

Rapid evidence review: Public sector relocation

Introduction

Public sector relocation involves the movement of central government functions from one part of the country to another.

This rapid evidence review summarises the evaluation evidence on public sector relocations.

This rapid evidence review informed our evidence briefing on assessing the local economic impacts of public sector relocation.

Things to consider

Need for more evidence

- There is a need for more evaluation evidence on the local economic impacts of public sector relocations. Evaluations should focus on understanding the impacts on employment, wages, and productivity.
- Government should commit to undertaking robust impact evaluations of future relocations and the establishment of new government agencies and bodies.

Policy lessons are covered in the briefing.

Evaluation evidence

What is public sector relocation?

Public sector relocation typically involves the movement of central government functions – and the employment associated with them – from one part of the country to another. In the UK, this has generally involved relocation from London to the rest of the country outside of south east England.

Understanding the impact of public procurement

Our evidence reviews use studies with a score of three or above on the Maryland Scientific Methods Scale (SMS), which classifies evaluations based on methodological robustness and implementation.¹ Our toolkits and rapid evidence reviews also include studies with a score of two or above when these add to the evidence base. All the studies included in this rapid evidence review score SMS 3 or above.

Our search identified eight evaluations. Four were scored as SMS 4, and four as SMS 3. Five of the studies are also included in our [local multipliers toolkit](#). The annex provides a summary of each study.

Four of the studies are evaluations of public sector relocations. We have also included four studies that have evaluated the impacts of other changes in public sector employment that are likely to have similar impacts as relocations.

The findings are organised by outcome. Be cautious of findings based on a small number of studies.

Evidence on impacts

Employment

All eight studies consider the effect of public sector relocations or public sector employment on private sector employment. Four of the studies scored SMS 4 and four SMS 3.

Of the four studies that evaluate public sector relocations, all except one finds relocation has positive effects on private sector employment. Two of the studies (PSR-2 and PSR-3) relate to the relocation of the German government – from Berlin to Bonn in the 1940s and from Bonn to Berlin in 1999 – which were very large scale, so findings may not be transferable to smaller scale relocations.

- PSR-1 (SMS 3) evaluates the impact of public sector relocations in the UK between 2003 and 2007. It finds public sector relocations have a positive effect on private sector employment in the destination area but that impacts are highly localised and that there is a high degree of displacement, with private sector jobs increasing near the site (within 1 km) whilst decreasing further away (1 to 3 km). Effects are limited to service sectors, with no effect on manufacturing employment.
- PSR-2 (SMS 3, also cited in the local multipliers toolkit) evaluates the long-term effect of relocating the German federal government from Berlin to Bonn in the 1940s on private sector employment. It finds a negative effect on tradeable sectors, with each additional public sector job leading to a decrease of 0.2 tradeable sector jobs but a positive effect on other parts of the private sector, with each additional public sector job leading to 1.05 new jobs in the non-tradeable sector.
- PSR-3 (SMS 3) examines the impact of the relocation of government institutions to Berlin following German reunification. It finds the relocation of 100 public sector jobs into a given postcode results in an additional 52 to 56 private sector jobs within that postcode and 36

¹ For more information on how we rank the robustness of evaluations, see our introduction to the [Maryland Scientific Methods Scale](#).

new jobs in postcodes located within 1km of the affected postcode. The positive effect diminishes with distance from the relocation site. Employment effects are mainly seen in the service sector, with increases in intermediate demand for consultancy and legal work, and in consumer demand for catering and personal services. There is no effect on manufacturing employment.

- PSR-4 (SMS 3) evaluates the closure of 38 prisons in the US. Whilst this is not a public sector relocation, the effects may be similar, although reversed. It finds a negative effect on public sector jobs (reflecting the fact that most of closed prisons were government-run) confined to non-graduate workers. There was no effect on private employment, total employment, or the unemployment rate.

For the four studies that evaluate the impact of public sector employment, the evidence is more mixed. Two studies find public sector employment has a negative effect on private sector employment. This is known as crowding out.

- PSR-5 (SMS 4, also cited in the local multipliers toolkit) evaluates the impacts of central government cuts to public employment and finds that each additional job in the public sector reduces private employment by between 0.6 and 0.8 jobs. Each additional public sector jobs leads to a decrease of 0.6 jobs in manufacturing employment, but no changes in service and construction employment.
- PSR-6 (SMS 4, also cited in the local multipliers toolkit) finds each additional job in the public sector reduces private sector employment by 0.74 jobs. Within this, there is a negative effect on employment in the tradeable sector while employment in the non-tradeable sector is unaffected.

One study finds positive effects.

- PSR-7 (SMS 4, also cited in the local multipliers toolkit) finds that each additional job in the public sector creates 1.3 jobs in the private sector, mainly in non-tradeable services.

One study finds mixed effects.

