what works centre for
local economic growth

Assessing the impacts of public sector relocation on local economies

1. Summary

Public sector relocations directly create new jobs in the local area.

They can also *indirectly* generate local jobs through increased demand for local goods and services from the public sector employer or its new employees; or by creating or strengthening 'clusters' of firms. In general:

- **The impact on local supply chains is likely to be limited** unless the public sector organisation is unusual in the amount it procures locally.
- **Public sector relocation is unlikely to create a new cluster** from scratch. Seeking to strengthen an existing cluster is more realistic.
- **Increased local demand for goods and services from people newly employed is the most likely way in which a relocation will indirectly create jobs**. The size of the impact will depend on the number of additional jobs (created directly and indirectly); how well those jobs are paid; and what percentage of income new employees spend locally.

Public sector **relocations can also have some negative impacts on jobs**.

'Displacement' occurs when new jobs are offset (wholly or partially) by job losses in other organisations. For example, a new supermarket can create jobs but put smaller shops out of business. **For public sector jobs, local displacement is rare**, because public sector organisations are not usually competing directly with one another.

'Crowding out' occurs when a public sector employer negatively affects local private sector firms, for example, by paying high wages relative to other local employers, making it harder for them to attract workers. This can be a particular problem in places with weaker economies. **Some crowding out may occur, and in a worst-case scenario it could more than offset the additional new jobs created through factors such as increased local demand.**

The local employment 'multiplier' is a figure which captures the overall impact of a relocation on the number of local jobs, accounting for the positive and negative impacts discussed above. The multiplier will be different in each case, but evidence suggests **for public sector relocation, a good starting point is that, on average, each new public sector job could create between 0.25 and 0.37 additional private sector jobs.**

An increase in local jobs can affect house prices by increasing demand. Public sector relocations are rarely of sufficient scale to drive up house prices across an area, **but there might be increases in particular neighbourhoods. This would benefit home-owners, but renters could be priced out.**

The scale of most public sector relocations is small relative to the overall local economy. This means that **the effect of a relocation on local productivity, or the demand for and supply of skilled workers, is likely to be small, unless it creates or significantly strengthens a cluster.**

Additional interventions may be required to ensure public sector relocation benefits existing residents as well as people who move to the area to work. For example, training programmes to help people access new employment opportunities, or increased capacity for local public services to counter increased demand from new residents.

2. Background and purpose

In 2020, the Government committed to moving 22,000 civil service jobs out of London over ten years. Among other moves, they have announced a new "Treasury North" campus in Darlington to house 400 relocated Treasury staff and 350 from other departments; at least 500 Department of Levelling Up jobs across the West Midlands, with a headquarters in Wolverhampton; and a new government hub at Fletton Quays in Peterborough for more than 1,000 civil servants.

This briefing aims to help decision-makers assess the likely impact of public sector relocation on an area. This involves using multipliers to estimate likely employment impacts, and drawing on economic theory, available evidence, and contextual knowledge to assess the likely impact on productivity, skills, wages, and house prices.

Decision makers will also need to consider the impact of relocation on the operation of public sector bodies themselves, but that is not considered in this document.

The next two sections discuss the ways in which relocations can affect local employment either positively, section 3, or negatively, section 4. Sections 5 and 6 discuss the likely size of overall employment impacts - the employment 'multiplier'. Section 7 considers the local geography of impacts, and sections 8, 9 and 10 cover house price impacts, productivity impacts, and skills, respectively. Section 11 considers impacts on local residents.

3. Employment effects - new jobs

3.1 New jobs with the public sector employer

Public sector relocation will have direct employment effects. It is important to know how many jobs will be new to the area, and over what timeframe. For example, the government announcement that 500 Department of Levelling Up jobs will be based across the West Midlands included 300 existing positions, so the number of new jobs is 200.[1]

Key message: Focus on the number of new jobs, not the headline figures. This will be a major determinant of some of the possible impacts.

3.2 New jobs in other firms and organisations

New jobs in the supply chain

Additional public sector employment can also indirectly generate local jobs by increasing demand for goods and services from local suppliers. For example, the purchase of office equipment from a local supplier might increase employment at that supplier.

