

# German Reunification

Lessons from the German approach to closing regional economic divides

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**Navigating Economic Change**  
*Lessons from abroad and history*

## Navigating Economic Change

As the UK is buffeted by the economic shocks and challenges of the 2020s, The Economy 2030 Inquiry, a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics (LSE), funded by the Nuffield Foundation, is publishing a series of essays examining how policy makers from a range of advanced economies, including the UK in the recent past, have managed periods of disruptive economic change. As we seek to reformulate the UK's economic strategy for new times it is vital that we learn the lessons of these comparative and historic perspectives.

Some consider the trajectory of a national economy following a major shock – for instance, Germany after unification, New Zealand after the UK joined the European Community, Estonia post-USSR and the UK during the tumultuous 1980s. Others examine the experience of particular cities – for instance a group of post-industrial 'turn-around cities' - or the adjustment of key features of a national economic system, such as Danish 'flexicurity'. Together they offer a powerful and timely set of insights on the successes and failures of economic policy makers in the face of economic shocks and structural change.

The essays are written by a range of leading economists and national experts and reflect the views of the authors rather than those of the Resolution Foundation, the LSE or The Economy 2030 Inquiry.

They have been commissioned and edited by Gavin Kelly (Chair of the Resolution Foundation and member of the Economy 2030 steering group) and Richard Davies (Professor at University of Bristol and fellow at the LSE's Centre for Economic Performance).

## The Economy 2030 Inquiry

The Economy 2030 Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics, funded by the Nuffield Foundation. The Inquiry's subject matter is the nature, scale, and context for the economic change facing the UK during the 2020s. Its goal is not just to describe the change that Covid-19, Brexit, the Net Zero transition and technology will bring, but to help the country and its policy makers better understand and navigate it against a backdrop of low productivity and high inequality. To achieve these aims the Inquiry is leading a two-year national conversation on the future of the UK economy, bridging rigorous research, public involvement and concrete proposals. The work of the Inquiry will be brought together in a final report in 2023 that will set out a renewed economic strategy for the UK to enable the country to successfully navigate the decade ahead, with proposals to drive strong, sustainable and equitable growth, and significant improvements to people's living standards and well-being.

## Summary

Germany's sudden reunification in 1990 was a large shock to which the German government responded with unprecedented scale. The Communist East was transformed into a decentralised and democratic market economy within less than a year. Trillions were spent with the aim of narrowing gaps between East and West Germany. In terms of scale and speed of response, modern Europe has seen nothing quite like it.

The dimension and disruption of reunification was certainly unique, but aspects of the German experience have implications for the UK, which is also challenged by deep social and economic spatial divides. Reunification policies in Germany, for instance, successfully harmonised infrastructure and took major strides in equalising living standards. This was only possible because the fiscal response was far-reaching, permanent, and based on an all-party 'whatever-it-takes' consensus.

But some areas were overlooked by policy makers. Unaddressed wage differentials have led to a major brain drain, with a net 1.7 million people moving from East to West Germany between 1989 and 2019, and a related pay gap between East and West for all skills levels. And reunification policies addressing the private and public sector were not always consistent. When it came to business support this focused on manufacturing while innovation and more knowledge-based service-focussed businesses were not significant policy priorities. This approach inadvertently led to a de-facto spatial strategy that prioritised industrialised smaller towns over larger cities, the consequences of which are still borne out in productivity figures today as Germany becomes a more service-orientated economy.<sup>1</sup> At the same time, policy on public services and infrastructure, such as on schools and local administration, led to more centralisation in cities.

Meanwhile an absence of democracy-building and civil-society strengthening policies, and the wholesale import of Western institutions and elites without sufficient participation of East German stakeholders, has contributed to the high levels of political disfranchisement in today's East Germany.

So what can policy makers in the UK learn from the German experience? First, that to make progress on large structural regional inequalities requires significant long-term commitment and funds – Germany has spent the equivalent of a furlough scheme every year on its reunification agenda over the last three decades. Second, the prioritisation of legacy jobs via subsidies and other interventions at the expense of initiatives to grow emerging parts of the economy that were set to become engines of growth, namely large service-orientated cities, was an error. UK policy makers shouldn't make the same mistake. Places like Leeds and Manchester are underperforming but the right policy and investment mix could leverage the benefits of agglomeration and the UK's services specialism to drive more regionally balanced economic growth.

Relatedly, reunification demonstrates how investment in public infrastructure, though crucial, is not enough on its own to drive prosperity gains. Infrastructure in East Germany may be on a par with that in the West, but productivity and pay are still one-fifth lower.

<sup>1</sup> C Wingerter, [Erwerbstätige nach Wirtschaftsbereichen und Berufsgruppen](#), Federal Agency for Civic Education (bpb), March 2021.

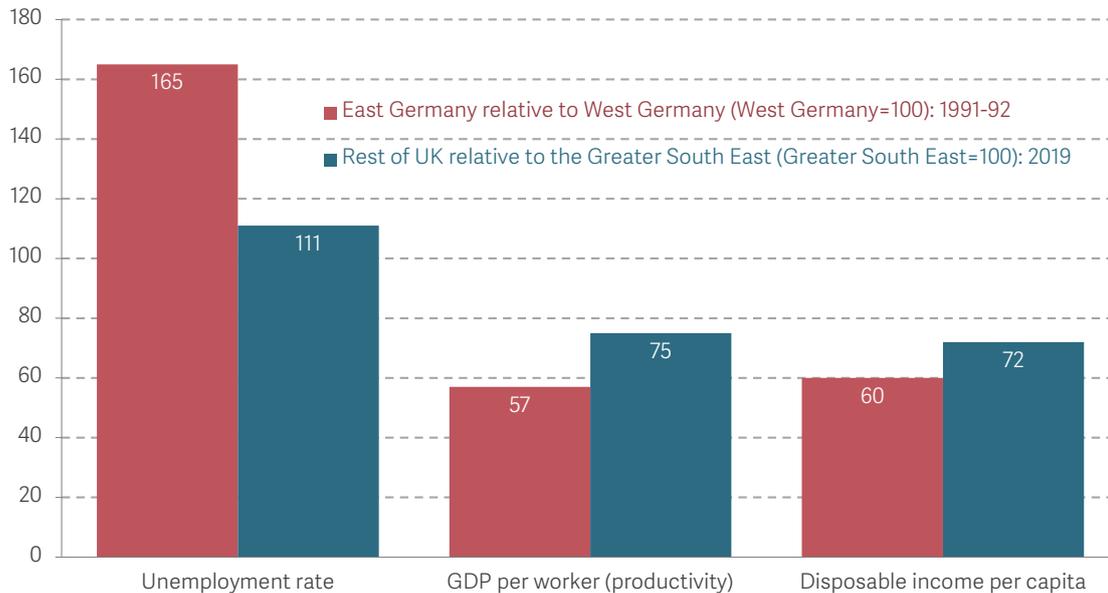
## Aspects of the challenges facing Germany at the time of reunification were of a similar type and magnitude to those facing the UK today

When reunification was heralded after 40 years of separation, re-united Germany faced massive regional inequalities. While West Germany had opened up to international trade and developed a pluralist society, its socialist Eastern counterpart had run a centrally planned economy in which inefficient businesses, using outdated machinery, were sheltered from international competition. The East also lacked democratic governance for more than 50 years.

Clearly, the political economy of the UK in the 2020s is radically different from this pivotal moment in European 20th century history. But the German experience is instructive because some of the regional disparities seen in the UK are nonetheless large and broadly similar, if less extreme (Figure 1). Gaps in disposable income and productivity between the Greater South East and the rest of the UK pre-pandemic were very large and not that much smaller than those observed between East and West Germany in 1992. Both East Germany and the regions outside the Greater South East had higher unemployment than the rest of the country, although this was significantly more extreme in the former.

