

Fetzer, Thimo

Article

Austerity and Brexit

Intereconomics

Suggested Citation: Fetzer, Thimo (2020) : Austerity and Brexit, Intereconomics, ISSN 1613-964X, Springer, Heidelberg, Vol. 55, Iss. 1, pp. 27-33,
<https://doi.org/10.1007/s10272-020-0865-5>

This Version is available at:

<https://hdl.handle.net/10419/221924>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Thiemo Fetzer

Austerity and Brexit

There is an ongoing debate as to the causes of the UK's vote to leave the European Union. While much of the earlier literature has focused on mostly descriptive patterns, few robust empirical contributions exist. The rare exceptions are three papers that have identified some causal links, which are however, hard to separate from one another. Algan et al. note that Leave support appears structurally higher in parts of the UK that saw steep rises in unemployment in the wake of the 2008/2009 crisis.¹ Colantone and Stanig suggest that parts of the UK most exposed to import competition from low income countries between 1988 and 2007 saw higher support for Leave in 2016.² Fetzer, on the other hand, finds a causal link between individual- or regional-level exposure to austerity and support for Leave.³

Politicians across the EU rightly ask themselves whether the UK with Brexit may be just the first domino to fall in the eventual unravelling of the EU. And hence, understanding why and how the UK ended up voting to Leave the EU is important. In particular, a crucial question is to what extent the UK's domestic political and economic developments – many of which may be detached from the issue of the UK's membership in the EU – played a potentially more important role in shaping the 2016 EU referendum than is widely appreciated. To understand why the UK voted to leave the EU, it is imperative to understand the dynamics that led to the EU referendum to be called in the first place. As such, understanding the UK's unique electoral dynamics prior to the 2016 referendum is just as important as understanding why the vote ended up with a narrow victory for Leave.

© The Author(s) 2020. Open Access: This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>).

Open Access funding provided by ZBW – Leibniz Information Centre for Economics.

- 1 Y. Algan, S. Guriev, E. Papaioannou, E. Passari: The European Trust Crisis and the Rise of Populism, in: *Brookings Papers on Economic Activity*, Vol. 48, No. 2, 2017, pp. 309-400.
- 2 I. Colantone, P. Stanig: Global Competition and Brexit, in: *American Political Science Review*, Vol. 112, No. 2, 2018, pp. 201-218.
- 3 T. Fetzer: Did Austerity Cause Brexit?, in: *American Economic Review*, Vol. 109, No. 11, 2019, pp. 3849-3886.

Thiemo Fetzer, University of Warwick, Coventry, UK.

In this article, I explore some of the notable patterns and observations in UK politics and economics that I argue play a pivotal role in the run up to the EU referendum. This highlights that the UK's specific national context, domestic economic policy choices and economics matter a fair bit. Yet, the social and economic context of the UK is shared across many countries, highlighting the need for progressive economic policymaking to tackle the underlying structural economic failures.

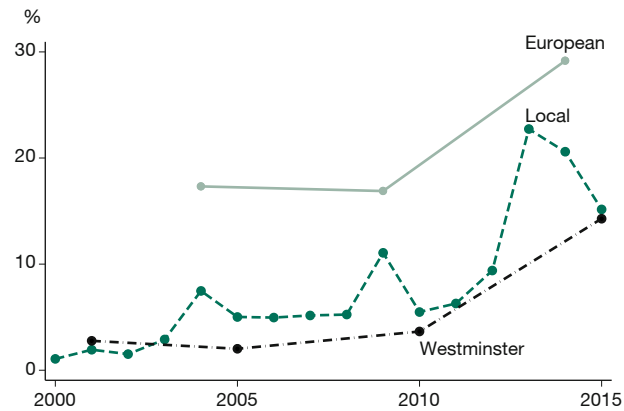
Domestic politics prior to 2016

The only party in the UK's political system that stood on a political platform of leaving the EU was the United Kingdom Independence Party (UKIP). The party was established in the wake of the Maastricht Treaty and, from the late 1990s, started to increasingly contest UK elections. In the 2005 Westminster elections, UKIP fielded 496 candidates across the 650 constituencies. In 2010 it fielded 558 candidates, while in the consequential 2015 general election, UKIP fielded candidates in 624 out of 650 potential constituencies. Across European elections, which use an electoral system that gets much closer to proportional representation, UKIP did quite well electorally already in 2004, securing around 15.6% of the vote (albeit on low turnout).