Effects on local supply chains from public sector employers are likely to be smaller than from private sector ones because the former tend to procure more goods and services nationally rather than locally.

Key message: The impact on local supply chains is likely to be limited unless the public sector organisation is unusual in the amount it procures locally.

New jobs created by strengthening or creating clusters

A cluster is a set of firms located in the same area doing related activities. A famous example is Silicon Valley in California. It is often hoped that public sector relocation will strengthen or create clusters.

There are several ways in which a relocation might strengthen or create a cluster:

- By creating additional demand for the relevant supply chains as discussed above.
- Through the sharing of 'indivisible infrastructure' (for example, specialist research facilities such as the Diamond Synchrotron at Harwell in Oxfordshire).
- By supporting specialist local labour markets (for example, of accountants or lawyers with specific expertise).
- Through local knowledge 'spillovers' (for example, between firms involved in producing software).[2]

1 https://www.stuartanderson.org.uk/news/stuart-anderson-mp-delighted-government-housing-department-hq-moving-wolverhampton

2 For more detail see: Duranton, Gilles & Puga, Diego, 2004. "Micro-foundations of urban agglomeration economies," Handbook of Regional and Urban Economics, in: J. V. Henderson & J. F. Thisse (ed.), Handbook of Regional and Urban Economics, edition 1, volume 4, chapter 48, pages 2063-2117, Elsevier. (https://ideas.repec.org/h/eee/regchp/4-48.html).

The way these factors can play out differently in different places is illustrated by a Centre for Cities analysis of two relocations: the Office of National Statistics (ONS) move to Newport in 2005; and the BBC relocation of some operations to Salford Quays from 2011. As of 2017, there was no evidence of a statistics or data science cluster forming in Newport.[3] In contrast, a significant number of media jobs beyond those directly created by the BBC have been created in, or relocated to, Salford Quays (now called MediaCityUK).[4]

This comparison – discussed in Box 1 below – illustrates a more general finding: that it is easier for relocations to strengthen an existing cluster than to create new clusters.[5] The BBC relocation partly built on an existing cluster including the BBC's existing North-West HQ on Oxford Road in Manchester. There was no equivalent existing cluster in Newport. Interventions to create new 'clusters' of activity are rarely successful, and decision makers should take this into account when assessing likely cluster effects.

Key message: A public sector relocation is unlikely to create a new cluster from scratch. Seeking to strengthen an existing cluster is more realistic.

3 The BBC is an example of a public corporation. It was founded by the 1922 Broadcasting Act, and is funded by the TV licence fee. However, it is not directly run by the UK government, and not usually referred to as a public sector body.

4 https://www.centreforcities.org/wp-content/uploads/2017/08/17-08-10-Should-we-move-public-sector-jobs-out-of-London.pdf

5 See, for example, Martin, R. and Sunley, P., 2003. Deconstructing clusters: chaotic concept or policy panacea?. Journal of economic geography, 3(1), pp.5-35.

Box 1 - Case Study: Salford and Newport

Questions to consider when considering the role of clusters

Do the new jobs create additional demand for local supply chains in the relevant sector?

Public sector employers tend to procure a higher proportion of their goods and services nationally than private firms. The ONS is a good example of why this is the case: work is mainly desk-based with specialist services procured from expert providers across the country. In contrast, when the BBC in Salford makes television programmes it requires a range of specialist services (lighting, catering, etc.) some of which are procured locally.

Do the new jobs help support shared infrastructure for the relevant sector?

The BBC relocation formed an important part of the business case for the extension of the MetroLink to Salford: the expected increase in workers from the BBC made this shared infrastructure more viable. The BBC also serves as an 'anchor tenant' for the private sector developed MediaCityUK, a mixed-use property development with a focus on creative industries.

Do the new jobs help support a specialist local labour market for the relevant sector?

The local labour market in Newport was not well placed to support a data science cluster. In 2006, only 12 per cent of jobs in Newport were 'knowledge-based', placing it 47 out of 62 cities. Anecdotal evidence suggests ONS struggled to fill the 900 posts they moved. In contrast, the BBC in Salford can draw on a labour market of over 2.5 million, and the largest student population outside London provides a ready supply of highly skilled people interested in media and related industries.