- PSR-8 (SMS 4, also cited in the local multipliers toolkit) finds the impact of public sector employment on private sector employment varies depending on sector and time-period considered. Over a four-year period, there was no effect on private sector employment overall but, within this, each additional public sector job creates 0.5 jobs in the non-tradeable sector (construction and services) and reduces employment by 0.4 jobs in the tradeable sector (manufacturing). Over an eight-year period, there was no effect on the non-tradeable sector and a larger negative effect on the tradeable sector, leading to an overall negative effect on private sector employment.

Combined, this suggests that whilst public sector relocations may have an impact on employment, these are not guaranteed to be positive, with a risk that public sector employment will crowd out private sector employment. Employment effects vary across sectors, with any increases generally seen in service sector employment (especially non-tradeable services such as retail and hospitality) and any decreases in manufacturing employment. The concentration of impacts in non-tradeable services is likely to be reason impacts appear to be highly localised.

Other economic outcomes

Some of the studies also consider other economic outcomes.

- Three studies – PSR-5, PSR-7 and PSR-8 – look at the impact on the **working age population**. PSR-8 finds no effect, whilst PSR-5 and PSR-7 both find a positive effect. PSR-7 also looks at **total population** and **economically active population** and, again, finds a positive effect.
- One study – PSR-8 – looks at the impact on **unemployment** and **economic inactivity**. In both cases, there is no effect.
- Two studies – PSR-2 and PSR-6 – look at the impact on **wages**, with both finding a positive effect.
- One study – PSR-2 – looks at the impact on **productivity** and finds a positive effect.
- One study – PSR-5 – looks at the impact on **house prices** and finds a positive effect over a seven-year period.

This highlights that relocations may have other economic impacts, but more evaluation is needed for us to be able to draw conclusions and inform policy.

Are they cost effective?

None of the studies consider cost effectiveness.

Annex: Evidence on public sector relocation

For this rapid evidence review, we looked for evaluation evidence of public sector relocations on economic outcomes using a wide range of search terms. We focused on evidence from OECD countries, published in English. We considered any study providing before-and-after comparisons or cross-sectional studies controlling for differences between areas with different procurement approaches, studies that compare changes in outcomes in treated areas with changes in outcomes in similar non-treated areas, or that use an instrumental variable approach.

We have also included studies that evaluate the impacts of other changes in public sector employment that are likely to have similar impacts as relocations.

We found eight evaluations that met our criteria for inclusion in a rapid evidence review. Four were assessed as SMS 4, and four as SMS 3. Two studies are from the UK. Three studies are from Germany, and one each from Italy, Spain, and the US. Five of the studies are also included in our [local multipliers toolkit](#). This annex provides a summary of each study.

PSR-1 (SMS 3, UK) examines the impact of the Lyons Review initiative to relocate 25,000 public sector jobs on private sector employment in the destination areas. The study employs a treatment intensity estimation approach in a difference-in-differences setting. Treatment intensity is captured as a function of the distance to a relocation site. The study estimates the effect of the relocation over the period 2003 to 2007. The study is based on three data sources – relocation data from the Office of Government Commerce, the Business Structure Database and the 1991 and 2001 Censuses. The analysis is conducted at the output area (OA) level, which divides the UK into 218,000 areas. OAs are made up of clusters of five or six adjacent unit postcodes, originally designed to have comparable population sizes and to be as socially homogeneous as possible (in terms of dwelling type and household tenure). The main sample consists of 151,912 OAs, of which 227 were destinations for public sector relocations. The study finds that a public sector relocation has a positive effect on total private sector employment in the areas receiving new public sector jobs, with 10 public sector jobs generating 11.7 additional private sector jobs. However, the study also finds evidence of displacement, with the above positive effect within 0 to 1 km of a relocation site being offset by negative effects within 1 to 2 km and 2 to 3 km. Aggregating the effect within the 0 to 3 km range, 100 relocated public sector jobs are associated with just 0.9 additional private sector jobs. There is no effect beyond 3 km, suggesting that the effect is highly localised. The study also finds the impact varies across sectors. There is no effect on manufacturing employment, but there is an effect on services, with 10 additional public sector jobs leading to an increase of about 12 additional jobs.

PSR-2 (SMS 3, Germany, also cited in the local multipliers toolkit) examines the effect of relocating the German federal government from Berlin to Bonn during the Second World War on private sector employment. The study uses a panel of 41 cities for the period 1925 to 1987. It applies a difference-in-differences strategy which compares the city of Bonn (the treated city) to a synthetic control city constructed using a weighted average of the 40 non-treated cities. The study finds an additional job in the public sector reduces employment in the tradeable sector by 0.2 jobs and increases jobs in the non-tradeable sector by 1.05 jobs. Wages in 1987 were 2.4 percent higher than in control cities. Modelling spillovers suggest that doubling public employment in a city reduces productivity in the private sector by about 0.4 percent while amenities in the city increase by about 1.8 percent.