Yet, it remains that prior to 2010, UKIP performed quite poorly in most national polls. And even in May 2010, as unemployment reached record levels in the wake of the 2008/2009 crisis and despite fielding candidates in most constituencies, UKIP won only 3.1% of the popular vote. The 2010 election produced a three-way split and a hung parliament with the Conservatives winning 36.1% of the popular vote (but gaining 47.1% of the seats); Labour coming in second with 29% of the popular vote and the Liberal Democrats in third with 23% of the popular vote. The hung parliament resulted in a Conservative-led coalition government, in which the Liberal Democrats were by far the minority partner with one-sixth of the number of seats that the Conservatives held. While UKIP was only a minor player in national politics prior to and including 2010, from then onwards, the party started to significantly pick up votes in local elections, most notably from 2013 and particularly in the 2014 European election and the 2015 general election (see Figure 1).

The relevance of UKIP's electoral support for the 2016 Leave vote has been documented broadly. At the individual level, a vote for UKIP in the 2014 European election or the 2015 general election almost certainly implied support for

Figure 1
UKIP support across elections over time



Notes: Figure presents the average UKIP vote share across the European, Westminster and local elections since 2000.

Source: T. Fetzer: Did Austerity Cause Brexit?, in: *American Economic Review*, Vol. 109, No. 11, 2019, pp. 3849-3886.

Leave in 2016.⁴ This pattern at the individual level also holds in aggregates. Figure 2 highlights the tight relationship between support for UKIP in the 2014 European elections and support for Leave in the 2016 referendum quite clearly.

UKIP's voter base, to a significant extent, included protest voters. In the 2014 European election, in which UKIP came out first securing 26.6% of the popular vote, only 43% of UKIP voters cited that they support UKIP because they wanted the UK to leave the EU or were unhappy with Europe. The second most frequent response, with 26%, indicated that UKIP voters wanted to send a message to the other three parties or to voice their protest. Despite the topic dominating the 2016 EU referendum, only 18% of UKIP voters cited immigration as their reason for supporting UKIP. This highlights that individual electoral support for UKIP includes a mix of motivations – from classical EU-scepticism to pure protest, which was consequential in 2016.⁵

What can explain UKIP's post-2010 surge? Before making the case that the answer to this is found in the UK's domestic economic policy decisions in the wake of the 2008/2009 crisis, it is imperative to understand that even the paltry 13% performance of UKIP in the 2015 general election was consequential in bringing about the 2016 EU referendum. The answer is found in the UK's first-past-the-post electoral system in which UKIP's 13% popular vote in 2015 resulted only in a single seat in the Westminster parliament. Fetzer highlights that post 2010, UKIP started to attract significant

amounts of anti-austerity protest votes from a broad set of backgrounds that may conventionally be associated either with non-voting or with support for Labour or the Liberal Democrats – which, until then, was seen as the classical protest party.⁶ In England, the Conservatives won 59.9% of the seats with only 40.9% of the vote. The fragmentation of votes across four other opposition parties – Labour, UKIP, Liberal Democrats and the Greens – allowed the Conservatives to claim victory in England. The outright majority across the UK was secured due to Scotland being effectively lost to the Scottish National Party by both Labour and the Conservatives.

The resulting surprise Conservative election victory directly led to the 2016 EU referendum due to Prime Minister David Cameron's announcement, prior to the years' local elections in January 2013, that he would hold a referendum on EU membership if he won an outright majority in the next general election. Nobody expected this to happen. Rather, almost unanimously the Conservatives were expected to continue in a coalition government with the Liberal Democrats. The Liberal Democrats, as the countries' most explicitly pro-European party, would not have entered into such a coalition government. Yet, UKIP, by splitting the opposition vote, helped grant the Conservatives an outright surprise election victory, forcing Cameron to call for a referendum and deliver on his pledge. The rest is history that is still being made. What can explain the consequential surge post 2010? I argue that austerity, as the defining element of UK economic policy since 2010, offers an important explanation.

Austerity as defining economic policy since 2010

The UK's defining domestic economic policy under the Conservative governments since 2010 can be subsumed under the term 'austerity'. Fetzer shows that the sharp increase in support for UKIP between 2010 and 2015 was to a significant extent caused by austerity.⁷ I estimate that around 6% to 11% of the support for Leave in 2016 can be attributed to individual- or regional-level exposure to cuts. Austerity entailed deep cuts to public spending, which were implemented along three main pillars.

