The Use and Misuse of Regional Data: Insights from Across the UK



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High-quality regional data is crucial for improving public service delivery, allocating funding and developing evidence-based policies that tackle regional inequalities.

Our paper*, published in *Regional Studies: Policy Debates*, analyses the challenges faced when constructing regional statistics and using these statistics in policy debates.

The paper draws on extensive engagement and semi-structured interviews with analysts from the UK's Office for National Statistics (ONS), devolved administrations (DAs) in Northern Ireland, Scotland and Wales and other regional data stakeholders.

What are the Challenges when Constructing Regional Statistics?

Using data collected from national surveys to produce regional statistics leads to several challenges. We focus on the UK but stress that such challenges are faced internationally.

Regional Apportionment

Business data is collected by surveying firms and is provided by the firms' reporting unit (RU). In the UK, RUs are either classified as Great Britain (GB) or Northern Ireland. The RU also provides some data on associated local units (LUs). A GB RU can have LUs in all three of Scotland, England and Wales.

Regional apportionment involves using a proxy indicator to attribute economic activity to different regions. The UK typically uses LU employment for apportionment due to data availability; however, data on LU wages, salaries and turnover would be better proxies in some cases.

Bottom-up and hybrid approaches, used by the ONS to produce regional gross fixed capital formation estimates and the Scottish Government to produce quarterly GDP estimates, reduce the need for top-down apportionment but are resource intensive.

Sample Sizes, Response Rates and Survey Weighting

Small sample sizes at the regional level can lead to estimates which are uncertain and volatile. Smaller local authorities (LAs) also need to be oversampled and reweighted to produce representative estimates. Falling response rates have also been observed across countries, compounding these challenges. This forced the ONS to suspend publication of Labour Force Survey statistics temporarily in 2023.

Boosting samples is sometimes possible but can be costly and resource intensive. Administrative, commercial and digital trace data are being used to overcome some of these limitations. In Australia, survey estimates and administrative data are used to produce modelled estimates of regional employment and unemployment.

Geographical Standardisation

The appropriate geography for policy analysis varies depending on the policy context. There is typically a distinction between statistical geographies, areas relating to national and local statistics, and administrative geographies, areas relating to national and local government.

These geographical areas are not standardised which poses challenges for data users. Administrative geographies often change as seen in France's 2016 regional reorganisation. Differences between administrative geographies and policy-specific geographies (e.g., health boards, travel to work areas) add complexity and make it difficult to link datasets. In the UK, devolution exacerbates these challenges with the four nations having different census-based small area geographies.

Comparability

Across the UK, data users prioritise the comparability of regional statistics differently. At the UK level, greater emphasis is placed on the UK-wide comparability of statistics. This supports UK policymaking and funding allocation via initiatives such as the Levelling Up Fund.

The DAs focus on policymaking within their nation. Consequently, regional data relating to devolved policy areas often cannot be directly compared across the UK due to different data collection strategies, definitions and methodologies. However, indicators which capture the same concepts are typically available across the UK.

Collaborative efforts, including those led by the Government Statistical Services' (GSS') coherence work programme, have sought to identify topic areas where comparability is needed. This, for example, has contributed to the development of UK interregional trade estimates.

How can Regional Data Support Policymaking?

Regional data plays a key role in policy debates. Levelling up, we argue, made apparent key regional data gaps, influencing the UK GSS' subnational data strategy.

Levelling Up

The analysis in our paper demonstrates that policy often outpaces data availability with insufficient data to underpin levelling up. For example, four out of five transport connectivity metrics provided in the levelling up white paper (LUWP) were available for England only. This proved contentious with connectivity likely to be problematic in rural parts of Scotland and Wales.

We argued that regional data should have the following: geographical coverage; geographical and sectoral granularity; comparability within a region and/or between regions; and timeliness, the frequency and publication lag, which maps to the policy being considered.

Notably, though, by mapping missions to metrics, the LUWP shed light on regional data gaps across several policy areas, informing the GSS' subnational data strategy.

The UK Subnational Data Strategy

The subnational data strategy consists of three ambitions: improving timeliness, granularity, and harmonisation; building capability and capacity across the GSS; and improving dissemination.

Andy Haldane, former head of the levelling up taskforce, contributed to the strategy foreword. The then Department for Levelling Up, Housing and Communities provided additional funding to ONS Local, an advisory service targeting local users.

While the strategy provides a clear overarching vision and has led to the release of several new statistics, it also faces challenges. Trade-offs between timeliness and granularity and the need to prioritise different data features in different contexts are not fully articulated.

The strategy also fails to fully capture issues regarding different user needs, budget pressures and organisational priorities across the four nations. For example, the now retired subnational indicators explorer only included English indicators in cases where directly comparable data was not available for the four nations. This limited its usefulness and risked incorrectly implying that the DAs had substantive data gaps.

Concluding Thoughts

Overall, we conclude that regional datasets should be purpose-driven, with features such as granularity and comparability aligned with policy needs. Producers should take a long-term view and consider wider user needs not only flagship policies like levelling up. Policymakers should also consult a range of indicators, transparently presenting how data is used in policy decisions. We also stress that collaboration across national, devolved and local stakeholders is key but is challenging in the face of different mandates and resource constraints.

* Reference to the article

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