

If we want to create jobs in disadvantaged local areas, the idea of 'local' needs to be revisited.

Alan Manning and **Barbara Petrongolo** explain the problem of thinking of geographical space as non-overlapping single labour markets.

Their study, which draws on evidence from job openings in London ahead of the 2012 Olympics, provides a useful toolkit to understand the likely impact of place-based policies.

How 'local' are local labour markets?

Place-based policies that target disadvantaged areas are widespread in both high-income and developing countries.

But their impact depends crucially on the effective size of local labour markets.

For example, if labour markets are very local, an effective intervention needs to be targeted to the disadvantaged areas themselves and more distant interventions will not benefit the target group. But if labour markets are not as local, targeted intervention is ineffective as it may simply benefit workers from other, more advantaged areas.

A broader question concerns the incidence of local shocks to labour demand and their impact on labour mobility. What happens, for example, if there is a sharp rise in job vacancies, as happened in and around Stratford ahead of the 2012 Olympics in London?

To answer such questions, we need a clear definition of a 'place'. Most research on the topic uses the output of government statistical agencies, which divides geographical space into non-overlapping areas that are assumed to be single labour markets. Examples include the 367 Metropolitan Statistical Areas for the United

States, or the 320 Travel to Work Areas for the UK.

In such classifications, the cost of distance within areas is implicitly assumed to be zero. Because people commute large distances to work in the centre of big cities, large metropolitan areas are generally classified as single labour markets. But those who live in the northern suburbs might not think of the southern suburbs as part of their labour market.

Second, the non-overlapping nature of labour markets constructed in this way causes inevitable discontinuities around the boundaries. Someone living just inside a large metropolitan area would be classified as living in a large labour market, while someone living just across the border would be classified as living in a modestly sized labour market. But these individuals live in essentially the same labour market.

The root of these problems is a failure to recognise the continuous nature of geographical space. In reality, the economy cannot be divided into non-overlapping segments, and there is always some commuting across borders. Typically, the labour market for one individual at one location overlaps with that for a second individual at a different but not too distant



New job openings attract not only local workers, but also those living in surrounding areas

A local labour market's size is determined by the cost of distance – measured as geographical distance, commuting time or commuting cost



location. The second individual's labour market then overlaps with that for a third individual, whose labour market may not overlap at all with that for the first individual.

Our study shows that if geographical space is treated as continuous, as opposed to a collection of non-overlapping units, one can attain a more realistic characterisation of local labour markets, with implications for the evaluation of local policies.

In our approach, a local labour market represents the set of jobs for which an unemployed worker, currently in a particular location, will apply. Its size is determined by the cost of distance, measured as geographical distance, commuting time or commuting cost. If the cost of distance is high, workers will be more reluctant to consider jobs in more distant locations than if that cost is small. This approach means that the boundary of a local labour market is fuzzy.

Jobseekers decide whether to apply for jobs at different locations on the basis of two considerations. The first is the probability of success, which is affected by how many other jobseekers are applying for these jobs. The second is the utility enjoyed on the job, which in turn depends on the distance to the job and the wage paid.

Linkages across areas arise because the number of applicants to jobs in a given area is likely to be influenced, even if only slightly, by unemployment and vacancies in other areas, as they are ultimately linked through a series of overlapping markets.

Data on the filling of vacancies allow us to infer the distance over which people look for work, as the ease of filling a vacancy in a certain area is determined by the number of jobseekers for whom the vacancy is in their local labour market. If the vacancy filling rate in area A responds to the number of jobseekers in area B but not in area C, we conclude that A is in the local labour market for residents of B but not for residents in C.

We use unemployment and vacancy data on 8,850 census wards in England and Wales, and combine these with micro data on wages and the use of transport modes to analyse commuting costs between any two wards.

Our estimates show evidence of high costs of distance. For example, the probability of a random job 5km distant

being preferred to a random local job is only 19%. We also find that workers are discouraged from applying for jobs in areas where they expect relatively strong competition from other jobseekers.

Our work provides a useful toolkit to understand the likely impact of place-based policies. High estimated costs of distance may suggest that local intervention would have heavily concentrated effects on target areas.

But this argument is deceptive if labour markets are overlapping: even though the labour market for an individual worker may be quite local, a local shock sends a ripple effect through surrounding areas, diffusing its impact over a much wider area than the typical commute. The extent of the ripple effect may be limited by 'firebreaks' – that is, natural or institutional borders across which few workers commute.

As an example, we consider an increase in the number of job openings in Stratford in East London, which was the main venue of the 2012 Olympics, and has an unemployment to population ratio

about three times the national average. We thus combine a large rise in labour demand from Olympic-related projects with a disadvantaged local labour market.