1. Budget cuts for day-to-day spending across most Westminster departments which took almost immediate effect with the announcement of the autumn budget in 2010.
2. Nominal freezes on most public salaries and benefits.
3. Substantive and ongoing deep reform of the UK's social security system – most of which was set in motion

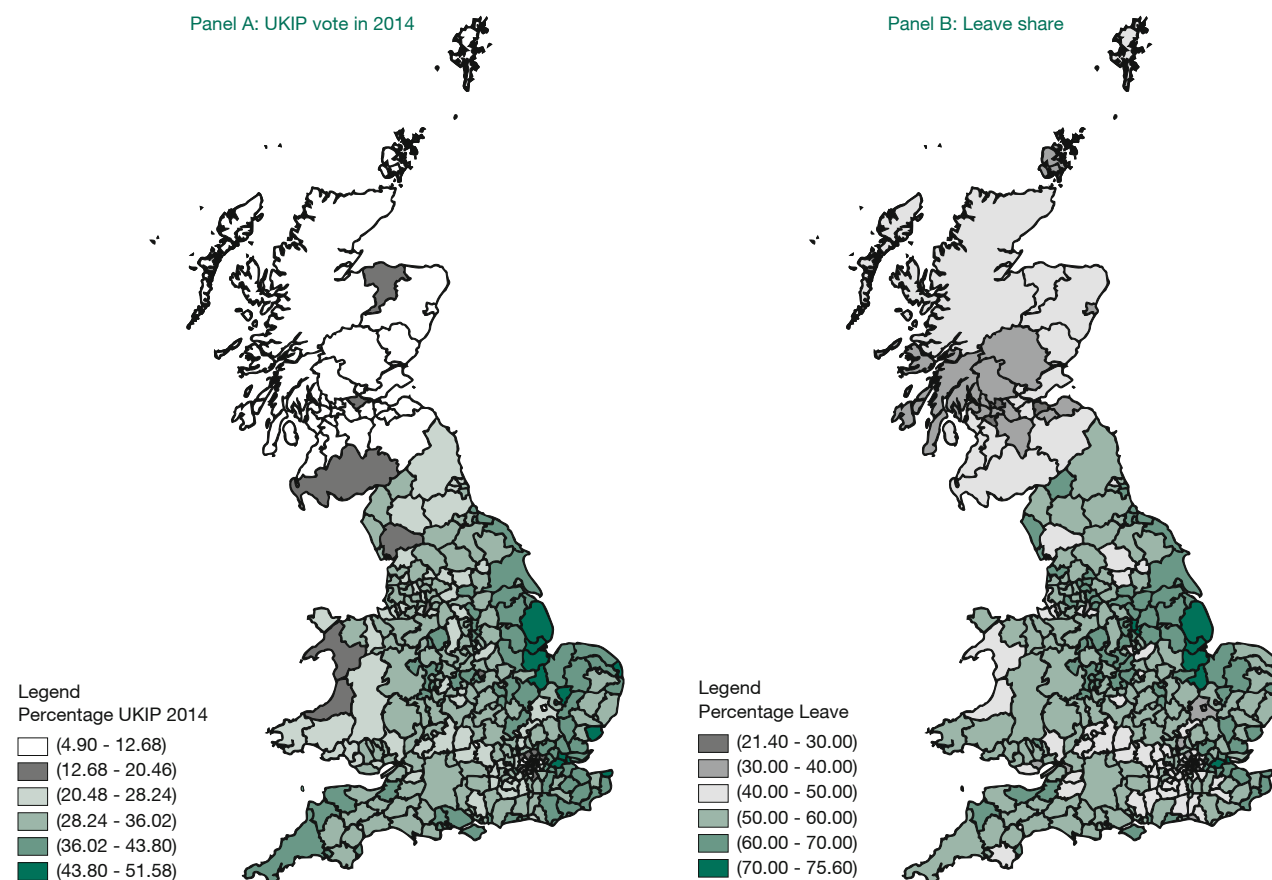
4 See E. Alabrese, S.O. Becker, T. Fetzer, D. Novy: Who voted for Brexit? Individual and regional data combined, in: *European Journal of Political Economy*, Vol. 56, 2019, pp. 132-150; T. Fetzer, op. cit.