Do the new jobs support local knowledge spillovers within the relevant sector?

The absence of other statistics and data science providers in Newport limits the opportunity for local knowledge spillovers from ONS. In contrast, the presence of other private sector firms in media, and related industries in MediaCityUK and the Greater Manchester area provide plenty of scope for spillovers which – in aggregate – increase the productivity of all the organisations in the cluster.

New jobs created by increased demand from more people employed locally

If relocation creates more local jobs – directly or indirectly – more money will be spent on local goods and services by people newly employed in the area.[6] For example, increased local employment is likely to increase demand for goods and services on the local high street, which in turn might create more retail and hospitality jobs.

Local jobs created in this way will tend to be in 'non-tradable' sectors, which means they need to be done locally, either because they require face-to-face interaction (for example health care, education, hospitality) or because local production overcomes substantial 'transaction costs' related to distance (for example local food delivery and perishable goods).

The number of such jobs will depend on what proportion of income is spent locally as well as how well paid (or, equivalently, how senior) are the new public sector jobs. In the past, public sector relocations from London have disproportionately involved junior roles, with senior and ministerial positions remaining in Whitehall. The commitment from the current government to relocate ministers and senior roles should mean that this is less the case for forthcoming relocations.

Key message: The impact on local demand from people newly employed in the area will depend on the number of new jobs (direct and indirect), how well the jobs are paid, and what percentage of income the employees spend locally.

4. Employment effects - displacement and crowding out

4.1 Displacement

In many cases, the creation of new jobs by a private sector firm will be partially offset by job losses in other local firms. For example, a new supermarket might create new jobs but put smaller shops out of businesses. This 'displacement' must be accounted for when estimating the overall impact of new jobs.[7] Displacement can also occur on a larger geographical scale. For example, when a firm moves to a new city it creates new jobs in one place at the expense of existing jobs in another.

In the case of ***public sector*** jobs, local displacement is rare, because public sector organisations are not usually competing directly with one another.[8] At larger geographical scales, displacement of public sector jobs from London or the South East to a new location is precisely what is intended.

4. 2 Crowding out

For public sector employment, a greater risk than displacement is that of 'crowding out'. Crowding out occurs when a public sector employer negatively affects local private sector firms, for example, by paying high wages relative to other local employers, making it harder for them to attract workers.

This can be a particular problem in places with weaker economies. Public sector wages are usually set nationally or regionally, and so tend to be more competitive in areas where wages are otherwise relatively low. As an example, some employers in the burgeoning digital sector in Newcastle and Gateshead have expressed concern about losing highly skilled workers such as web developers to nearby offices of HMRC and DWP.

6 Any increase in local wages resulting from the relocation will also have a similar effect, although the employment effects are likely to be larger.
7 Displacement is sometimes called 'substitution' in examples like this.
8 Displacement may occur if the new employer helps to strengthen a cluster: in the case of the BBC above, some of the new jobs in MediaCity UK came at the expense of existing employment elsewhere in Manchester.

A report commissioned for the 2004 Lyons Review on Public Sector Relocation suggested that the extent of crowding out could be affected by:

- The size of the local wage disparities between public and private sector pay.
- The extent of pay flexibility in the public sector, and whether it can be used to mitigate upward pressure on local wages.
- Whether the local supply of skilled labour can realistically be increased (for example, is there a supply of suitable local graduates who tend to leave but might be attracted to stay?).[9]

Key message: The risk of direct displacement is small, but some crowding out may occur. In a worse case-scenario it could more than offset the additional new jobs created through factors such as increased local demand. Decision makers should carefully assess the risk of crowding out based on local pay and labour market conditions.

5. Estimating the size of employment effects - the 'multiplier'

Sections 3 and 4 discuss the various factors which can influence the overall local employment impact of a relocation. The employment 'multiplier' is a figure which captures this overall impact. There are a number of ways to estimate this multiplier which vary according to the method used and the extent to which it accounts for the various factors discussed above.

