**Executive Summary**

Cities offer a number of inherent benefits to more knowledge-based forms of economic activity. The most successful ones offer access to large numbers of high-skilled workers, and they provide greater opportunity to create and share knowledge face-to-face.

Economic complexity is an analytical approach that attempts to measure how sophisticated an economy is. It has been widely used to compare countries, but to date has been less commonly applied at the subnational level, especially in the UK.

Using this approach shows that because of the inherent advantages cities have, they are more complex. The UK’s most knowledge-based activities tend to cluster within its urban areas.

But mirroring data on productivity, as shown in Centre for Cities’ briefing on levelling up, the UK’s largest cities after London are less complex than their scale should allow them to be. Something on complexity v productivity. But they trail their large European comparators, stat.

This static picture hides what has been an improving picture for the big cities over the last 40 years. Applying the economic complexity approach for the first time to historical data in the UK, this briefing shows that the big cities have started to close the gap between their actual and potential performance. In 1981, xxxxxx. But since then, large cities have proven to be an exception, breaking out of a ‘low knowledge’ trap to attract in more knowledge-based activities.

Some argue that this turnaround has been policy driven, with a bias shown towards big cities at the cost to other parts of the UK. Looking back at the whole range of policy interventions since then, it is difficult to see any favouring through policy. Instead, as the UK economy has specialised in more knowledge-based activities over this period as a result of increasing globalisation, big cities have been best placed to take advantage of this change as such activities looked for particular things from their location of choice.

But clearly there is work to be done. Despite their improvement, the continued underperformance of the UK’s large cities creates a cost to the UK economy that the Centre for Cities estimates is at least £47 billion per year. In order for the UK economy to get the most out of what is has, there needs to be greater focus on the performance of large cities, particularly if the Government wants to level up the economy.

This research also offers a note of caution for those who urge areas to ‘play to their strengths’ when attempting to improve their economies. Those cities that have continued to specialise in similar types of activities such as city x in activity y, are the ones that have become less complex in recent years. This suggests that in many struggling places, it is not what a place has that should be the only question asked, but rather what a place doesn’t have. Many places in North and Midlands won’t see a turn around in the coming years if they continue to focus on what they already have, particularly in manufacturing. They need to focus on addressing the barriers that stop more complex activities from investing in their areas.

**Either intro, or start of the explanation about ECI**

The creation and use of new knowledge is what drives economies on, be that through the invention of new technology or improvements to the ways that we work. Those economies that are the most developed are the ones that have been best able to do this.

Economic Complexity attempts to capture the amount of knowledge and knowhow in economies by looking at the types of sectors that do business within them. Using this approach…