5 YouGov: YouGov/The Sun Survey Results, Technical Report, 18 March 2014.

6 T. Fetzer, op. cit.

7 Ibid.

Figure 2
Support for UKIP in 2014 European election and the Leave share in the 2016 EU referendum



Source: T. Fetzer: Did Austerity Cause Brexit?, in: American Economic Review, Vol. 109, No. 11, 2019, pp. 3849-3886.

through the Welfare Reform Act 2012, with many policy changes taking effect starting in April 2013. It is the third pillar that is most notably studied in Fetzer.⁸

To illustrate the magnitudes and implied compositional changes in public spending, Figure 3 suggests that, starting in 2011, spending for welfare and social protection dropped significantly, declining by 16% in real terms, falling to levels that had last been seen in the early 2000s.⁹ Public spending on education contracted by 19% in real terms, while expenses for pensions steadily increased, suggesting a significant shift in the composition of government spending.¹⁰ The

8 T. Fetzer, op. cit.

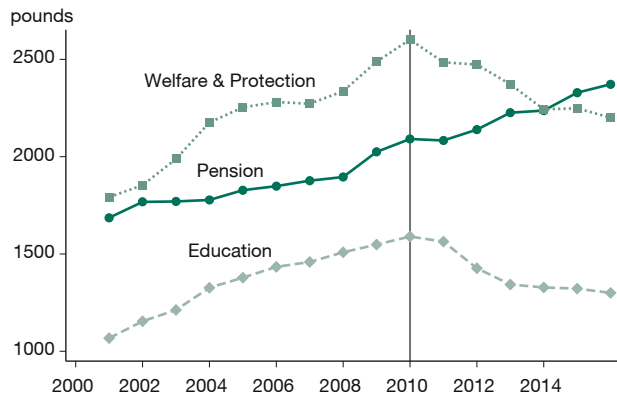
9 Ibid.

10 The deep cuts to public spending on education were further exacerbated by increases in tuition fees. Formally the tuition fee caps for undergraduate studies was raised from 3,225 to 9,000 British pounds, implying that the privately born cost of further education steeply rose across most of England and Wales (Scotland does not charge tuition fees to Scottish or EU students – but does levy them on English and Welsh students).

impact of austerity across these three main items of public spending is self-evident: public spending cuts were disproportionately borne by the current working age adult population (who are mostly benefiting from social security payments) and the future generation (who benefit from publicly funded education), highlighting that government spending became increasingly age-biased.

A second significant component contributing to the cuts in government spending was nominal freezes on most public salaries and benefits. Public sector employees earning more than 21,000 British pounds saw, from 2011 to 2013, a freeze of their salaries, while wage growth has been capped at 1% since 2014. Similar freezes were introduced for most welfare benefits, resulting in real term wage and benefit cuts as inflation rates were consistently above 1% throughout this period. As such, public sector employment became increasingly unattractive, contributing to staffing and staff retention problems across most government entities – particularly in the National Health Service (NHS). There, staffing shortages

Figure 3
Government spending along the age divide: Growing age bias of public spending



Notes: Figure plots real aggregate spending per capita in pounds using data from HMRC for the years between 2000-2015. Aggregate totals are divided by total population from the National Office of Statistics and the annual CPI with 2015 being the base year.

Source: T. Fetzner: Did Austerity Cause Brexit?, in: American Economic Review, Vol. 109, No. 11, 2019, pp. 3849-3886.

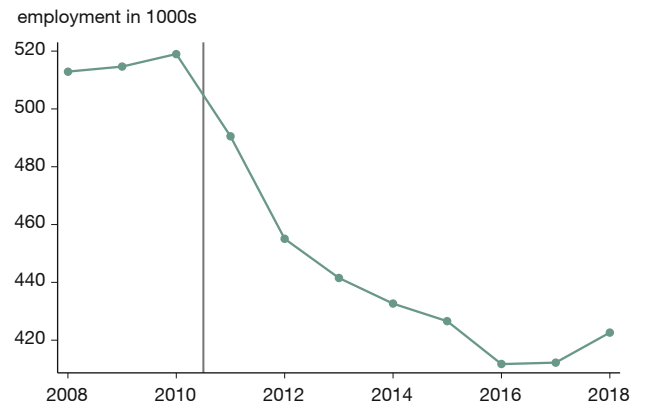
were exacerbated by cuts to maintenance grants which help nurses in training to cover the cost of their training. The civil service shrank from around 519,000 employees in 2010 to a low of 411,370 in 2016 – declining by around 20% (see Figure 4).

