The Geography of the Disability Employment Gap

Policy Brief

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Mark Bryan, Andrew Bryce, Jennifer Roberts and Cristina Sechel

University of Sheffield
Department of Economics

Disability is any long term physical or mental health condition that affects daily activities; around 20% of the working age population in Great Britain (GB) is disabled.

The **Disability Employment Gap (DEG)** is the difference between the employment rates of non-disabled and disabled people; it varies a lot across areas in GB. We explore how this geographic variation can be explained by:

- **People effects:** the **differing demographics** of these areas.
- **Place effects:** different **area-level factors** such as the size and composition of labour **demand**, the **supply** of healthcare and social institutions, and local **policies** towards disabled people.

Headline findings

- About **one third** of the spatial variation in the DEG is explained by **people effects**, for example different education levels among the working age population.
- Another **third** can be explained by measurable **place effects**, in particular factors relating to labour demand in the area.
- Areas with a high concentration of people working in **knowledge industries** (IT, finance, professional services and education) and areas with a high concentration of people working in **elementary occupations** (for example, cleaning and hospitality) tend to have the lowest DEGs.
- In contrast, local differences in healthcare provision, social institutions and policies towards the employment of disabled people have very little correlation with the DEG.
- The remaining **third** of the spatial variation consists of **place effects** that cannot be measured, suggesting that in many areas the size of the DEG is influenced by other area-specific factors.
- Our results highlight the importance of **strong local labour markets** with low unemployment, a thriving knowledge sector, and good availability of elementary jobs. Policies such as levelling up, that promote these types of labour markets, can **disproportionately benefit** disabled people and **narrow the DEG**.
- But even with broadly shared prosperity, DEGs would still differ across areas. This suggests a need for **bespoke local interventions** to address specific barriers to disabled people's employment.

Background

Great Britain is one of the most **spatially unequal** countries in the developed world. Many parts of the country are thriving economically, particularly in the south of England, but other areas have become 'left behind'. Strategies such as **'Levelling Up' or devolution of powers** aim to address these spatial disparities and share prosperity more evenly across the country.

Disabled people may have more to lose from living in a left behind area; they experience a particularly **large variation in their employment prospects** depending on the local economy where they live. This may be due to finding themselves at the back of the 'job queue' - the last to be recruited when there are not enough jobs to go round.