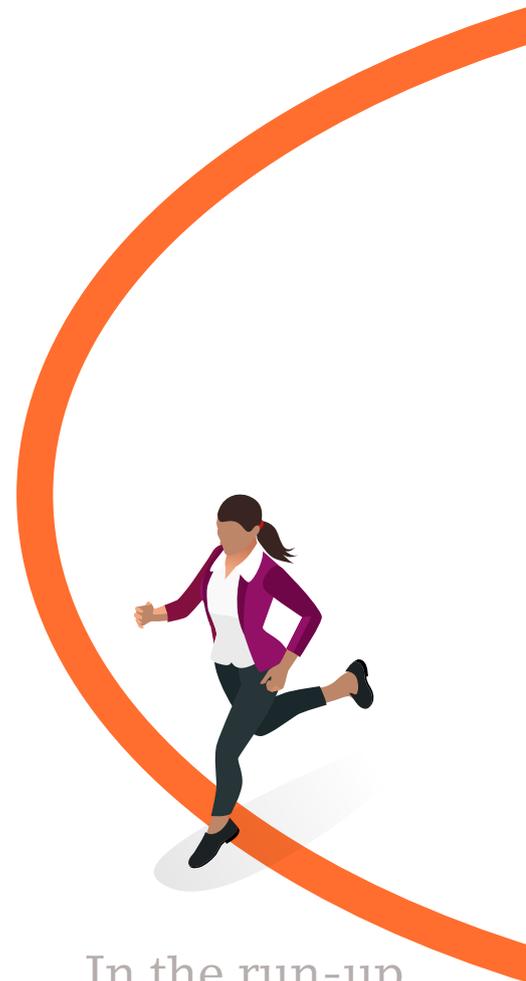
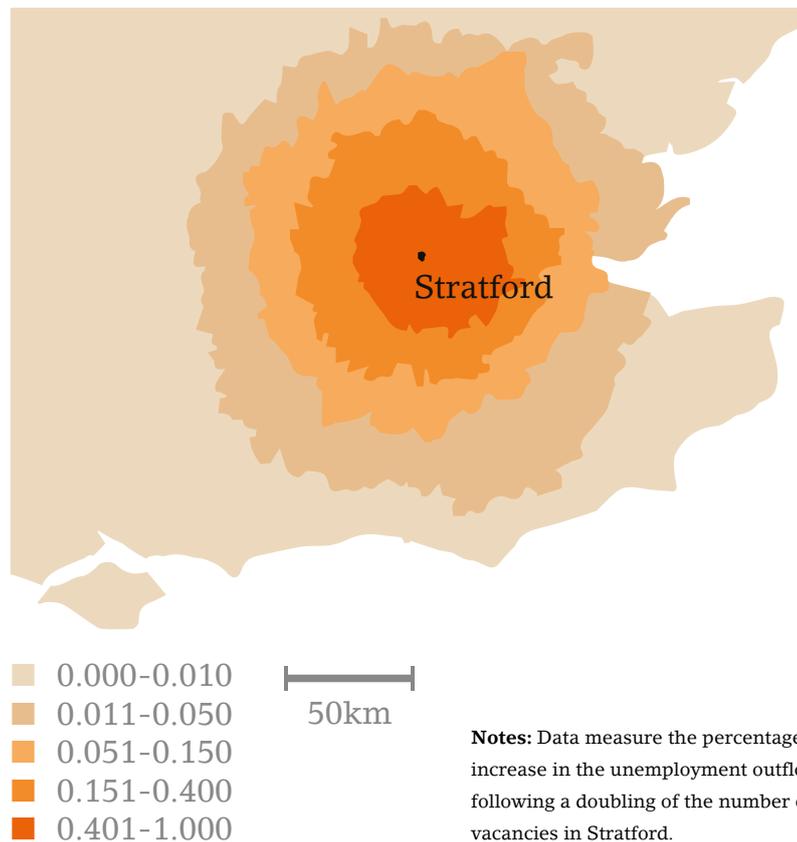
The rise in job openings predicts only a tiny (0.4%) increase in the local job finding rate, because unemployed workers living relatively close to Stratford diverted some of their job search effort from their local wards towards Stratford. This raised job competition in Stratford, reduced job competition in their local wards, attracted applications from elsewhere, and so on.

The bottom line is that even strong local stimulus has a limited bite on the local outflow rate from unemployment, because a series of spatial spillovers dilutes any local shock across space (see Figure 1). This prediction is confirmed by actual labour market trends in and around Stratford: while vacancy data record a sharp rise in Stratford in the run-up to the 2012 Olympics, there was hardly any increase in job finding in Stratford or surrounding areas as a result of the spike in vacancies.

This article summarises 'How Local Are Labor Markets? Evidence from a Spatial Job Search Model' by Alan Manning and Barbara Petrongolo, *American Economic Review* 107(19): 2877-2907 (earlier version available as CEP Discussion Paper No. 1101: <http://cep.lse.ac.uk/pubs/download/dp1101.pdf>)

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Figure 1:
Jobs in and around Stratford in the run-up to the 2012 Olympics: effects of a localised labour demand shock on the unemployment outflow in surrounding areas



In the run-up to the 2012 Olympics, there was a spike in vacancies in and around Stratford but hardly any increase in job finding