national industrial strategy cannot simply be rolled-out, top down from Whitehall even in the UK’s centralized governance system, but needs local actors and agencies to help. A placed-based approach might also be better able to address the dilemma of how to deal with boosting places with economic potential as well as addressing those with relatively less economic potential coping with decline.

3. However, we are not sure that the Green Paper gives the place-based dimension of an industrial strategy the critical importance it deserves. It is presented in the Green Paper as the last of ten ‘pillars’ of a strategy, as a separate issue. In fact, a place-based approach could be argued to the central issue. It is in individual places – regions and cities – that the other pillars listed in the Green Paper come together: a better-skilled workforce, a higher rate of innovation, a higher rate of enterprise, a higher rate of productivity, these and other key dimensions of economic performance all vary from region to region, from city to city. Understanding how they interact locally is one requirement; responding with a locally integrated policy approach is another. The local level provides the institutional actors on the ground with the local knowledge to help integrate and co-ordinate to deliver the industrial strategy, but they will need further devolved powers and resources to do it.

4. Relatively weak national economic performance, especially in terms of productivity, is in fact a regional and urban problem. Our research on some 85 British cities reveals significant disparities in economic
growth over the past forty and more years, with most southern cities outperforming northern ones (Figure 1). Further, most northern cities have remained at a disadvantage in terms of productivity, with most having levels of labour productivity below the GB average in both 1971 and 2014 (Figure 2). Most southern cities have consistently enjoyed above-average productivity levels.

Figure 1: The Imbalance in Economic Growth across British Cities, 1971-2014

![Graph showing economic growth in British cities]

Figure 2: The Imbalance in Labour Productivity across British Cities, 1971 and 2014

![Graph showing labour productivity in British cities]
Further, our research reveals that while for the subperiod 1971-2014 there was a tendency for labour productivity in northern cities to ‘catch up’ with levels in many southern cities, *since 1991, it has been southern cities that have led productivity growth, and which have therefore maintained their overall lead for the period 1971-2014 as a whole.* This pattern of narrowing and subsequent widening, for the top 5 and bottom 5 productivity cities, is shown in Figure 3. The switch in productivity growth leadership from the northern to the southern cities after 1991 is summarized in Table 1.

Figure 3: Time Paths of Relative Labour Productivity for Selected Cities, 1971-2014, Indexed to GB=100 (Top 5 and Bottom 5 Cities)
Table 1: Productivity Growth in Northern and Southern Cities
(Average annual growth in GVA per employed person, percent per annum)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Cities</td>
<td>1.84</td>
<td>2.05</td>
</tr>
<tr>
<td>Northern Cities</td>
<td>2.28</td>
<td>1.51</td>
</tr>
<tr>
<td>Great Britain</td>
<td>2.08</td>
<td>1.69</td>
</tr>
</tbody>
</table>

6. The productivity levels of the major northern ‘core cities’ have consistently lagged those of London, and the gap has widened significantly since the late-1980s (Figure 4).

7. Importantly, our research has shown that these persistent city differences in productivity are only partly accounted for by differences in economic structure (using both an 82 and a 249 sectoral disaggregation). Indeed, city economic structures have converged over the past forty years (Figure 5). The cities that had the highest levels of economic specialisation in 1971 have been those that have experienced the greatest decline in specialisation since. It is argued by some that the key to faster growth and higher productivity is by specialising: our findings suggest that this is too simplistic an interpretation of the existing evidence.
8. While economic structures have converged, some key differences have opened up in the ability of cities to maintain or renew their export (tradable) base. While even London witnessed a substantial fall in export base employment (mainly in manufacturing) over 1971-1991, since then it has more than recovered as a result of the major expansion of tradable services (especially knowledge-intensive business services, including finance). In contrast, most major northern cities, which also saw declines in their (industrial) export base employment over 1971-1991, have experienced no such recovery (Leeds being a notable exception) (Figure 6). The challenge facing these northern cities is one of finding a new tradable base.

Figure 5: Sectoral Convergence in Employment Structures Across Cities, 1971-2014 (Change in Krugman Specialisation Index 1971-2014 plotted against Index in 1971)
9. Our research reveals that *structural change has played a minor part in accounting for the disparate patterns of productivity growth across British cities, and that most of that disparity can be attributed to city differences in within-sector productivity advance.* (Figure 7). Put another way, the same sector would appear to perform differently across different cities. This implies that there is much scope for policy that raises productivity performance in existing sectors through measures
such as knowledge exchange and innovation application, supply chain support, provision of appropriate capital, skill development and management mentoring, export promotion and so on. At the same time, industrial strategy needs to foster investment in R&D innovation, especially in new transformative and ‘general purpose’ technologies, and the search for new industries.