Austerity was mostly implemented by means of cutting spending – not by raising revenues. Rather, tax-free allowances, whose full benefits are only reaped by people with incomes above the tax-free allowance were significantly expanded. Corporation tax rates were drastically reduced from 26% to now 19%. Similarly, very generous pension tax credits were only marginally cut. The most salient dimension of the austerity programme, however, were the cuts to the UK’s social welfare system and cuts to local government funding – which provide many of the day-to-day services that citizens use.

Local government spending cuts

Most government ministries saw direct cuts to their budgets. The only departments sheltered from cuts were the Department for International Development and the Department for Health, which funds the NHS. Yet, even the NHS experienced real cuts de facto as it was not spared by the wage squeeze making primary care jobs less attractive, while at the same time it experienced significant increases in demand due to the UK’s ageing population. Most salient to many citizens were the dramatic cuts to local government finances.

Figure 4
Impact of public spending cuts on public employment



Notes: Data from the Annual Civil Service Employment Survey for the United Kingdom provided by the Office for National Statistics.

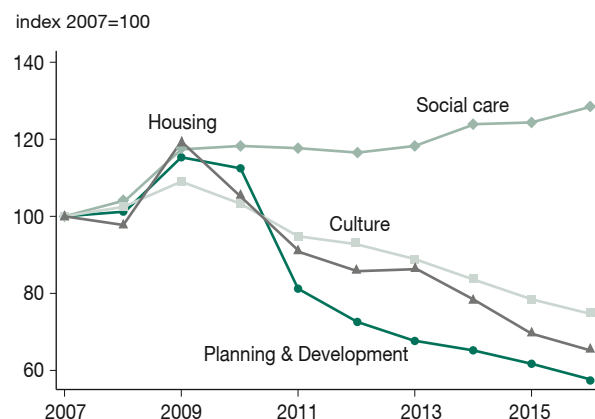
Source: Author’s own illustration.

Funding for the Ministry of Housing, Communities and Local Government, which equips local councils with a significant part of their funding, was cut in real terms by between 30 and 40%, putting pressure on local councils to provide services – in an overall environment of increasing demand due to population growth and limited independent revenue-raising abilities.¹¹ Figure 5 highlights the depth of cuts across local governments in England indexed to 2007. This figure is neither accounting for inflation nor population growth; yet, the patterns are quite obvious. Social care spending rapidly increased. In 2017-18, English councils’ core budgets totalled about 44 billion pounds. Spending on adult social care absorbed the largest and growing share at 35%. The ageing population along with the cuts to central government support grants implied that councils had to cut spending on items deemed non-essential – the parts of spending that most elastically responded were planning and development (a nominal contraction of 43%), housing (nominal contraction of 35%) and culture (nominal contraction of 25%).

The cuts were highly salient. Police forces had to cut their staff by 17.3% since 2010, which mechanically implies fewer police forces deployed to the street,¹² possibly undermining perceptions of public safety. Cuts in the culture domain

11 D. Innes, G. Tetlow: Delivering Fiscal Squeeze by Cutting Local Government Spending, in: Fiscal Studies, Vol. 36, No. 3, 2015, pp.303-325.
 12 R. Disney, P. Simpson: Police workforce and funding in England and Wales, IFS Briefing Note No. BN208, 2017, The Institute for Fiscal Studies.

Figure 5
Council spending shock across local authority districts in the UK



Notes: Figure plots nominal spending across major local council spending priority areas. The underlying data is from the local government financial statistics for England provided by the MHCLG.

Source: Author's own elaboration.

