what works centre for
local economic growth

Designing local growth policies to facilitate robust programme-level impact evaluation

Introduction

Reflecting a commitment to evidence-based policymaking and accountability, central government and mayoral combined authorities (MCAs) are keen to undertake programme-level counterfactual impact evaluation of local growth policies. Programme-level evaluation assesses the overall impact of the programme on its intended outcomes.

As evaluation options are greatest if evaluation is considered during the policy development process, this note outlines four features that would help make programme-level impact evaluation possible. These are:

- Focus on a narrow range of interventions and outcomes.
- Establish a comparison group.
- Consider statistical power.
- Check programme is big enough to have detectable effect.

Focus on a narrow range of interventions and outcomes

Challenge

Impact evaluation considers whether an intervention leads to changes in intended outcomes – for example, did providing business advice help supported businesses increase employment? Whilst monitoring can identify whether businesses increased employment, impact evaluation is needed to establish that this was due to the intervention. 'What works' questions are often phrased in the format: Did intervention A lead to outcome X?[1] One implication of this is that narrow interventions and outcomes help facilitate impact evaluation at the programme-level.

Why is this an issue for programme-level evaluation of local growth policies?

Local growth policies often have multiple outcomes and interventions.

- Including multiple outcomes makes data collection and analysis more complex and time-consuming. It also raises problems with multiple hypothesis testing, where the higher the number of outcomes that are measured, the greater the risk of finding an impact on at least one of those outcomes – even if, in reality, the policy did not have any impact at all.
- Including multiple interventions makes it more difficult to identify the appropriate outcomes. For example, if a programme can fund public realm, business advice, and skills interventions, it will have a wide range of outcomes such as reducing crime, and increasing pride in place, business turnover, and employment.
- It also makes it more difficult to construct treatment groups of similar areas, businesses or individuals (as they would need to be similar on multiple dimensions), and to construct comparison groups where nothing is happening on one or more of these dimensions.[2]

Current and recent growth funds (Towns Fund, Levelling Up Fund, UKSPF, Local Growth Fund, etc.) have all been umbrella programmes covering diverse interventions and outcomes. The diversity of interventions delivered under these funds has made it difficult to identify a small number of outcomes for the programme-evaluation.

How could this be addressed?

Local growth policies that focus on a narrow range of interventions and outcomes would make data collection and analysis easier, reduce the risk of multiple hypothesis testing, and make it easier to construct a comparison group. For example, it will be easier to evaluate a programme focused on delivering business advice (where the evaluation question is 'did the business advice programme help increase employment in supported businesses?') than an umbrella programme (where the evaluation question is 'did the umbrella programme help improve the employment rate in supported areas?').

1 Impact evaluation can also establish whether different interventions or design features are more effective in achieving an outcome – for example, whether offering training or mentoring is more effective in supporting businesses to increase employment. These are known as 'what works better' questions, and are often phrased in the format: Was intervention A or intervention B more effective in delivering outcome X? Given the nature of programme-level evaluation – i.e. that it is trying to establish the overall impact of the programme – what works better questions are less relevant here.

2 Establishing a comparison group is discussed in more detail in the next section.

Establish a comparison group

Challenge

Impact evaluation uses comparison to establish causality. The ideal scenario would be to compare the same individual, business or area under two different scenarios – one where they receive support (known as 'treatment') and one where they do not. As establishing this counterfactual is not possible, an alternative comparison is needed. This is done by establishing a control group or comparison group. The standard approach is to create a group of individuals, businesses or areas that are similar to those being treated, but that did not receive treatment. Changes in outcomes can then be compared between the treatment group and the comparison group.

The main challenge is how to ensure the comparison group is similar to the treatment group. Various methods are available to try to achieve this. The most robust of these are randomised control trials, followed by approaches that exploit some natural randomness such as a regression discontinuity design that makes use of a cut-off in eligibility. In these methods, randomness helps ensure unobservable factors are not responsible for the outcomes. Where this is not possible, approaches are less robust and focus on controlling for observable factors. More information on impact evaluation methods are given in our guide to scoring.

Why is this an issue for programme-level evaluation of local growth policies?

This is less likely to be an issue if the programme-level evaluation is evaluating changes in outcomes measured at the individual or business level, as the comparison group comprises similar but untreated businesses and individuals and there is a potentially large pool of these for a national programme.

It can be more challenging when the programme-level evaluation is undertaken at the area level. If all areas receive local growth funding at same time and at a similar intensity, there will be no potential comparison areas. If funding is awarded on the basis of need (for example, funds are allocated to areas with high unemployment), or funding is awarded on a competitive basis, then untreated areas are likely to be different to treated areas, making establishing a comparison group difficult.

Current funds are either allocated to all areas (for example, UK Shared Prosperity Fund) or allocated on basis of need, competitive bids or a combination (for example, Towns Fund, Levelling Up Fund).

How could this be addressed?

These issues could be addressed in programme design, for example, by only allocating funds to some areas (and with this not linked to need or other factors that will affect outcomes), rolling funding out in phases, or allocating funding in different intensities (i.e. some areas receive higher funding per head than others on a random basis), or by using a cut-off for funding eligibility. However, all of these choices can be politically difficult.

Alternatively, if programmes focus on a narrow set of interventions and outcomes, it may be possible to evaluate at the individual or business level, where it is generally easier to establish a comparison group.

Consider statistical power

Challenge

As impact evaluation relies on statistical methods, the number of observations matters. More observations is better, increasing the statistical 'power' – the likelihood of getting statistically significant results which accurately reflect whether the policy has positive, negative or no effects.

Why is this an issue for programme-level evaluation of local growth policies?