**FIGURE 1: Some of Germany’s challenges at the time of reunification are similar in scale to those the UK is facing today**

Disposable income per capita, unemployment rate and productivity: Germany, 1991/92; UK, 2019



NOTES: Disposable income per capita is before housing costs; the Greater South East encompasses the geographic regions London, South East England and East of England.

SOURCE: Volkswirtschaftliche Gesamtrechnungen der Länder, Entstehung, Verteilung und Verwendung des Bruttoinlandsprodukts in den Ländern der Bundesrepublik Deutschland; ONS, Regional gross disposable household income (GDHI); ONS, Employment by region; ONS, Regional economic activity by gross domestic product; Volkswirtschaftliche Gesamtrechnungen der Länder, Bruttoinlandsprodukt, Bruttowertschöpfung in den kreisfreien Städten und Landkreisen der Bundesrepublik Deutschland 1992 und 1994 bis 2019; Bundesagentur fuer Arbeit, Arbeitsmarktstatistik; ONS, Annual Population Survey; NISRA, Labour Force Survey.

### 1. The comprehensive policy response had many dimensions

Germany’s reunification happened at lightning speed. The Berlin Wall unexpectedly fell in November 1989 after large-scale protests against the Communist regime. Free elections in East Germany followed in the spring of 1990, and parties proposing a fast-track reunification won by large margins.

Reunification became irreversible when East Germany started adopting all West German standards and introduced the Deutsche Mark in July 1990. Germany reunited on 3 October 1990 after the UK, the US, the French, and the Soviet governments agreed, and East Germany introduced West German institutions within weeks.

Reunification came with very large amounts of funding over a very long period

In the light of the scale of the inequalities between East and West, all main parties in Germany acknowledged that reunification would not come cheap. But the volumes of transfers and the persistent need for them were far beyond all expectations. The initial support package was set up for six years with around £81.3bn, but it soon became apparent that lifting the East up towards the prosperity of the West would require enormous funds and long term commitment.<sup>2</sup> According to the most recent estimates, more than £2 trillion (2019 prices) was spent on the reunification project between 1990 and 2018. This corresponds to more than a quarter of East Germany's cumulated GDP since 1991, or around £74 billion every year in 2019 prices. For context, the UK government spent £70 billion on furlough during the pandemic.

A striking characteristic of this expenditure in East Germany is the long timeframe of the underlying programmes and the associated support. After the initial six years, further economic and political support was guaranteed for 10 years in 1995 and renewed for another 15 years in 2005. In 2020, a new system of fiscal grants replaced the explicit transfers but it still favours the East.

The central factor that facilitated this long-term approach was the cross-party commitment to support East Germany. Reducing regional disparities is a key goal of almost all-party manifestos, which was likely helped by the pre-existing practice of central government capital subsidies being disproportionately allocated to West German regions adjacent to the intra-German border before the fall of the wall. It therefore didn't require a large shift in mindset to expand this strong regional redistribution system and approach to business subsidies to East Germany after 1990.

Financial transfers through the welfare system accounted for the largest shares of all transfers

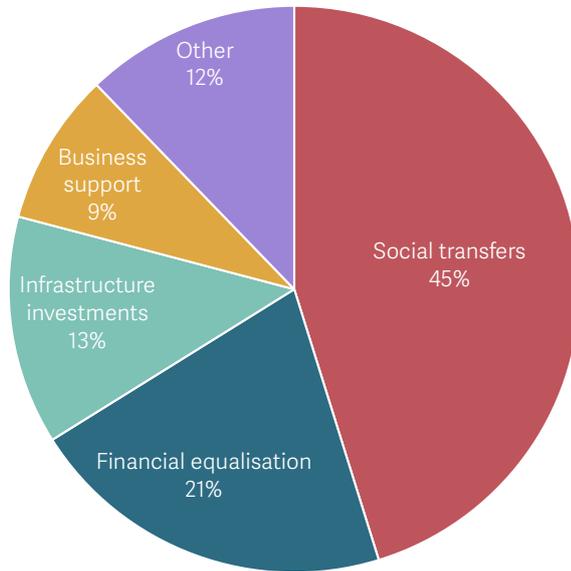
Spending took two forms: direct and indirect transfers, which focused on capital and social transfers. Figure 2 shows the composition of these transfers to East Germany in 2003 which is similar to other years. Direct transfers were organised as financial equalisation grants from the central government and wealthier federal states to the East German state governments to modernise schools, roads, and hospitals. There were also direct infrastructure investments by the central government, as well as subsidies and support for manufacturing businesses to renew their capital equipment. The largest component was indirect transfers via the social security and health care systems: pensions, unemployment benefits, and health care.

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<sup>2</sup> Figure is in 2019 prices. DM115bn in 1990. In: Federal Agency for Civic Education (bpb)- Vor 30 Jahren: Fonds „Deutsche Einheit“, May 2020.

**FIGURE 2: Social transfers accounted for the largest share of government support**

Distribution of gross government transfers to East Germany: 2003



NOTES: Social transfers includes pensions and unemployment benefits. Financial equalisation is the money that is redistributed between wealthy federal states (and the federal government) and less wealthy (especially eastern) federal states.

SOURCE: Halle Institute for Economic Research, [Wie hoch sind die Transferleistungen für die neuen Länder?](#), IWH-  
Pressemitteilung 21/2003, October 2003.

In contrast, direct wage subsidies, large innovation programmes, or strategies to promote social cohesion have never been important objectives of the reunification funds, for reasons discussed below. Within a few years, millions lost their jobs in the industrial sector after reorganisation and privatisation of the East German economy. Re-training was considered risky as future qualification and labour market needs were often very unclear at a time of disruptive structural change. People and policy makers waited, expecting existing skills and qualifications to still be appropriate. Therefore, schemes aimed at supporting the unemployed often focussed more on providing basic bridging work, such as rebuilding cycling and walking trails, rather than developing new skills or qualifications.<sup>3</sup>

And despite the amount of money spent on reunification and a large number of different programmes and initiatives launched, there was no integrated, overarching strategy in place beyond mimicking the West. Reunification essentially meant rolling out established place-based policies from West Germany (for example, capital subsidies for regions along the intra-German border) and implementing the full social transfer system in the East. There was little space for specific East German preferences or goals: West German averages were the benchmark to meet in all reforms and policies (for example, police coverage, school and administration size etc.).

West German institutions were copied and implemented at a fast speed

The quickest way to implement reunification was seen to be to import West German institutions. These institutions and structures had successfully facilitated Germany's fast economic and democratic recovery after World War Two and were therefore considered an ideal blueprint for East Germany.<sup>4</sup> Hence the East German parliament (Volkskammer) implemented democracy, federalism,

<sup>3</sup> G Reutter, Irrtümer und Einsichten – [Berufliche Weiterbildung in den neuen Ländern nach der Wende](#), forum erwachsenenbildung, 2019.

<sup>4</sup> S Mau, [Wie ostdeutsche Identität bei der Vereinigung helfen kann](#), Vorwärts, November 2021.

local autonomy, and market economy institutions in 1990 within a few months, widely supported by the West German administration.

Stronger local government and greater devolution, for instance, were accomplished by reducing the number of local councils and giving them the same powers as West German ones such as the ability to levy taxes.