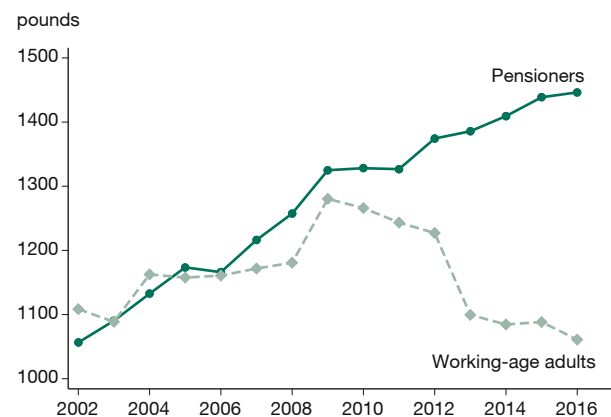
implied the closure of community centres, public parks and libraries, which in many cases produced significant local uproar and may have undermined community cohesion. The dramatic cuts to planning and development spending, naturally the most elastic component of spending, indirectly provided a further economic shock to regional economies and undermined council plans to invest in more public housing – in the wake of an already mature housing crisis, an inelastic housing supply and substantial cuts to locally provided housing services, which most often benefit poor and vulnerable groups in society. Fetzer et al. highlight that housing benefit cuts implemented in 2011 are sharply and causally associated with an increase in evictions, statutory homelessness and actual rough-sleeping adding to the perception of local economic decline.¹³ The fact that around one-third of UK rough sleepers come from other EU countries may have vastly exacerbated the perception of the extent to which immigration may create pressure on the welfare system (despite immigration from the EU being fiscally very positive for the UK).¹⁴

Wealthier communities and districts, on average, were better able to cope with the funding cuts as they could mobilise other sources of funding. As such, the impact of local council budget cuts is likely to have further exacerbated the

13 T. Fetzer, S. Sen, P.C. Souza: Housing insecurity, homelessness and populism: Evidence from the UK, CAGE Working Paper, 2019.

14 See S.O. Becker, T. Fetzer: Has Eastern European Migration Impacted British Workers? CAGE Working Paper, 2013.

Figure 6
Social protection vis-à-vis state pension spending in real terms per capita over time



Notes: Figure plots nominal spending across major local council spending priority areas. The underlying data is from the local government financial statistics for England provided by the MHCLG.

Source: Author's own elaboration.

already vast regional economic inequalities within the UK.¹⁵ Austerity and, in particular, the cuts to local government budgets, were hugely unpopular.

In 2014, 60% of the British Election Study respondents indicated that they thought that cuts to local services in their area had gone either too far or much too far. Only 6% of respondents indicated that they thought cuts had not gone far enough or not gone nearly far enough – the remainder thought that cuts were about right. Contrary to some beliefs, austerity was not popular among UKIP voters.

Welfare reforms and hollowing out of social protection

The central pillars of austerity were substantive cuts and ongoing reforms to the welfare system. Beatty and Fothergill highlight that, in particular, disabled working-age adults and single parents were disproportionately affected by spending cuts.¹⁶ Most welfare reform measures were implemented through the 2012 Welfare Reform Act, which took effect in April 2013. These biggest elements combined were expected to reduce welfare spending by around 18 billion pounds by 2015. The extent of cuts is quite visible. Figure 6 presents real welfare spending per capita over time, distinguishing benefits targeted at pensioners and benefits that are not specifically targeted to-

15 D. Innes, G. Tetlow, op. cit.

16 C. Beatty, S. Fothergill: Hitting the poorest places hardest: The local and regional impact of welfare reform, Technical report, 2013.

wards pensioners. The notable drop in welfare spending per capita from 2012 to 2013 by around 10% in real terms highlights the significant cuts that this entailed – despite unemployment levels in 2013 remaining near the 2012 record high, highlighting that these reductions do not mask broad reductions in the demand for welfare due to an improving economy.

Compositional spending changes. The steady rise in spending for the state pension highlights that the Coalition government’s design of austerity implied winners and losers, with many pensioners actually seeing the value of their state pensions increase. This is due to the so-called triple lock, which was introduced by the Coalition government and ensures that the state pension would grow by the minimum of either 2.5%, the rate of inflation or average earnings growth. The Institute for Fiscal Studies estimates that between April 2010 and April 2016 the value of the state pension increased by 22.2%, compared to 7.6% average earnings growth and 12.3% growth in prices.¹⁷ Hence, the real value of state pensions increased, while the working-age adult population in employment saw a decline in real incomes by 4.7%. For many, real incomes in 2019 have still not recouped their pre-crisis levels.