PSR-3 (SMS 3, Germany) examines the impact of relocating the German government from Bonn to Berlin in 1999. The study explores whether it results in the creation of new jobs through increased

demand for locally-produced goods and services. The study employs a treatment intensity approach to investigate the influence of a treatment variable and multiple treatment intensity variables on the local private sector employment. This approach combines the usual treatment dummy of a standard difference-in-differences approach, with treatment intensity variables. The study uses panel data from the Establishment History Panel provided by the Institute for Employment Research for the period 1975 to 2010 for former West Germany and 1991 to 2010 for the New Länder in the former East Germany. The dataset contains information on a 50 percent random sample of German establishments with at least one employee on social security records. The data is enhanced by additional postcode information and collected information on the number of jobs of each relocating institution before and after the move, the year the institution moved in or out of Berlin, and the new address of the institution in Berlin or the former address in Berlin of those institutions that were relocated to Bonn and the New Länder.² The study finds that when 100 public sector jobs are moved into an area, it leads to the creation of 52 to 56 additional jobs in the private sector within the same area and the creation of 36 new jobs in neighbouring areas, suggesting spillover effects. These effects are primarily seen in the service sector, while manufacturing employment remains unaffected by the relocation. The study finds evidence of a multiplier effect, both in intermediate demand for consultancy and legal work, and in consumer demand for catering and personal services. The positive impact of job creation is concentrated within the first few kilometres from the relocation site and diminishes as distance increases.

PSR-4 (SMS 3, US) evaluates the economic impact of prison closures on counties in the United States in the early 2010s. The study uses a difference-in-differences approach. The analysis is conducted at the county level, analysing 38 treated counties, each matched with three control counties in the same state over the period 2006 to 2019. Data from the 2012 Census of State and Federal Adult Correctional Facilities (CCF), the 2000 to 2019 Quarterly Census of Employment and Wages (QCEW) and Local Area Unemployment Statistics (LAUS), the 2000 Decennial Census, and the 2006 to 2010 and 2015 to 2019 American Community Survey (ACS) are used. The study finds prison closures have a negative effect on public sector jobs and no effect on private sector jobs. The effect on public sector jobs is likely to be because 35 of the 38 prisons were government-run. There is no effect on total employment and no effect on the unemployment rate. When the effect is broken down by qualification group, the study finds an effect for workers without a university education, but none for those with a university education.

PSR-5 (SMS 4, Italy, also cited in the local multipliers toolkit) examines the effect of a contraction in public employment on employment in the private sector in Italy. The study uses census data (2001 and 2011) which is aggregated at the municipality level. It applies an instrumental variable strategy that uses a Bartik instrument. It takes advantage of the idea that reductions in local public employment which occurred between 2001 and 2011 depended mainly on central government decisions without considering local economic conditions. Results suggest that an additional job in the public sector reduces private employment by between 0.6 and 0.8 jobs in the private sector. Public sector employment leads to a decrease in manufacturing employment, but no changes in service and construction employment. It finds public sector jobs have a positive effect on the size of the working age population and on house prices between 2004 and 2011.

PSR-6 (SMS 4, Germany, also cited in the local multipliers toolkit) examines the effect of an increase in public employment on private employment in Germany. The study uses data from the Establishment History Panel aggregated at the district level for the period 2003 to 2007. It applies an instrumental variable approach using a refined shift-share instrument that does not include the

2 Some public services were moved to Bonn and New Länder to help ensure political agreement for the move of the capital from Bonn to Berlin.

own district when computing the national growth of employment by sector and using 2003 values to compute initial shares. Results suggest that each additional job in the public sector reduces private sector employment by 0.74 jobs. It also finds that local gross daily wages increase – a one percent increase in the public sector employment leads to a 2.2 percent increase in private sector wages.

PSR-7 (SMS 4, Spain, also cited in the local multipliers toolkit) examines the effect of an expansion in public employment on private employment in the long-run in Spain. It uses census data on employment and population for 1980, 1990, and 2001 at the urban area level. The study uses a search and matching model embedded within a spatial equilibrium model with three sectors (public, tradeable, and non-tradeable) to simulate an expansion of the employment in the public sector. The study finds that each additional job in the public sector creates 1.3 jobs in the private sector, mainly in non-tradeable jobs. In addition, it finds that total population, working age population, and economically active population all increase.

PSR-8 (SMS 4, UK, also cited in the local multipliers toolkit) examines the effects of public employment growth on employment in the private sector in the UK. The study uses data at the UK local authority level for the period 2003 to 2007. It applies an instrumental variable approach using a refined Bartik instrument that does not include the own region when computing the national growth of employment by industry. The study finds that an increase in public sector employment does not affect overall private sector employment. The lack of effect is explained by the fact that each additional job in the public sector creates 0.5 jobs in the non-tradeable sector (construction and services) but reduces employment by 0.4 jobs in the tradeable sector (manufacturing). Using a longer time-period (1999 to 2007), the study finds no evidence of multipliers on the non-tradeable sector and a larger crowding-out effect on the tradeable sector, leading to an overall crowding-out effect on total private sector employment. The study finds no evidence of an impact on working age population, inactivity, or unemployment.

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