To achieve Western standards as fast as possible, the importing of institutions was accompanied by the importing of elites (mayors, state ministers, business leaders of companies – even state prime ministers) too. Western officials mainly carried out privatisation of formerly state-owned companies and public property, and businesses and real estate were mainly sold to West Germans. The involvement of local or East German stakeholders was minimal. There were no longer-term policies in place to develop civil society in an East Germany that had been hollowed out by more than 50 years of autocracy and state-run bureaucracy. This stood in sharp contrast to West Germany where clubs, political parties, trade unions, and civic organisations were vital actors in society.

Direct business support had a strong focus on manufacturing, with an implicit focus on smaller urban and rural areas

The East German economy was ill-prepared for the cold winds of global competition. Almost all larger businesses were state-owned, and resource allocation was centrally planned. Meaningful prices to signal shortages and private markets did not exist. And like in other Communist countries, the East German government had designed arbitrary political goals regarding sectoral, factor and regional allocation of resources and outputs. The result was that many companies either operated using antiquated pre-WWII machinery or at the cost of massive pollution and environmental damage. One-in-two workers in the East were employed in the industrial sector (mainly manufacturing and heavy industry), compared to one-in-three in the West.<sup>5</sup>

All this was compounded by the low productivity of East German businesses due to run-down infrastructure, misallocation of the labour force, and the absence of meaningful output prices. The rapid monetary union with West Germany in July 1990 ruled out devaluation as a measure to cushion this adjustment which resulted in a rapid economic downturn. After mass closures and lay-offs, employment in East German industry halved from 3.5 million in 1988 to 1.6 million in 1992. By the early 2000s, the number of industrial jobs in East Germany had fallen to around 1 million.

One of the most important programmes to directly support businesses in East Germany was the joint Federal Government/Länder subsidy scheme for improving the regional economic structure (“GRW”).

And while there was no specific spatial strategy in place, government funding implicitly had a strong spatial component which was influenced by two factors. First, the GRW funds had a very strong focus on industrial production and continued production by renewing businesses’ equipment and machinery.<sup>6</sup> And second, these kinds of activities were mainly located in towns and rural areas. In the 1960s, the Communist government relocated industrial plants to artificially create medium-sized local capitals, ignoring or even counteracting natural agglomeration forces.<sup>7</sup> As a result, industrialisation

<sup>5</sup> Destatis, *Statistisches Jahrbuch für die Bundesrepublik Deutschland*, 1992.

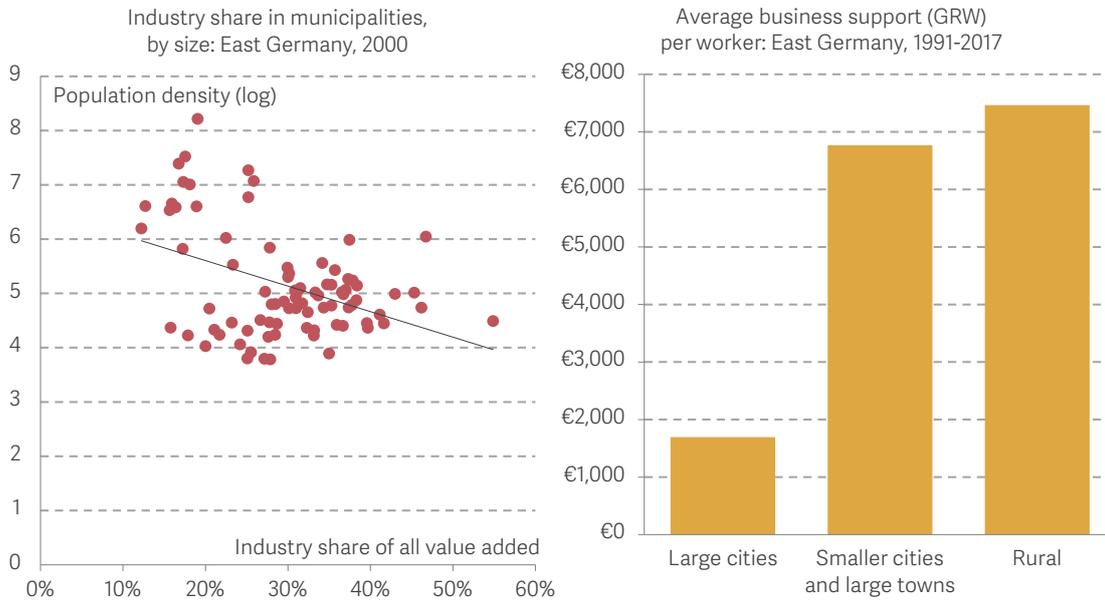
<sup>6</sup> Halle Institute for Economic Research, *Evaluation der Gemeinschaftsaufgabe ‚Verbesserung der regionalen Wirtschaftsstruktur‘ (GRW) durch einzelbetriebliche Erfolgskontrolle: Endbericht*, June 2020.

<sup>7</sup> F Roesel, *Leuchttürme mit langen Schatten: Frühere DDR-Bezirksstädte haben heute noch immer fast 50 000 Einwohner mehr*, ifo Dresden berichtet, 01-43, 2021.

was more pronounced in rural areas than in larger cities (Figure 3, left-hand side), and so funds were unintentionally directed into less urban areas rather than into cities (Figure 3, right-hand side).

**FIGURE 3: Smaller places benefited above average from regional subsidies for businesses (GRW)**

Industry share of value-added and average business support in different geographies: East Germany, 1991-2017



Note: Large East German cities are Berlin, Leipzig, Dresden.

SOURCE: Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Vereintes Land – drei Jahrzehnte nach dem Mauerfall, March 2019.; Volkswirtschaftliche Gesamtrechnungen der Länder, Entstehung, Verteilung und Verwendung des Bruttoinlandsprodukts in den Ländern der Bundesrepublik Deutschland; Destatis, Bevölkerung: Kreise, Stichtag.

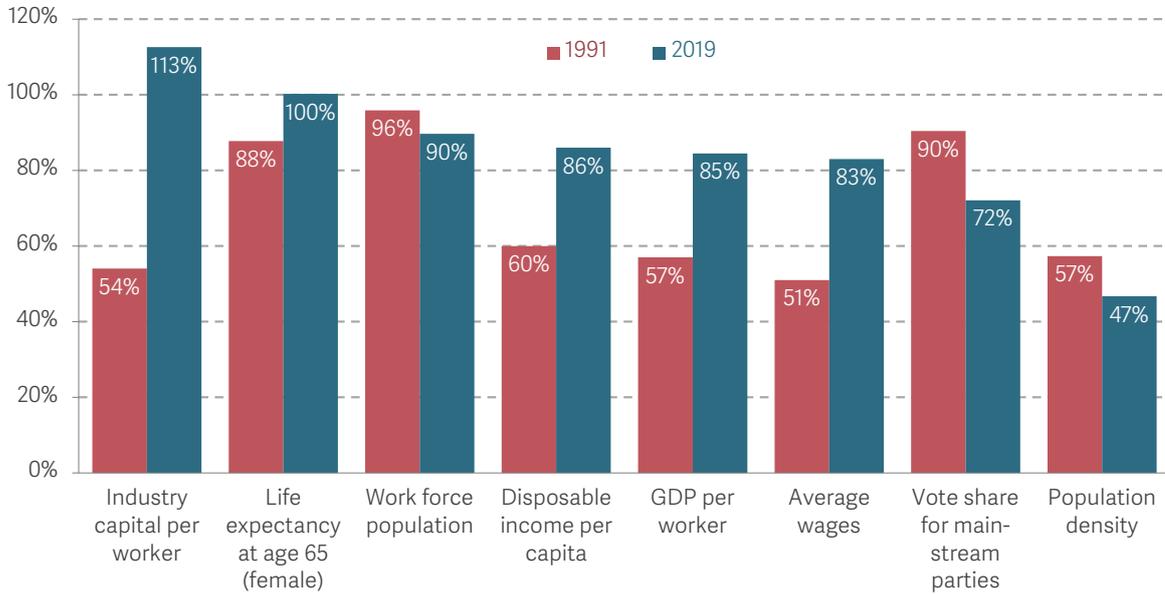
Innovation, change and the creation of new more knowledge-based businesses were not big goals of business support policies. In the light of skyrocketing unemployment, short-term strategies for saving existing jobs became a top priority over productive resource reallocation via Schumpeterian “creative destruction”. All this reinforced East Germany’s specialisation in low-skilled manufacturing industries in non-urban small and medium-sized cities such as Eisenhüttenstadt, Suhl or Neubrandenburg.