Ecological fallacy. The observation that state pensions grew faster than real employment incomes may come as a puzzle to some commentators who have studied the EU referendum. The common assertion is that it was the older cohorts that voted predominantly in support of Brexit.¹⁸ An analysis of the data would suggest that older people, on average, were significantly more likely to support Leave in 2016. Naturally, many pensioners would have been indirectly exposed to the consequences of austerity in their communities, for example, due to an increase in rough sleeping or more visible high street shop closures. Further, simply looking at the 2016 EU referendum data is very misleading as it fails to highlight an important compositional effect. A significant share of the older electorate that voted Leave in 2016 would have voted Leave if there had been a referendum, say, ten years ago, simply because EU-scepticism has always been much more pronounced among the older demographic. Yet, what proved consequential after 2010 was the sharp increase in support for UKIP, much of which

was due to working-age adult’s switching their support to UKIP – often out of pure protest and, in the context of the 2016 Referendum campaign on the basis of misleading, deceitful and unrealistic promises, most of which have since been debunked.

Indirect effects of cuts. The real cuts to transfer incomes further exacerbated regional economic divergence – as the cuts themselves contributed to the sluggish economic recovery in the early 2010s. The primary rule of thumb on the geographic incidence of most benefit cuts suggests that the impact of the welfare reforms was felt the hardest in the parts of the UK that already were most deprived prior to 2010.¹⁹ Fetzter estimates that for every pound lost in transfer income, local economies contracted by around 2-2.5 pounds.²⁰ The projected annual savings of around 18 billion pounds from the welfare cuts alone indirectly contributed to the UK’s economy being up to 45 billion pounds smaller. The VAT or broad tax receipts on that foregone economic activity could have easily paid for the UK’s annual net contribution to the EU’s budget. The indirect economic effects were concentrated in the retail sector, accelerating its already underway structural transformation and may have further contributed to the perception of local economic decline. This has often been subsumed under the notion that political populism provides a harbour for the economically “left behind” or the “places that do not matter”.²¹ In the case of the UK, the sharp increase in support for UKIP after 2010, which helped bring about the 2016 EU referendum, has mostly domestic origins.²²

Austerity exacerbated existing socio-economic cleavages

To summarise, it is quite evident that austerity exacerbated existing social and economic cleavages across the UK and across the constituent nations of the UK (Scotland was spared some of the impact of the cuts). Naturally, it is not the only factor that played a role in shaping the 2016 EU referendum outcome, but given the evidence, it is hard to deny that it played an important role. Specifically, austerity is likely to have furthered already existing and developing cleavages in society that have been documented in much of the descriptive work around the 2016 EU referendum, which points to a set of fault lines along which Leave

17 IFS: Would you rather? Further increases in the state pension age v abandoning the triple lock, 2019, pp. 4-7.

18 B. Eichengreen, R. Mari, G. Thwaites: Will Brexit Age Well? Cohorts, Seasoning and the Age-Leave Gradient, Past, Present and Future, NBER Working Paper No. 25219, 2018; E. Alabrese et al., op. cit.; F. Liberini, A.J. Oswald, E. Proto, M. Redoano: Was Brexit Caused by the Unhappy and the Old?, IZA Discussion Paper No. 11059, 2017.

19 C. Beatty, S. Fothergill, op. cit.

20 T. Fetzter, op. cit.

21 A. Rodríguez-Pose: The revenge of the places that don’t matter (and what to do about it), in: Cambridge Journal of Regions, Economy and Society, Vol. 11, No. 1, 2018, pp. 189-209.

22 T. Fetzter, op. cit.

versus Remain seem to be aligned.²³ In particular, support for Leave versus Remain appears to be distinctly different between

- rural and urban agglomerations
- high- and low-skilled groups
- manual versus non-manual workers
- able-bodied versus disabled
- young versus old
- natives versus migrants.

Consistent with patterns documented elsewhere, and recently summarised in a review by Fetzter and Gold, the welfare state and the UK's internal redistribution system – through transfers to local governments – helped moderate some of the structurally broadening cleavages.²⁴ Many of these developments featuring the hollowing out of the middle class, growing job polarisation, increasing economic insecurity and growing inequality have common roots. The economic roots are found in import competition from low income countries,²⁵ offshoring,²⁶ structural transformation,²⁷ along with the rise of automation,²⁸ and skill-biased technological change more broadly.²⁹ Further, even though most evidence highlights that migration has no adverse effect on natives' economic prospects on av-

erage, it is still possible to have very localised adverse effects.³⁰

Taken together, many of these ongoing and accelerating economic developments produce distributional effects that create winners and losers, and may increase (perceived) economic insecurity. The natural answer is that the welfare state needs to play a particular role in ensuring that losers are adequately compensated.³¹ Yet, it is not immediately clear whether transfer payments provide a suitable and sustainable solution to tackle these challenges. Rather, it is important to think about how social and economic policy could more broadly de-risk and reduce (perceived) economic uncertainty by reformulating social contracts.