This is less likely to be an issue for programme-level evaluations that focus on changes in outcomes at the individual or business level, because there will be large numbers in the treated and comparison groups if these are national or MCA programmes acting at scale, meaning a large number of observations. If the policy aims to affect an outcome that can be measured at small area-level (for example, postcodes or lower super output areas (LSOAs)), many observations may also be possible, depending on how many areas are targeted. However, if programme-level evaluation focuses on small programmes or on changes in outcomes for larger areas (for example, local or combined authorities), there will be fewer observations, making it less likely that the evaluation will detect effects.

Given the design of current and recent local growth policies, with funds including a wide range of interventions, the only possible outcomes for programme-level evaluation are high level such as employment, gross value added (GVA, a measure of the size of the economy) or pride in place, which in turn means the only possible unit of observation is the local or combined authority area. This has restricted the number of observations making it difficult for any programme-level evaluation to find statistically significant effects.

How could this be addressed?

This could be addressed by focusing local growth policies on a narrow set of interventions and outcomes, as these make it more likely that evaluation at the individual or business level will be feasible, and this can generate a large number of observations. If programme-level evaluation needs to be at the area level, the number of observations will depend on the number of areas included.

Check programme is big enough to have detectable effect

Challenge

The importance of the policy in affecting outcomes, relative to everything else that affects the outcome, will also matter. Where a policy only plays a small role, it is less likely that an effect will be detected.

Why is this an issue for programme-level evaluation of local growth policies?

If a programme-level evaluation is looking at change in complex outcomes (for example, individual health, or area level employment, GVA, or pride in place), it can be difficult to attribute change to intervention as a large number of factors are likely to be influencing the outcome. For example, if local growth funding is aiming to increase the employment rate in the median-sized English local authority (North Hertfordshire), a one percentage point increase would require getting 836 net additional working age residents into work.[3] Given evidence on the effectiveness of interventions and the potential for displacement and leakage, a large-scale intervention would be needed to deliver this.

3 The equivalent figures for the largest (Birmingham) and smallest (Rutland) local authorities are 7,398 and 197.

Other factors such as performance of national economy, or whether local employers are growing or contracting are likely to have a larger impact. Similarly, whilst new cycling and walking infrastructure could have an impact on health if it encourages residents to be more active, many factors influence individual health outcomes and effects can take many years to become apparent.

Given the broad range of interventions included within each of the current and recent local growth funds, the only possible outcomes for programme-level evaluation are high level (such as employment, GVA or pride in place) and the only possible unit of observation is the local or combined authority area. Given the value of available funds and the large number of factors that can affect these outcomes at the local or combined authority level, it is highly unlikely that effects of the funds can be detected.

How can this be addressed?

This could be addressed by focusing local growth policies on outcomes that can be measured at the individual or business level, as these can be easier to detect. If the programme focuses on outcomes that are measured at the area level, focusing on larger investments in fewer areas may increase the likelihood that an effect can be detected but this may reduce the likelihood that there will be statistical power (see previous section).

Examples

We consider two examples of how policies might be designed to have the four features that allow for programme-level evaluation:

- Funding is allocated to local authorities (by either central government or MCAs) to provide business support, with a goal to increase business turnover and employment. Outcomes will be measured at the business level. Local authorities must use funding to support businesses with a turnover of £750,000 or over.
    - Whilst a range of interventions could be delivered under this programme, they are narrowly defined in scope (they must support businesses) and outcomes they are intended to deliver (increasing business turnover and employment).
    - As only businesses with a turnover of £750,000 or over are eligible, comparison of businesses just above and below this threshold should be possible.
    - As there could be a large number of businesses within the treated and comparison groups across the country, there will be a large number of observations, ensuring statistical power.
    - As outcomes are being measured at the business level and existing evidence suggests that some kinds of business support can measurably improve business-level outcomes, it should be possible to detect effects of the programme (if it is large enough).

- Funding is allocated by central government to local and combined authorities to deliver skills and other interventions to reduce unemployment of over 55s. Outcomes will be measured at the area level. Funding is phased in over a five-year period, with some areas receiving funding in year 1, others in year 2, etc.
    - Whilst a range of interventions could be delivered, they are narrowly defined in scope (skills and other interventions to support over 55s not currently in work) and outcomes they are intended to deliver (supported individuals moving into (sustained) work).
    - As funds are allocated on a phased basis, areas receiving funding later can act as comparison for those in early phases.

- There are over 300 local authorities across England so it should be possible to structure the roll-out of the programme to have enough observations to have statistical power. One option would be to agree with local and combined authorities to only target specific LSOAs within their area – as this increases the total number of observations.
- As the group being targeted is tightly defined (unemployed over 55s) and existing evidence suggests that some kinds of support can measurably improve outcomes for the unemployed, it should be possible to detect effects at area level (if the programme is large enough). If the programme if not large, measuring outcomes at individual level would be more appropriate.

Other considerations

- Programme evaluation may not be the priority. For example, Labour's manifesto set out ambitions in relation to devolution and long-term (single) settlements for councils. This suggests local decision-making about what funds will be spent on will be prioritised.[4] This means the requirement that policy is 'focused on a narrow range of interventions and outcomes' is unlikely to be met (especially if a 'single pot' approach is adopted), making programme-level evaluation difficult for central government to implement.
- When programme-level evaluation is not feasible, it is important to explore other options for counterfactual impact evaluation (for example, intervention-level, place-level, or project-level) and ensure that policy design facilitates these to be undertaken.

4 Devolution is not necessarily a barrier to programme-level evaluation as long as policy is focused on narrow range of interventions and outcomes. Options may however be more limited – randomising who gets funding is not feasible so an alternative approach (e.g. phased roll-out) will be needed.

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