Evidence from previous public sector (re)locations – reviewed for the What Works Growth Multipliers Toolkit – suggests that the multiplier for public sector jobs is 0.25. This means that, on average, each new public sector job creates 0.25 additional private sector jobs in the local area.[10] The Office for National Statistics (ONS) uses a different method, known as input-output analysis, to estimate the multiplier for different sectors. The ONS figures suggest that each new public sector job creates 0.37 new private sector jobs in the local area.[11]

5.1 Factors affecting the multiplier effect

The 0.25 and 0.37 figures are averages. As we have seen, the actual employment multiplier for any specific relocation could be larger or smaller than this, depending on:

- The extent of local procurement. The greater the use of local suppliers, the more jobs should be created in the local supply chain.
- The extent to which it strengthens or creates a cluster.
- Where new employees will work, live and spend their income. This will affect the extent to which increased demand for local goods and services occurs within or outside the local area.
- Wage levels for the new public sector workers:
  - Higher wage levels should have a larger impact on demand for local goods and services from new employees.
  - But higher wage levels also increase the risk of 'crowding out', which can offset jobs created directly and indirectly.

9 https://www.civilservant.org.uk/library/2004-Lyons-full_report.pdf

10 There are differing conventions for how multiplier effects are presented. Here, a multiplier of 0.25 means 0.25 additional jobs for every job created directly – 0.25 times the number of directly created jobs gives the number of *additional* jobs. A different convention is to call this a multiplier of 1.25 – 1.25 times the number of directly created jobs gives the number of total jobs. It's important to check which convention is being used.

11 More detail on these two methods can be found in on the What Works Growth Website here.

Each case will differ depending on the factors above. When estimating the multiplier for a particular case, it can be useful to think of the averages presented above as providing rough estimates of the likely multiplier. You can then assess whether the different factors listed in this section might increase or reduce the multiplier in that specific case, compared to these averages.

Key message: The total number of jobs that will be created by a given relocation is uncertain and depends on several factors. Assuming a multiplier of between 0.25 and 0.37 is a good starting point.

Private and public sector multipliers

The 0.25 figure compares to an average private sector multiplier of 1.31.[12] The difference shows the relatively limited impact of new jobs in the public sector compared to the private sector.

6. Relative impact on employment

Whether a relocation will make a noticeable difference to economic outcomes depends on the multiplier *and* the number of new public sector jobs relative to the size of the existing labour market.

For example, the new HMT campus in Darlington will deliver 750 new public sector jobs. Assuming a multiplier of 0.25, that's 940 new jobs in a labour market of about 53,000 people – about 2%. In contrast, the expansion of DLUHC in the West Midlands could mean 200 new public sector jobs spread across a labour market of just under 1.5 million – an increase of 0.02% after accounting for the multiplier.

Key message: Compare the total number of new jobs (both direct and indirect) to the size of the local labour market to assess the likely scale of the overall economic impact.

7. The geography of employment effects

To understand the full impact of a relocation on an area, it is important to consider the *geography* of employment effects.

These may differ for each of the main mechanisms discussed in section 3, as does the extent to which they can be predicted.

The geography of **new jobs in the supply chain** is difficult to predict: while information on procurement might be available from the public sector organisation, it is difficult for local areas to accurately map supply chains. See the What Works Growth toolkit on local data for more details.

The geography of **new jobs created by strengthening an existing employment cluster** is easier to predict precisely because such clusters are geographically defined. It may be sensible to think through several scenarios where new jobs are allocated to the relevant existing cluster or clusters within the area. Data on commercial vacancies or likely planning consents may help to refine these scenarios.

12 One of the reasons the public sector multiplier is smaller is that, as discussed above, public sector employers are less likely to use the local supply chain. Note that 1.31 is the multiplier for *tradeable* private sector jobs.