## 2. The impact of the policy response: Where East and West Germany converged and drifted apart after 1990

The answer to the question of whether these measures helped East Germany to converge with the West depends on the indicators that are looked at. Gaps in life expectancy, for instance have been closed in full. And capital intensity has reversed – indeed, industry in the East is now more capital intensive than in the West. But for productivity, the numbers are less clear-cut as the convergence process has stalled after an initial catch-up. When it comes to social measures – such as democratic participation and social cohesion - where there was much less policy focus, there has been divergence (Figure 4). This section looks at these measures in more detail.

**FIGURE 4: Gaps between East and West Germany did not close in all policy areas**

East Germany's performance as a share of West Germany's on a range of economic and social indicators: 1991 and 2019



NOTES: Life expectancy: Without Berlin; Population density: East Berlin is part of East Germany and West Berlin part of West Germany; Capital stock: 2018, GDP per worker: 1992, Population density: 2017, Vote for main-stream parties: 1990 and 2017. Average wages calculated as total wages divided by total number of workers.

SOURCE: Volkswirtschaftliche Gesamtrechnungen der Länder, Anlagevermögen in den Ländern der Bundesrepublik Deutschland 1991 bis 2018; Volkswirtschaftliche Gesamtrechnungen der Länder, Entstehung, Verteilung und Verwendung des Bruttoinlandsprodukts in den Ländern der Bundesrepublik Deutschland; Volkswirtschaftliche Gesamtrechnungen der Länder, Bruttoinlandsprodukt, Bruttowertschöpfung in den kreisfreien Städten und Landkreisen der Bundesrepublik Deutschland 1992 und 1994 bis 2019; Bundesagentur fuer Arbeit, Arbeitsmarktstatistik; Volkswirtschaftliche Gesamtrechnungen der Länder, Bruttoinlandsprodukt, Bruttowertschöpfung in den Ländern der Bundesrepublik Deutschland 1991 bis 2020, Reihe 1, Länderergebnisse Band 1 Destatis, Bevölkerung: Kreise, Stichtag.

### East and West Germany converged in capital stock and living standards

There has been a great deal of convergence in areas where policy was most focused. In terms of industrial capital stocks, East Germany has not only caught up but has surpassed West Germany.<sup>8</sup> The generous GRW programme has modernised the East's outworn capital stock, helping to shift its industrial capital stock per worker from just 54 per cent of the West in 1991 to around 113 per cent in 2019 (Figure 4). Across the entire economy, the capital stock per worker converged from 37 per cent to 90 per cent of the levels in West Germany; East Germany's capital intensity almost tripled since 1991 in real terms. This was also helped by mass redundancies that contributed to the rise of capital-labour ratios.

Infrastructure investments were also significant. Transport networks and public spaces like universities and town centres also experienced major upgrades, often resulting in infrastructure more modern than in much of the West.<sup>9</sup>

And the gap in living standards has narrowed too. East German wages converged substantially in the first years after reunification (from 51 per cent of West German levels in 1991 to 74 per cent by 1995),

<sup>8</sup> Industry capital per worker is defined as all manufactured assets in the manufacturing sector that are used repeatedly or permanently in production for more than one year divided by employment in industry. The figure exclusively refers to the private sector as comparable data for the public sector are not available.

<sup>9</sup> For example, see: K v Dohnanyi, „Die Debatte ist etwas merkwürdig“, Deutschlandfunk, December 2008; Der Tagesspiegel, [Ost-Strassen sind besser](#), 24 May 2005.

but by much less over the longer time period between 1995 and 2019 (74 per cent to 83 per cent). The pay gap is broadly similar at different education levels and this has been a key pull factor for sustained East-West migration.<sup>10</sup> In East and West the nature of pay trends across the distribution have been broadly similar. The lower end of the wage distribution experienced a fall in real wages between 1995 and 2008 (of 10 per cent at the 15th percentile of the distribution). By contrast, over the same time period, towards the top wages grew (the 15th percentile of the distribution increased by 10 per cent in real terms over this period) while median wages stagnated.<sup>11</sup>

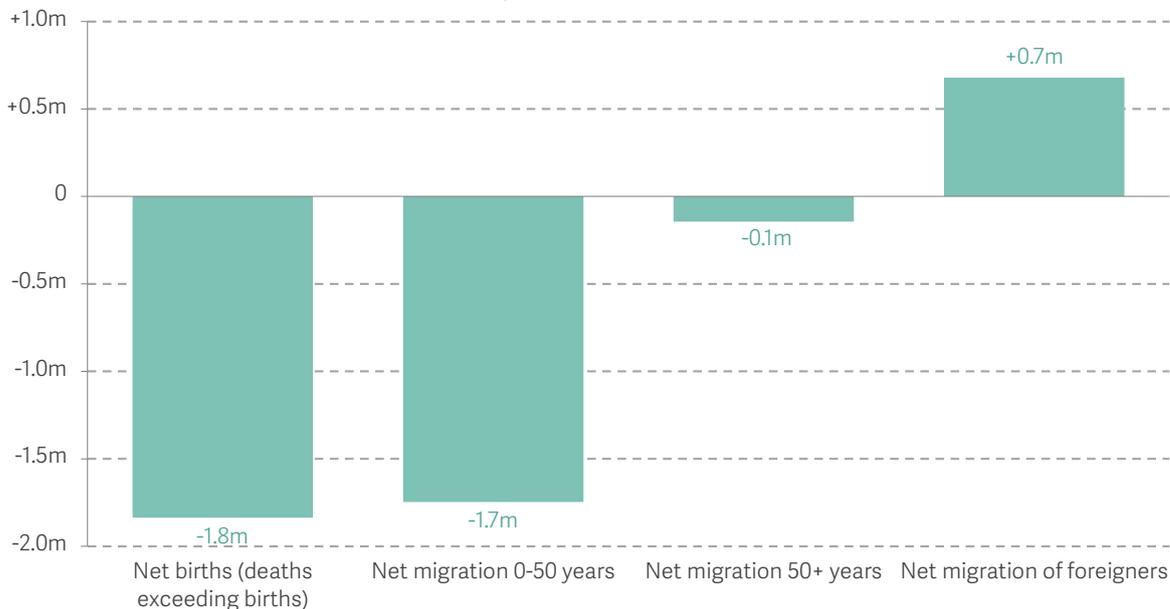
Alongside this significant, if somewhat stalled, wage convergence has been a massive amount of direct social transfers (pensions, unemployment benefits) as well as indirect social security benefits (modernising the social and health care sector) which has resulted in a quasi-equalization of net incomes and living conditions. Female life expectancy in the East at age 65 is now on a par with the West. And disposable income in the East is now 86 per cent of West German disposable income, up from 60 per cent. These are major gains.

### East and West diverged on demographic and political indicators

Despite this convergence in some domains, reunification policies failed to address the dysfunctional labour market with its lower wages, high unemployment, and inadequate access to skills and training. This set off a wave of outward-migration to the West. This benefited those who moved, but made things more challenging for those who stayed.