Structurally, the erosion of unionisation and collective bargaining along with weaker employment protections, together with the rise of large corporations that may exercise monopsony power in labour markets are a challenge that economic policy needs to tackle. Similarly, the increase of precarious or insecure employment, coupled with increasing barriers to accessing housing and affordable and reliant healthcare are a shadow that threatens to break the implicit intergenerational contract. For the first time, future generations do not expect to live a better life than the previous generation. The sceptre of the ongoing climate crisis and geopolitical realignment provides further context.

Brexit itself is a product of the UK's specific economic and political history, facilitated by its inadequate institutional setup and significantly driven by austerity politics. The underlying broader economic context is shared by many countries both inside and outside the European Union. Progressive and pragmatic policy changes, ideally backed by solid evidence, are key to tackle the many crises and bring in a brighter future – after all, every crisis is also an opportunity.

23 See e.g. S.B. Hobolt: The Brexit vote: a divided nation, a divided continent, in: *Journal of European Public Policy*, Vol. 23, No. 9, 2016, pp. 1259-1277; M. Goodwin, O. Heath: The 2016 Referendum, Brexit and the Left Behind: An Aggregate-Level Analysis of the Result, in: *The Political Quarterly*, Vol. 87, No. 3, 2016, pp. 323-332; S.O. Becker et al., op. cit.

24 T. Fetzter, R. Gold: What Drives Populist Votes? A Selected Overview of Recent Insights, New Forum Working Paper, 2019.

25 D. Autor, D. Dorn, G. Hanson, K. Majlesi: Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure, CEPR Discussion Paper No. 11511, 2016; I. Colantone, P. Stanig, op. cit.; C. Dippel, R. Gold, S. Heblich: Globalization and Its (Dis-) Content: Trade Shocks and Voting Behavior, NBER Working Paper No. 21812, 2015.

26 D.H. Autor, D. Dorn, G.H. Hanson: The China Syndrome: Local labor market impacts of import Competition in the United States, in: *American Economic Review*, Vol. 103, No. 6, 2013, pp. 2121-2168; K. Scheve, M.J. Slaughter: Economic Insecurity and the Globalization of Production, in: *American Journal of Political Science*, Vol. 48, No. 4, 2004, pp. 662-674.

27 R. Rogerson: Structural Transformation and the Deterioration of European Labor Market Outcomes, in: *Journal of Political Economy*, Vol. 116, No. 2, 2008, pp. 235-259; D. Rodrik: Premature deindustrialization, in: *Journal of Economic Growth*, Vol. 21, No. 1, 2016, pp. 1-33.

28 B. Caprettini, H.-J. Voth: Rage Against the Machines: Labor-Saving Technology and Unrest in England, 1830-32, 2017; G. Graetz, G. Michaels: Robots at work, forthcoming, in: *Review of Economics and Statistics*, Vol. 100, No. 5, 2018, pp. 753-768.

29 D. Acemoglu: Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality, in: *The Quarterly Journal of Economics*, Vol. 113, No. 4, 1998, pp. 1055-1089; D.H. Autor, F. Levy, R.J. Murnane: The skill content of recent technological change: An empirical exploration, in: *Quarterly Journal of Economics*, Vol. 118, No. 4, 2003, pp. 1279-1333.

30 S.O. Becker, T. Fetzter, D. Novy: Who voted for Brexit? A comprehensive district-level analysis, in: *Economic Policy*, Vol. 32, No. 92, 2017, pp. 601-650; C. Dustmann, T. Frattini, I.P. Preston: The effect of immigration along the distribution of wages, in: *Review of Economic Studies*, Vol. 80, No. 1, 2013, pp. 145-173; G.I.P. Ottaviano, G. Peri: Rethinking the Effects of Immigration on Wages, in: *Journal of the European Economic Association*, Vol. 10, No. 1, 2012, pp. 152-197.

31 W.F. Stolper, P.A. Samuelson: Protection and Real Wages, in: *The Review of Economic Studies*, Vol. 9, No. 1, 1941, pp. 58-73; D. Rodrik: How far will Economic Integration Go?, in: *Journal of Economic Perspectives*, Vol. 14, No. 1, 2000, pp. 177-186; J. Stiglitz: *Globalization and its Discontents*, New York 2002, Penguin.