**Figure 7: Decomposition of City Productivity Growth, 1971-2014, into Within-Sector, Between-Sector and Covariance (Interaction) Contributions (Decomposition using sectoral employment shares)**

10. The importance of the ‘city-specific’ within-sector effect of city productivity growth our research has identified requires explanation as it indicates that there are considerable differences in the character and performance of firms within any given industry across the country. We need to know much more about the nature of differences in, and the density of, supply chains across the regions. The city-specific within-sector effect may be due to city differences in externalities, such as those associated with agglomeration. Some academics equate agglomeration economies directly with city size. However, as Figure 2 above indicates, with the exception perhaps of London, the largest British cities have not been those that have enjoyed the fastest rates of economic growth, nor highest productivity, over the past 40 years. What our findings do suggest is that it is the wider agglomeration effects associated with a large and well integrated urban-regional labour and customer market like that comprising London and its surrounding polycentric system of satellite cities (essentially those within a reasonable commuting distance from the capital) that confer advantages to this part of the national economy, and is also the source of spatial imbalance within the broader UK economy. This
finding emphasizes the **great importance of investments in hard and soft infrastructures that enhance connectivity between and among cities, particularly northern cities, or what is increasingly termed ‘city clustering’.** It is clear that London and its surrounding cities have a distinct advantage in this respect.

11. Other advantages of this southern set of cities include a skilled and highly educated workforce (including what has during much of the past four years or so been a net inflow from other regions of the country). Such a workforce is essential for attracting and developing high-productivity exporting firms. There is also growing international evidence that what matters for city productivity and growth is the presence of key occupational and task ‘bundles’. **A favourable occupational and task mix enables a city more easily to adapt and branch into related and even new types of economic activity.** The southern cities also include some of the nation’s most innovative centres (especially Oxford and Cambridge).

12. Our findings thus lend firm support to a place-based approach to industrial strategy, and thus to the reference to such in the Green Paper. However, as mentioned above (Point 3), **to have any substantive impact it is important that an industrial strategy treats place not just as an additional ‘pillar’, but as a key organizing arena within which the different elements of an industrial strategy can be integrated and fashioned for maximum impact.** We welcome many of the horizontal dimensions of the proposed industrial strategy, but key measures such as finance for SMEs, skill training, management improvement, and innovation development, need to be coordinated and integrated by local/regional development bodies if they are to work effectively. Local experiments in policy development and delivery necessitate a stable, properly resourced and long-term policy framework. **This requires an appropriate nation-wide geographical network of regional or urban-region economic/industrial bodies.**

13. The UK’s present system of spatial economic governance is little short of chaotic. It includes the three Devolved Administrations (Scotland, Northern Ireland and Wales), over 400 principal (unitary, upper and secondary tier) local authorities, some 39 Local Enterprise Partnerships, 24 Enterprise Zones, 36 City Deals and shortly 6 city-region Devolution (Metro-Mayor) Deals. All have some degree of responsibility for local economic development, although overall the UK system is also one of the most centralised (in London) of any country in the OECD. **An industrial strategy that is to have significant impact requires a fit-for-purpose territorial system of economic governance institutions and machinery, with appropriate powers and responsibilities as well as stability to reduce endemic churn and constant reorganization.** In many cities growth has been frustrated by a lack of cooperation and fragmentation between authorities and an inability and failure to deliver appropriate and coherent housing, transport infrastructure and space for expansion.

14. **Greater devolution of finance, and fiscal and economic powers to such institutions would certainly be needed to ensure that their local industrial strategies would have the resources required to be effective enablers and facilitators of economic growth.** But at the same time,
expecting local government to raise much of the required resources from their own tax base is only likely to advantage the already more prosperous cities and localities. Central Government will remain a key agent of transfer and support, especially in the low growth and low productivity cities and areas of the country. And while a devolved system has the benefit of allowing each city or locality to respond to its particular mix of problems and opportunities, competences and capabilities, the need for an overall centrally set of objectives and priorities will remain essential.

15. By the same token, a fit-for-purpose nation-wide system of economic development institutions must be integrated into national fiscal, monetary, technology, trade and other policies. The aim should be to create a complementary policy mix rather than one riven by fragmentation and trade-offs. Industrial policy should take spatial conditions and circumstances explicitly into account, both in terms of the potential impact of those policies across different areas of the country, but also in forming those policies in the first instance. In this context, there is a case for regional arms of the Treasury, BEIS and Bank of England, both to provide economic intelligence back to the London centres of those key institutions, and to work with the local/regional development institutions to help implement their strategic aims.

16. The sort of suggestion just outlined is radical, and would constitute a major break with the past. But the UK has had nearly 90 years of ‘regional policy’ aimed at reviving lagging regions and cities. The fact that in 2017 the problem of spatial economic imbalance is still with us surely indicates that a radical and bold strategy is long overdue. Devolved Administrations for Scotland, Wales and Northern Ireland have put the English regions in a particularly difficult place and there is an urgent need to ensure that a new industrial strategy seeks to remove the anomalies that currently exist as soon as possible.

17. We can do no better than quote the North America urbanist Jane Jacobs who argued (in her Cities and the Wealth of Nations, 1984) that in an important sense there is no such thing as a ‘national’ macro-economy, but rather a system of city-regions, and that it is within these that the real everyday business of economic life – of production, consumption and trade - is conducted. In Jacobs’ view – and we strongly concur – national economic problems (such as low productivity) are quintessentially urban and regional problems, and that if ‘national’ economic policies are to succeed they must necessarily be place based. There is both an urgency and an opportunity for the UK Government to be bold in its proposed Industrial Strategy. It is not just a question of identifying the right mix of objectives and policies; it is also a question of finally designing the right spatial economic governance structure through which to achieve those objectives and policies.

Some of the research, analysis and argument on which this Submission is based can be found in the following:


10 April 2017