**FIGURE 5: In thirty years, East Germany’s population fell by 3 million**

Contributions to population change: East Germany, 1989 - 2019



SOURCE: Destatis: Statistisches Jahrbuch für die Bundesrepublik Deutschland; Destatis: Bevölkerung und Erwerbstätigkeit. Wanderungen, Fachserie 1, Reihe 1.2.

East Germany lost 1.75 million more people to the West than it gained between 1989 and 2019. Accounting also for net reproduction (deaths exceeding births) and net movements arising from immigration from abroad, East Germany lost 3 million people between 1989 and 2019 (Figure 5). As

<sup>10</sup> Lohnspiegel, *Ost-West-Unterschiede: 17 Prozent weniger Gehalt*.

<sup>11</sup> E Brüll, *Essays on Labour Economics*, Heidelberg university, March 2019.

a result East Germany is now the same size as it was in 1905, while flourishing West Germany posts record population numbers year after year. Strikingly, the population density ratio of East to West Germany has more than halved from almost parity in 1946 to 57 per cent in 1991 and 47 per cent today (Figure 5).

As most of the people leaving East Germany came from younger generations, the East lost the portion of its population that had the highest fertility and productivity potential.<sup>12</sup> Back-of-the-envelope calculations suggest that the GDP produced by all East German workers who emigrated to the West since 1989 almost equals the funds spent on reunification (both roughly £2 trillion in 2019 prices). The East now has to grapple with the impact of this young-biased brain drain, such as labour shortages, an ageing population, and a significant excess of deaths over births. Much of the outward migration was perhaps inevitable given better job prospects in the West despite all the gains made in improving infrastructure and amenities in the East.<sup>13</sup> Today, wages along the full spectrum of skills are still higher in West Germany.<sup>14</sup> Young and mobile people often study in East German cities where housing is affordable but then choose West Germany for their first job.<sup>15</sup>

Policy was initially blind to the long-term consequences of high outward migration. There were hardly any options discussed or considered to create the conditions for workers to stay in East Germany, sometimes quite the opposite. Migration to West Germany was considered the better short-term option rather than facing unemployment in East Germany. Local governments used low wages as an argument to attract new businesses. A national minimum wage was not introduced until 2015, and wage differentials persisted.<sup>16</sup> And as unemployment continued at high levels until the mid-2000s, even a programme to modernise housing could not stem the tide.

Rather than seeking to strengthen public services and civil society in times of economic disruption, policy too often pointed in the opposite direction. The formerly omnipresent state withdrew from many towns and villages.<sup>17</sup> For example, every second East German school was closed after 1990, and large-scale consolidation of local government did not always reflect the specific needs of local areas. The importing of West German elites into East Germany, which is still visible today (Figure 6), left many East Germans with a feeling of being overrun and “colonialized”.<sup>18</sup>

12 Statistisches Landesamt Freistaat Sachsen, [2. Sächsische Wanderungsanalyse: Ergebnisbericht](#), 2017.

13 Federal Agency for Civic Education (bpb), [Der Zug nach Westen – Jahrzehntelange Abwanderung, die allmählich nachlässt](#), May 2020.

14 M Janson, [Gehalt, So groß ist der Unterschied zwischen Ost und West](#), Statista, May 2020.

15 K Nicolaus, [Deutschlands Akademiker ignorieren den Osten](#), Die Welt, May 2019.

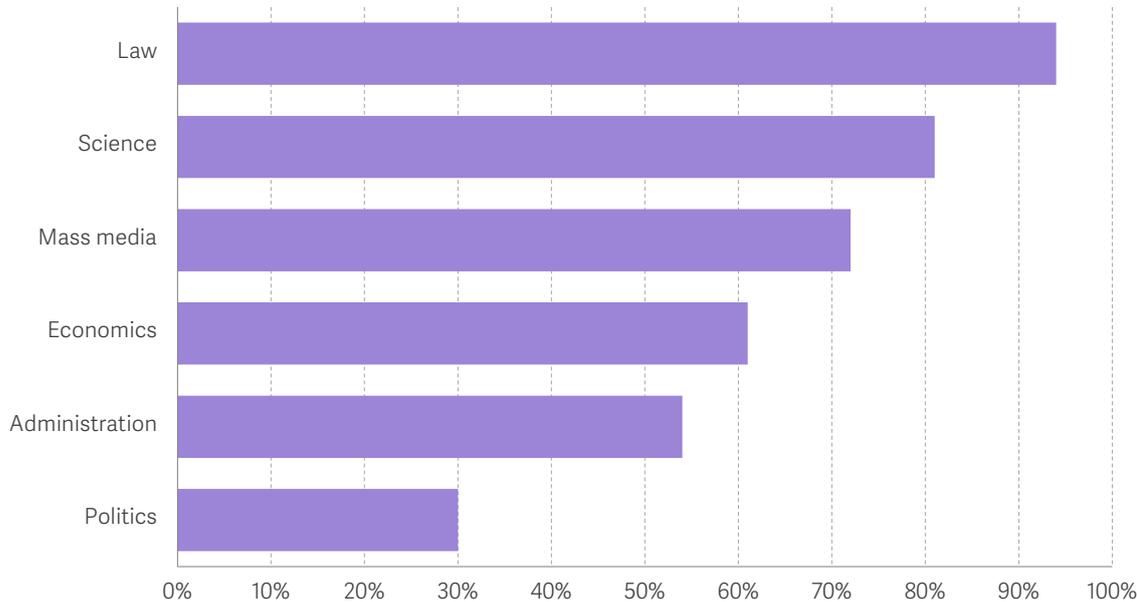
16 B Schultz, [Lohnkostenzuschüsse für Unternehmen in Ostdeutschland - neues Instrument mit alten Fehlern? - ein Kommentar](#), Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Vol. 4, Iss. 4, 1998; K Brenke et al, [Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland](#): Neunzehnter Bericht, Kieler Diskussionsbeiträge, No. 346/347, 1999.

17 The massive fiscal transfers mentioned in the first part of the paper refer to individual transfers such as pension, unemployment or social security. Municipalities that are responsible for the public service provision were supported as well but to a lesser extent which led to austerity.

18 R Kollmorgen, [Zwischen Austausch und Marginalisierung: Ostdeutsche in den Eliten nach der Vereinigung](#), Federal Agency for Civic Education (bpb), May 2020.

**FIGURE 6: West German elites still have a strong influence in East Germany**

Shares of West Germans in selected sectoral elites: East Germany, 2015-16



SOURCE: R Kollmorgen, *Zwischen Austausch und Marginalisierung: Ostdeutsche in den Eliten nach der Vereinigung*, Federal Agency for Civic Education (bpb), May 2020.

Despite the progress in terms of living standards and infrastructure, social indicators pointed in a different direction. East Germany experienced a drop in political participation and voter turnout.<sup>19</sup> And while vote shares for Germany’s mainstream parties stood at 90.4 per cent of Western levels in 1991 this dropped to 72.1 per cent in 2017 mainly due to an increase in far-right parties.<sup>20</sup> In the latest Federal election, right-wing parties performed better in Eastern German states than in the rest of the country. All this reflects polarisation alongside strong and growing political disenfranchisement in East Germany.

In terms of closing the productivity gap, convergence has come to a halt

The gap in East Germany’s productivity has narrowed considerably, rising from 57 per cent to 85 per cent of levels in the West. But this gap is still large and the major gains that were made in the 1990s have not continued into the 21st century.