Figure 1: DEG (difference from Great Britain average) by ITL3 area, 2014-19

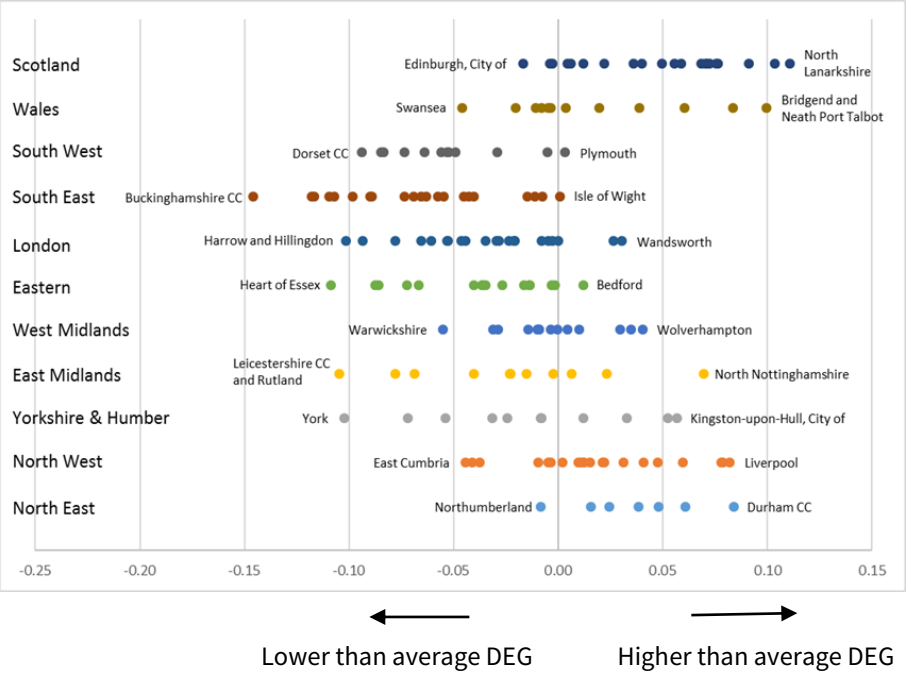


Figure 1 shows how the DEG varies across International Territorial Level 3 (ITL3) areas (made up of one or more local authority). Most areas in Scotland, Wales and the north of England have a DEG that is higher than the national average while most areas in the south of England have a lower DEG.

The highest DEG is in **North Lanarkshire** (11 percentage points higher than the national average), while the lowest is in **Buckinghamshire** (15 percentage points lower than the national average).

Explaining the spatial variation

Some of the difference between each area's DEG and the national DEG can be explained by the **characteristics of the working age population living in that area** – this is the **people effect**. If every area of the country had exactly the same demographics, the spatial variation in the DEG (measured by its 'standard deviation') would reduce by **28%**.

Any remaining difference between each area's DEG and the national DEG is called the **place effect**. These place effects are shown in **Figure 2**. The **red areas** are those that have a higher than average DEG after accounting for population characteristics while the **green areas** have a below average DEG after accounting for population characteristics.

Figure 3 shows how the DEG in the ten core cities in GB is composed of people effects and place effects.

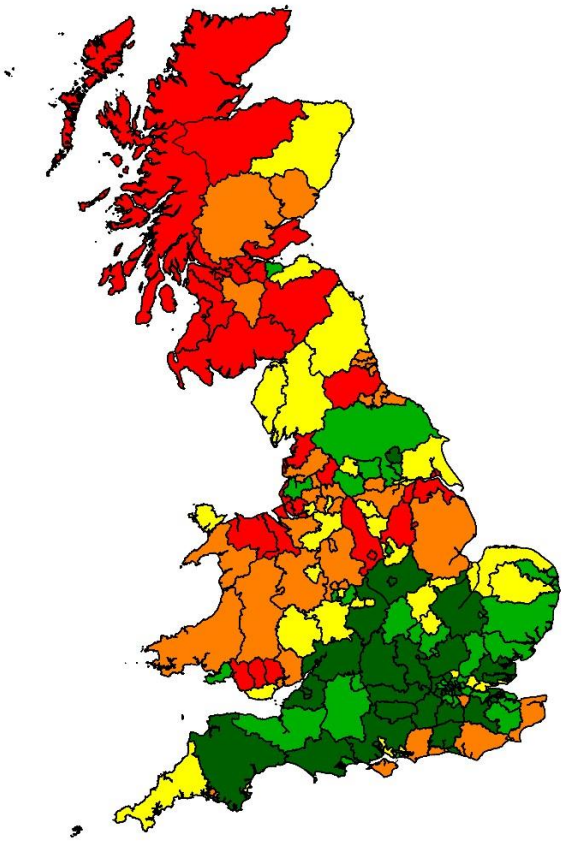
Cities such as **Glasgow** and **Liverpool** have a DEG above the national average that is explained by both people effects and place effects. In contrast, **Bristol** and **Leeds** have a lower than average DEG, which is also explained by both people and place effects. But in **Cardiff** the people and place effects are working in opposite directions. The city has a lower than average DEG because of its population characteristics but they are partly offset by unfavourable place effects. Meanwhile, **Nottingham** would have an above average DEG based on its population but actually has a below average DEG due to strongly favourable place effects.

Some of the place effect can be explained by particular **area-level factors** which we can measure. These include:

(a) Demand factors like the unemployment rate, productivity, industrial and occupational composition, and the share of employment that has particular characteristics (e.g. flexibility, autonomy and the ability to work at home).