The geography of **new jobs created by increased demand from more people employed locally** will depend on where these new employees live and work. It is therefore important to know where the public sector jobs will be located, the extent to which they will be done remotely rather than at that location, and the extent to which the new employees will live in the local area:

- **Where the new public sector jobs are located** will have implications for weekday demand for local goods and services. For example, concentrated employment on an HMT campus in Darlington could significantly increase demand on the nearest 'high street'. Contrast that with DLUHC jobs spread across the West-Midlands.
- **The extent of remote working** will have implications for spending by employees near to the relocation site. If more flexible working practices are adopted, it can't be assumed that the impact on the local high street will be the same as it would have been before the pandemic.
- **Where new public sector workers will live** will have implications for night-time and weekend spending (and daytime if they are working remotely some days of the week). New public sector workers may choose different residential locations from existing households. For example, if they are better paid and more highly qualified than the local average, they will tend to live in more expensive residential areas and travel further to work. Data on local Travel to Work Areas can help with likely scenarios.[13]

Where displacement and crowding out occur will also have implications for the geography of employment effects. Any displacement effects should be relatively easy to predict as they depend on the where public sector jobs have been moved from in the relevant organisation. The geography of crowding out is harder to predict.

Key message: The indirect employment effects of relocation will be affected by where public sector employees live and work and by the geography of firms that supply goods and services. Use local data to model likely scenarios for the geography of indirect effects: don't assume they will all be experienced where the employer's offices are located.

8. House price effects

If the scale of public sector relocation is large relative to the local labour market, the resulting increase in demand will increase local house prices. Broadly speaking, this is good for home owners, but can lead to renters being priced out.

Evidence from the relocation of the German government before and after re-unification – which was very large in scale – shows such effects. In practice, most public sector relocations in the UK will not be of sufficient scale for similar impacts, and any house price effects are likely to be limited to certain neighbourhoods[14]. Analysis of where public sector employees are likely to live (see section 7) along with local housing supply data, could be used to assess whether an effect is likely, and where.

Key message: it's important to assess the impact of house price effects on residents and allow for the possibility that they will be concentrated in certain neighbourhoods.

13 ONS data on travel to work areas is available here: https://ons.maps.arcgis.com/home/item.html?id=26d46c4eb2c14ba6aaa827f3025789de

14 For detail on the Bonn/Berlin example see Becker, S.O., Heblich, S., and Sturm, D.M. (2018). "The Impact of Public Employment: Evidence from Bonn" IZA DP No. 11255

9. Productivity effects

Increasing the total number of jobs in an area will increase the total economic ***output*** of that area – as measured by 'Gross Value Added' (GVA), for example. It is often hoped that a public sector relocation can also increase local ***productivity*** - as measured by output per worker, for example.

One way in which this could happen is if, on average, the **new jobs are higher productivity than existing jobs**. Wages can be used to assess the likely effect, because wages are a good proxy for productivity. Public sector jobs are often relatively well paid, which will pull average wages up. In contrast, jobs created through the public sector multiplier effect tend to be non-tradable (section 3.2), and thus relatively poorly paid compared to the labour market as a whole, pulling average wages down. The fact that these mechanisms work in opposite directions, and that most relocations are small relative to the overall labour market anyway (see section 6), means overall effects on average wages are likely to be limited. This suggests that increases in productivity caused directly by the changing composition of jobs will also be limited.[15]

A second way in which productivity can be affected is through **benefits from agglomeration economies** – a term used to describe the benefits of spatially concentrated employment. However, the fact that most relocations are small relative to the overall labour market also limits the extent of the impact. To illustrate: Gibbons and Graham (2018), drawing on 47 studies, find that the average estimate indicates that a doubling in city size leads to a 4.6% increase in productivity.[16] Even with a large multiplier effect, any plausible relocation could only deliver a fraction of a doubling of the local labour market. These kind of productivity effects are therefore likely to be limited.

Agglomeration economies increase the productivity of clusters, as well as the local economy as a whole. This means that there may be some additional productivity effects if a relocation strengthens or creates a cluster. Gibbons and Graham (2009) provide estimates of agglomeration effects by broad industry and these can be used with estimates of the likely percentage increase in employment in a cluster to predict the productivity effects.[17]

Key message: The productivity effects of a relocation are likely to be small unless it creates or significantly strengthens a cluster.