It is still not well understood why productivity convergence ground to a halt. Attempts to explain the East-West productivity gap by differences in urbanity, company size, sector composition, work time and many other observables have not delivered conclusive results. The largest part of the remaining productivity differential is still a puzzle, reinforcing a sense of frustration among East German workers who expect the same wages for the same work done by their West German colleagues only a few miles away.<sup>21</sup>

We can, however, observe that East Germany’s productivity catch-up has been much slower in big cities than outside of large-urban areas. Productivity in large cities in East Germany increased by 84

<sup>19</sup> Wissenschaftlicher Dienst des Deutschen Bundestages, *Sinkende Wahlbeteiligung in Deutschland: Ursachen und Lösungsvorschläge*, January 2015.

<sup>20</sup> P Manow, *Populismus – in Ost und West. Eine Datenanalyse*, Federal Agency for Civic Education (bpb), September 2021.

<sup>21</sup> J Kluge & M Weber, *Decomposing the German East-West wage gap*, *Economics of Transition*, 26(1), January 2018. M Mertens & S Mueller, *The East-West German gap in revenue productivity: Just a tale of output prices?*, IWH Discussion Papers . 14/2020.

per cent between 1992 and 2019 which is faster than either the productivity growth in large cities in West Germany (55 per cent) or non-large city areas of West Germany (60 per cent growth). But this is still much less than the impressive 154 per cent increase in productivity in non-large cities in East Germany. In relative terms large cities in the East have done less well.

Figure 7 shows how these different growth rates have acted to substantially narrow the gap between non-large city areas in East and West Germany, while the gap between large cities has closed by a much smaller amount.<sup>22</sup> In 1992 non-large city areas in East Germany had productivity levels that were 48 per cent lower than comparators in West Germany, by 2019 productivity in these areas was just 17 per cent lower in the East than in the West (see the right-hand panel of Figure 7). Meanwhile, the gap between cities in East and West Germany declined by a smaller amount, from 35 per cent to 23 per cent.

**FIGURE 7: GDP per worker in Eastern and Western municipalities**

GDP per worker in large cities and other areas: East and West Germany, 1992 and 2019



NOTES: Data not adjusted for inflation. Large cities in the West: Stuttgart, Munich, Dusseldorf, Cologne, Essen, Hamburg, Dortmund, Frankfurt. Large cities in the East: Berlin, Leipzig, Dresden. Productivity data for Mecklenburg-Western Pomerania, Lower Saxony and Saarland are for 2000 instead of 1992.

SOURCE: Volkswirtschaftliche Gesamtrechnungen der Länder, Gross domestic product, gross value added in the independent cities and districts of the Federal Republic of Germany from 1992 and 1994 to 2019

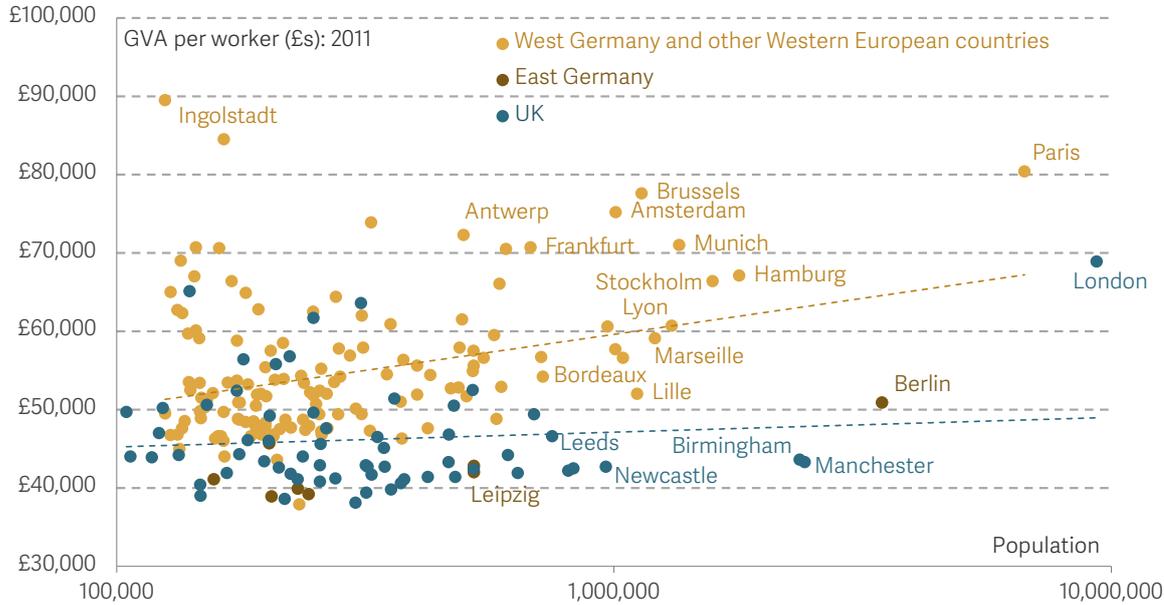
This pattern of performance runs counter to what has happened not just in West Germany but in other developed economies over the last three decades.<sup>23</sup> The rise of the knowledge economy, and the associated increase in the importance of face-to-face interaction to share tacit knowledge, has meant that so-called 'superstar' cities have become relatively more important within national economies. The underperformance of the East's largest cities therefore appears to have acted as a drag on closing its productivity gap, as their underperformance weighs heavily on the overall performance of the East. Figure 8 shows that while there is generally a positive relationship between city size and productivity in Western European countries, this does not hold for large East German cities (and the majority of large UK cities).

<sup>22</sup> Cities with daytime populations of above 550,000.

<sup>23</sup> E Moretti, *The new geography of jobs*, Houghton Mifflin Harcourt, 2012.

**FIGURE 8: Most large cities are more productive**

Population and GVA per worker in large cities: Western Europe 2011



SOURCE: ONS, Mid-year population estimates; ONS, Regional gross domestic product (GDP) reference tables; Centre for Cities, Competing with the Continent Data tool

The policy approach taken towards reunification is likely to have inadvertently fostered this. The strong focus of policy on lower-skilled manufacturing industries through the GRW funding, and the preference of these activities for locations outside of big cities, meant that there was much greater policy support for these areas than for fostering the development of more knowledge-based activity in larger cities. Studies have shown that GRW subsidies have contributed to regional employment and productivity, but only to a small extent.<sup>24</sup>

### Policy failed to address the productivity potential of cities

Reunification policies didn't do enough overall to address the productivity potential of cities and high-skilled services businesses that need dense and innovative city centres with attractive housing and office space as well as access to a large pool of workers.

As described above, large parts of the brain drain of highly-skilled labour directly after the reunification may have been unavoidable. However, little priority was given to shift the focus on the retention and attraction of highly-skilled workers. Wage subsidies and active labour market policies mainly focused on low-skilled employment rather than high-skilled jobs, as government support was tied to the number of created jobs but not their quality.

Reunification business funds hardly addressed the innovation gap. Innovation and new jobs via "creative destruction" were not considered a priority when unemployment hit record-highs within months.

And after 30 years of mismanagement, city centres were derelict, and the necessary refurbishment of the historic buildings was delayed for a long time.<sup>25</sup> Public funding was channelled into the new

<sup>24</sup> However, there was no effect on the operational productivity. In: E Dettmann, M Brachert & M Titze, *Identifying the Effects of Place-based Policies – Causal Evidence from Germany*, IWH Discussion Papers 18/2016, Halle Institute for Economic Research (IWH), 2016.