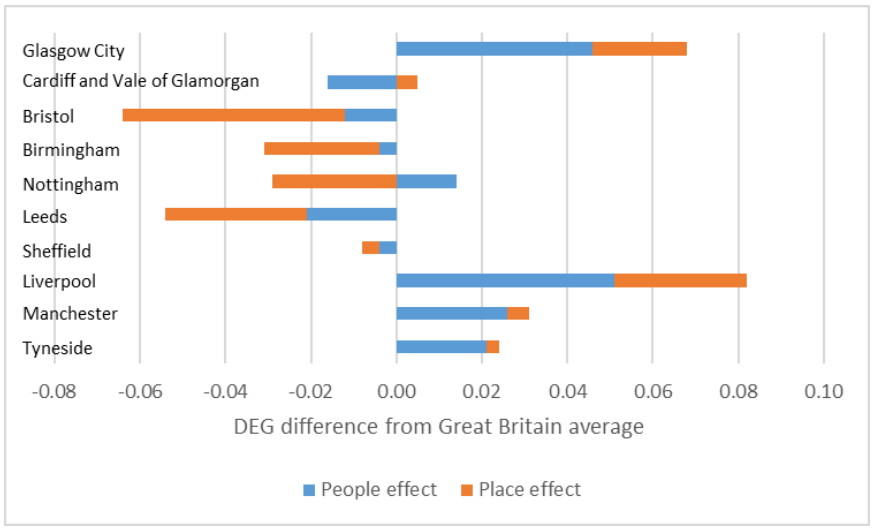
(b) Supply factors like healthcare provision, the strength of social institutions and commuting times.

Figure 2 – DEG due to place effects (2014-19) by ITL3 area



(c) Employer based policies towards disabled people and other policies covering welfare benefits and sanctions.

Figure 3: Core cities - breakdown of DEG (difference from GB average)



Industrial composition makes the largest contribution to explaining spatial variation in the DEG. Areas with a large proportion of people in **'knowledge industries'** have high employment of disabled people, after accounting for people effects. In comparison, there is no relationship between the employment rate of non-disabled people and industrial composition. Related to

this, a higher concentration of jobs suitable for **working from home** is also associated with a lower DEG.

Given an industrial composition that favours knowledge services, areas with a high proportion of people working in **elementary occupations** have a smaller DEG. This is not surprising as disabled people are often concentrated in lower skilled occupations. Moreover, **local unemployment rates** affect the employment prospects of disabled people to a larger degree than non-disabled people, suggesting that both the **level of** and **composition of labour demand** is important for the DEG.

In contrast, spatial variation in the **provision of services** that might be expected to help disabled people find employment (namely healthcare provision, strength of social institutions and public transport travel times) has minimal influence on the DEG. Similarly, very little of the spatial variation in the DEG can be explained by **local differences in disability employment policies**. Specifically, we find minimal geographic effects from employer engagement with Disability Confident or the strictness with which benefit sanctions are applied.

If every area had the same area-level characteristics, the overall variation (standard deviation) in the DEG across Great Britain would reduce by **23%**. Eliminating all differences in industrial composition alone would reduce the overall variation by **11%**.

Conclusion

Our research shows how policies such as levelling up have the potential to help disabled people living in left behind areas to find work and hence reduce geographical disparities in the DEG. Strong local labour markets characterised by low unemployment and a thriving knowledge sector, coupled with good availability of elementary jobs, can disproportionately improve the employment prospects of disabled people and narrow the DEG.

However, levelling up is not a magic bullet. We find that, **even if all areas of Great Britain had the same characteristics, there would still be considerable variation in the DEG**. This indicates that there is scope for bespoke area interventions to address specific barriers to disabled people's ability to access employment at a local level.

Where does our evidence come from?

We analyse data from the Annual Population Survey (APS) pooling together the years 2014 to 2019, combined with area-level data from a range of sources. We look at the DEG in each of the 166 ITL3 areas in Great Britain (England, Scotland and Wales).

Source of APS data: Office for National Statistics, Social Survey Division. (2022). *Annual Population Survey, 2004-2021: Secure Access*. [data collection]. 23rd Edition. UK Data Service. SN: 6721, DOI: 10.5255/UKDA-SN-6721-22

For further information, please see our website: **bit.ly/sheff-DEG**

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