10. Skilled workers

Most of the relocations announced by this government are expected to include senior and graduate roles. More higher paying public sector jobs will increase demand for high-skilled workers in an area unless completely offset by crowding out. If the supply of skills increases in response – for example, through improved graduate retention or people relocating from the previous public sector site – this may also make an area more attractive to private sector firms that employ high-skilled workers.

15 It is possible that wages are a weaker proxy for productivity in the public sector than in the private sector, but this is still a useful exercise.

16 Graham and Gibbons, 2018. Quantifying Wider Economic Impacts of Agglomeration for Transport Appraisal: Existing Evidence and Future Directions. http://eprints.lse.ac.uk/91682/1/Graham_Quantifying-wide-economic-impacts_Author.pdf

17 Graham and Gibbons, 2009. Transport investment and the distance decay of agglomeration benefits. https://www.researchgate.net/publication/228793866_Transport_investment_and_the_distance_decay_of_agglomeration_benefits

The following factors can be used to assess the likely impact:

- The expected 'grade' profile of the new public sector jobs: job 'grades' and accompanying pay-scales can be used to estimate the skills profile of the jobs, and the proportion of them which are likely to be graduate roles.[18]
- The proportion of the jobs created ***indirectly*** which are likely to be highly skilled: as discussed in section 3, new jobs in the non-tradeable sector, which tend to be lower skilled, are more likely than new supply chain jobs or jobs in new clusters.
- The current size of the high-skilled labour market: what increase is needed to realistically attract new private sector firms, and is that likely, based on the data discussed above?

In most cases this assessment will suggest that effects on the size of the local labour market for high-skilled workers will be small.

Key message: The effects of public sector relocation on the demand for and supply of higher skilled workers are likely to be small unless it creates or significantly strengthens a cluster.

11. Impacts on current residents

Sections 3 to 10 discuss the potential impacts on ***places*** of public sector relocation. It is also important to consider the impact on ***current residents***.

Employment and wages

- Do current residents have the skills that are likely to be needed for the new jobs created:
  - directly (including high-skilled public sector jobs)?
  - indirectly (jobs in the supply chain, non-tradable jobs, etc.)?
- Can interventions such as re-training programmes increase the likelihood that current residents benefit from new jobs?
- Which current residents might be affected by jobs ***lost*** through displacement and crowding out?
- Relatively high public sector pay can drive up wages in places with weaker economies (see section 4). If this occurs, which current residents will benefit?

Educational attainment

- Will there be an impact on local educational attainment? What will drive this?
  - New higher skilled residents will have higher attaining children, on average.[19] But any impact on ***overall*** attainment is likely to be small and will be due to newly resident pupils.
  - It has been argued that improving the economic prospects in an area may raise the educational aspirations of existing pupils, therefore improving attainment, but the evidence to support this is limited.
  - Are there other mechanisms by why educational attainment will improve for local pupils, or are additional local polices needed to achieve this?

18 For example, more detail on grades and pay in the Civil Service can be found here: https://www.instituteforgovernment.org.uk/explainers/civil-service-pay

19 Hertz, Tom, Tamara Jayasundera, Patrizio Piraino, Sibel Selcuk, Nicole Smith, and Alina Veraschchagina. 2007. "The inheritance of educational inequality international comparisons and fifty-year trends." The B.E. Journal of Economic Analysis and Policy 7: Issue 2 (Advances), Article 10.

House prices and local services

- What are the likely effects on house prices in different local areas (see section 8)? As discussed above, prices might increase in particular neighbourhoods. This would benefit home-owners, but renters could be priced out.
- Will there be additional demand for local public services such as schools from new public sector workers? What will the geography of this demand look like (see sections 7 and 8)? Is there sufficient supply to cope with this increased demand?

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This work is published by the What Works Centre for Local Economic Growth, which is funded by a grant from the Economic and Social Research Council, the Department for Business Energy and Industrial Strategy, the Department for Levelling Up, Housing and Communities, and the Department for Transport. The support of the Funders is acknowledged. The views expressed are those of the Centre and do not represent the views of the Funders.

January 2022

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