<sup>25</sup> Reasons for the delay were restitution, unclear ownership and a lack of equity.

development of areas on the outskirts of cities. As a result, new urban spaces such as commercial areas, subsidised suburban residential areas and small housing estates emerged. Such an expansion - as also happened in West Germany - is a 'natural' outcome of well-performing cities that have to address a large demand of businesses and residents. But in East Germany, where the overall demand was falling, diffusion of economic activity appears to have impeded agglomeration and ultimately contributed to the dismantling of social infrastructure. This further decreased the attractiveness of cities for residents and businesses. When policy-makers eventually realised the missed opportunity and invested more in housing quality in city centres, many potential residents and workers had already left.<sup>26</sup> And while large East German cities have experienced a recent increase in their population since around 2000, the numbers are still far below the population levels in the nineteen-thirties. Comparing population data of 1939 and 2019 for example, Leipzig's population is still 23 per cent lower, Dresden's 21 per cent lower and Berlin's 15 per cent lower. Population for all East Germany was 17 per cent lower in 2019 than in 1939.

Looking back, higher capital subsidies for companies that committed to employing high-skilled workers or improved their innovative capacity may have been a better policy solution. Future policy should shift focus towards innovation, high-skilled jobs, agglomeration effects and improving social cohesion to narrow today's divides between East and West.

### 3. Lessons for the UK

Germany's sudden reunification was both a massive shock and a nation-building project of unprecedented scale. While the political and economic environment of today's UK is starkly different from the one in Germany in the 1990s, some of the challenges are quite similar. There are lessons for the UK to take both positive and negative.

Regional policies must consider both capital and labour (money for places and people).

Infrastructure investments were successful in the sense that today, many parts of East Germany have better infrastructure than in the West.<sup>27</sup> But the German case has also shown that investments in infrastructure alone are not enough to trigger significant economic growth. In the long run, skilled labour and business innovation are key drivers of development and should therefore be at the core of policies and political strategies. Infrastructure is necessary but not sufficient.

*Productive businesses need high-skilled workers and an innovative environment.* Much of the policy effort to improve the economy in East Germany inadvertently focused on low value-added activities, while policies designed to boost innovation and foster higher value-added activities were largely absent. The result is that the East has fewer jobs in highly skilled services than the West.

West German headquarters acquired large parts of the privatised East German economy, which continued operating in low-skilled manufacturing industries lured by cheaper wages, better infrastructure and generous subsidies. Most high-skilled, high value-added activities and enterprises stayed in West Germany, where innovative networks in large cities developed after 1945.

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<sup>26</sup> C Hannemann, [Schumpfende Städte in Ostdeutschland - Ursache und Folgen einer Stadtentwicklung ohne Wirtschaftswachstum](#), Federal Agency for Civic Education (bpb), November 2020.

<sup>27</sup> T Jaeck, [Infrastruktur und Infrastrukturlücke in Ostdeutschland](#), Federal Agency for Civic Education (bpb), July 2003.

The spatial divide between low-cost production and high value-added, high-skilled activities is also visible in the UK. At Nissan for example, the relatively low value-added manufacturing is done in Sunderland, but the high-skilled activities like engineering or R&D take place in places that are rich in highly skilled workers and have a high innovative capacity - London and Oxfordshire.

The lesson for the UK is that policy needs to deal with the barriers that limit high value-added business investment outside the Greater South East if it wants to spread prosperity. The UK has a long history of not doing this, through policies like Enterprise Zones that lowered the cost of doing business in a place rather than improving the benefits of locating there. And it looks set to continue this, with policies such as freeports again focusing on lower costs rather than a credible, long-term plan for improving skills and innovation.

*Further reducing geographic disparities will require a bigger focus on larger cities.* The underperformance of East Germany's large cities is mirrored in the UK, with the struggles of cities such as Manchester, Leeds and Glasgow costing the UK economy billions of pounds each year.<sup>28</sup> And whilst there is still a significant gap between large East and West German cities, the former's trajectory has at least been more positive recently. This trend will need to continue to close the persistent productivity gap between East and West. In both countries, large cities should play a pivotal role in the national economy. This is the case in the West of Germany and the South of England. Elsewhere in both countries it is not. Learning from failure in East Germany would mean having a consistent spatial plan that prioritises the productivity struggles of the biggest urban areas.

### Long-term commitments to large-scale funding can level up living standards and economic performance

While East Germany is by no means at parity with the West in all policy areas, the financial transfers combined with a "whatever it takes" mentality towards raising East German living standards and industrial production resulted overall in solid economic convergence across East and West.

Concentrated, long-term funding can restore living standards, capital stocks and economic performance. German reunification was not based on a comprehensive strategy as the extreme time pressure required quick decisions which in most cases led to a cut and paste of West German institutions and policies. While this worked in some areas (such as fiscal transfers), in others (such as the lack of a spatial strategy as discussed above) it fell short.

One of the main reasons German reunification was partly successful despite the lack of an overarching strategy was the credible commitment and consensus across all main parties. The ambition of creating equal living conditions was never questioned by any major party in government or opposition. Investors could rely on both high-quality public services and infrastructure and long-run subsidy schemes. East German local and state governments were funded based on long-term agreements. All policies had very long-time frames and were backed with massive injections of money, enabling a quick recovery of private and public capital stocks.

This sort of long-term commitment is missing in the UK. An analysis by the Industrial Strategy Council, itself now axed, found that the UK needs more certainty of funding, increased long-term planning and more appropriate institutions to support it.<sup>29</sup>

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<sup>28</sup> P Swinney, [So you want to level up?](#), Centre for Cities, June 2021.

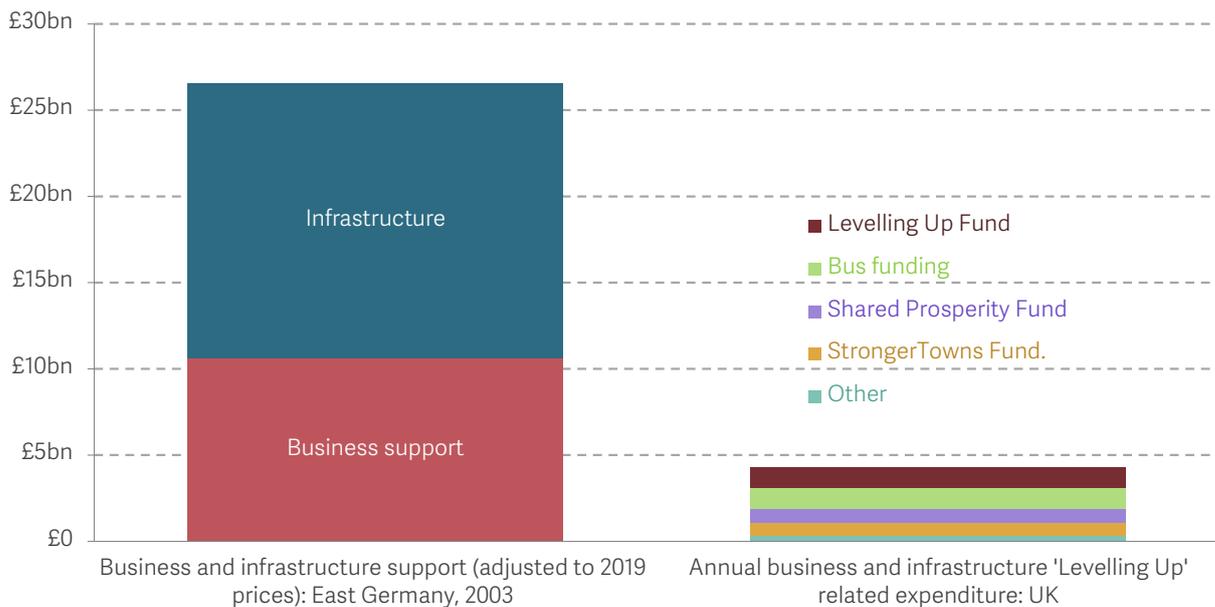
<sup>29</sup> A Regan et al, [Devolution and Governance Structures in the UK](#), Industrial Strategy Council Research Paper, May 2021.

Regional re-balancing requires enormous sums of money. As well as falling short in terms of timeframes, the current approach in the UK falls far short in terms of funding too. Currently, total committed spending in the UK on infrastructure and business support broadly aimed at levelling up amounts to around roughly £4.3 billion annually, while in East Germany, the most analogous categories 'business support' and 'infrastructure' is estimated to have exceeded £27 billion in one year alone, as shown in Figure 9.<sup>30 31</sup>

In terms of revenue spending there is also divergence. Fiscal transfers were the biggest driver of closing living standards divides between East and West Germany. The UK pulled this policy lever long ago, so in that respect there is little to learn. That said, more than a decade of austerity have reduced these sorts of transfers, rather than increasing them, with the poorest parts of the country most affected.<sup>32</sup> While there is much discussion about the allocation of small pots of capital money through competitive funds, these are dwarfed by the implications of the squeeze on benefits and public service provision that the poorest areas have experienced. Social welfare and local government financing should be central to plans to level up the UK.

**FIGURE 9: Spending on levelling up is significantly smaller than money spent on infrastructure and business support in East Germany**

Spending on infrastructure and business support: UK and Germany, 2003 and 2022



Note: UK spending is a best estimate of the funds that are broadly aimed at levelling up, as planned to be spent as of late-2022 in the first half of the 2020s. These figures are likely to be an overestimate as they include money that went into parts of the UK which are not in need of Levelling Up. Bus funding includes City Region Sustainable Transport Settlement funds. Other includes: Community Ownership Fund, Community Renewal Fund and freeports.

SOURCE: Data for Germany: Halle Institute for Economic Research, *Wie hoch sind die Transferleistungen für die neuen Länder?*, IWH-Pressemitteilung 21/2003, October 2003; Data for UK: Calculations by the Centre for Cities.

30 This includes: Levelling Up Fund, Shared Prosperity Fund, Stronger Towns Fund, Freeports, Bus funding for levelling up (incl. CRTS), Community Renewal Fund, Community Ownership Fund.

31 For example, see: Halle Institute for Economic Research, *Wie hoch sind die Transferleistungen für die neuen Länder?*, IWH-Pressemitteilung 21/2003, October 2003. The estimates on how much has been spent on business support and infrastructure vary. The ifo Dresden estimated that between 1991 and 2013, around €8 to €14.5 billion were annually spent on economic development; The IWH estimated that GRW-funding alone summed up to €42 billion between 1991 and 2017.

32 Centre for Cities, *A decade of austerity: Which cities have been hit hardest by spending cuts?*, in *Cities Outlook 2019*, Centre for Cities, January 2019.

## Expectations and participation must grow from the bottom up

One core mistake that was made in the course of the German reunification, that contributed to negative public sentiment, was the limited participation of local stakeholders in the reunification processes. The speed in which institutions from the West were transplanted meant a high degree of takeover by Western elites which we still see today.

Blindly copying institutions and local strategies may have been the only viable option in an extreme situation, but it should not be repeated in other contexts. Successful strategies in one region (West) may fail in other regions (East) as they are imported and not grown from the bottom up.

But while the lack of participation in the policy process was troublesome, the nature of institutional reform in East Germany also had benefits. In the GDR, municipalities were basically subordinate authorities of the centralist government.<sup>33</sup> The reunification process transformed East Germany's highly centralised governance structure into a federal system with strong municipal self-government. This ultimately increased the responsibility and influence of municipalities over their local areas and gave them powers over revenue raising and spending.<sup>34</sup>

The German case has shown that comprehensive institutional change can happen if the political will is there. The mistake made in the course of reorganisation was a top-down imposition of structures as well as of the elites running them.

In the process of reforming English local and city governance, the East German experience suggests that it will be important to involve local stakeholders in the ideas behind the reforms and make them become part of the process, backed with greater fiscal and political powers.<sup>35</sup>

## Conclusion

More than 30 years after the fall of the wall, East Germany has made significant progress in converging with West Germany. Being one of the largest countries in the world to have addressed massive and deep-rooted social and economic inequalities with concerted policy action, this experience is valuable for other nations facing their own entrenched regional divides.

The central positive element of the East German case, was its long-term commitment to closing spatial economic divides which was supported by all the main parties and backed with a very large funding commitment. This created long-term stability and facilitated the creation of more equal living conditions. The UK missed the opportunity to create similar framework conditions in its recent Levelling Up strategy, which has a short time horizon, lacks a credible funding commitment and hasn't forged a political consensus around a long-term plan.

Fiscal transfers were a central element in narrowing divides in living standards between East and West Germany. While extensive fiscal transfers already exist in the UK, the country has gone through a decade of austerity creating huge pressures on services and incomes in disadvantaged areas.

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<sup>33</sup> M Osterland & R Wahsner, [Die Kommunalverwaltung in den neuen Bundesländern: strukturelle und personelle Probleme ihrer Reorganisation nach der Wende](#), ZWE Arbeit und Region" Bremen - HBS-Manuskripte, 66, Hans-Böckler-Stiftung, 1992.

<sup>34</sup> Friedrich Ebert Stiftung, [Woher kommt das Geld? "Kommunale Finanzen" aus der Reihe Grundwissen Kommunalpolitik](#), February, 2020.

<sup>35</sup> A Regan et al, [Devolution and Governance Structures in the UK](#), Industrial Strategy Council Research Paper, May 2021.

And while there has been impressive convergence in Germany on some indicators there are still some persistent gaps. A particular challenge is the high levels of political disfranchisement which has been accompanied by a consolidation of local government which didn't always reflect local needs and opinions, and involved a centralisation of aspects of local public service provision.

Although reunification and the suite of policies that have followed demonstrate clearly the power of the state and the beneficial impact of a long-term policy consensus, some aspects of the German experience do serve as a warning for the UK. Reunification lacked a forward-looking strategy for growth and economic revival. As a consequence, there was little focus on higher value activities, knowledge-based sectors or the role of large cities, which has contributed to the stubborn productivity gap between East and West. Rather than energising cities and services with future growth potential, manufacturing employment and in less-urban places was heavily subsidised. The UK should not repeat these same mistakes but should focus on creating the conditions that will allow higher-skilled, business led growth to thrive in large cities outside the capital.

### **Navigating economic change: lessons from abroad and history**

As the UK is buffeted by the economic shocks and challenges of the 2020s, The Economy 2030 Inquiry, a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics (LSE), funded by the Nuffield Foundation, is publishing a series of essays examining how policy makers from a range of advanced economies, including the UK in the recent past, have managed periods of disruptive economic change. As we seek to reformulate the UK's economic strategy for new times it is vital that we learn the lessons of these comparative and historic perspectives.

Some consider the trajectory of a national economy following a major shock – for instance, Germany after unification, New Zealand after the UK joined the European Community, Estonia post-USSR and the UK during the tumultuous 1980s. Others examine the experience of particular cities – for instance a group of post-industrial ‘turn-around cities’ - or the adjustment of key features of a national economic system, such as Danish ‘flexicurity’. Together they offer a powerful and timely set of insights on the successes and failures of economic policy makers in the face of economic shocks and structural change.

The essays are written by a range of leading economists and national experts and reflect the views of the authors rather than those of the Resolution Foundation, the LSE or The Economy 2030 Inquiry.

They have been commissioned and edited by Gavin Kelly (Chair of the Resolution Foundation and member of the Economy 2030 steering group) and Richard Davies (Professor at University of Bristol and fellow at the LSE's Centre for Economic Performance).