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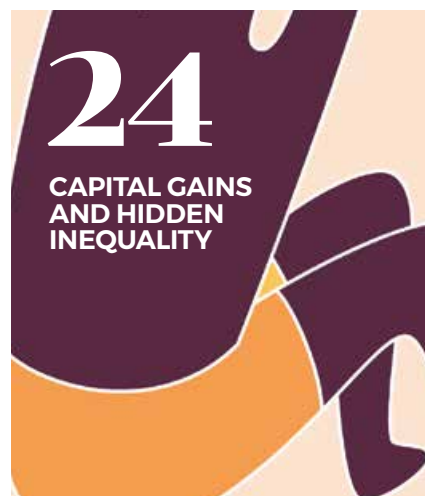
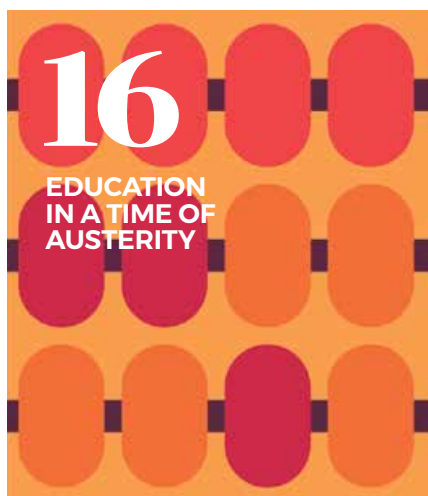
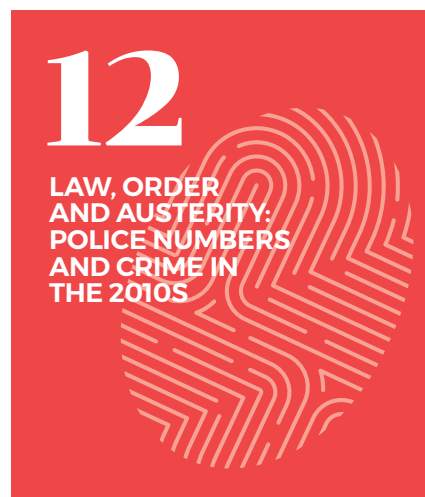
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AUSTERITY

10TH ANNIVERSARY SPECIAL

In this issue ...



Austerity Special

Welcome to the special austerity issue of CAGE's *Advantage* magazine ...

"When we started this project, our aim was to consider the effect of austerity both on the economy and wellbeing over the last 10 years. With a new government in place in 2019, and Brexit negotiations ahead of us, it seemed a good moment to encourage new measured policy choices by reflecting on past decisions.

But as we worked, a new economic crisis emerged — the COVID-19 pandemic. As I write this editorial, in lockdown, there is still much uncertainty about where this crisis will take us. But the content of this magazine is more relevant than ever. Even before we can take stock of the full economic situation, the virus has already thrown up new (as well as old) questions about government borrowing and spending policy; funding the NHS, social care and welfare; inequality in income and education; and wellbeing. This issue tackles all these concerns.

Gemma Tetlow begins by considering how, as we emerge from austerity, the UK government might respond to the economic shock of coronavirus. Nick Crafts, meanwhile, looks back in history to compare our most recent austerity period with those from the 1930s and 1980s.

Next, we consider the effect of austerity on public services and welfare. Mirko Draca and Monica Langella analyse crime and policing; Claire Crawford takes a look at education funding; and Thiemo Fetzer studies the effect of changes to housing benefits.

A well-used (perhaps over-used) saying of austerity was 'we are all in it together'. Our next articles suggest otherwise. Arun Advani and Andy Summers demonstrate that by excluding capital gains from the statistics, we have been given the wrong impression about inequality. Thiemo Fetzer highlights how austerity exacerbated divisions across the country, and tipped the balance of opinion in favour of Brexit.

But it isn't all bad news. Andrew Oswald and Nattavudh Powdthavee show that despite the divisions and difficulties of austerity, we are happier now than we were in 2011.

To know the best path to take next, we need to know where we have been. We hope this issue will help policymakers make their next choices the right ones."

Stephanie Seavers

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Austerity: where next?

By Gemma Tetlow

Just as the UK was emerging from a decade of austerity following the global financial crisis, it was hit by a health crisis that became an economic one. The coronavirus pandemic has required unprecedented government intervention to shut down normal life and prop up businesses and households while the disease is brought under control. For 10 years public services have been told to cut the fat and achieve more with less to bring public borrowing down from a post-war high. But almost overnight fiscal caution was — justifiably — thrown to the wind, as Chancellor Rishi Sunak put together a support package that would keep UK businesses and workers going while the economy was temporarily mothballed to curb the spread of Covid-19. ►

Exactly how and when the UK will emerge from the shadow of coronavirus is still unclear. But it already seems likely that, on the other side, there will be questions about the future size and scope of government and how it is to be paid for.

Public borrowing in 2020–21 is very likely to exceed the peacetime record of 10.2% of GDP reached in 2009–10.

Much of that borrowing a decade ago was judged to be permanent, rather than merely temporary, leading — as Nick Crafts describes — to a longer and deeper period of austerity for public services than witnessed in either the 1930s or the 1980s. Benefits for those of working age were also cut sharply, while those for pensioners were protected. Public spending has borne the brunt of the fiscal tightening over the past 10 years because that is the choice governments — supported by the electorate — made, rather than opting for larger tax rises. But the Covid-19 crisis is likely to reopen this settlement.

Coronavirus will increase borrowing

The best-case scenario for the government is that the UK economy can emerge from the Covid-19 crisis without permanent scarring. That has been the core focus of the Treasury's wide-ranging economic support measures. If that can be achieved, the high level of public borrowing expected in the short-term will be purely temporary — a one-off increase in the stock of debt but not a permanent increase in its rate of growth.

If instead the current crisis causes the sort of permanent damage to the UK's economic potential that the financial crisis did, annual public borrowing would be left at an elevated level indefinitely.

In the best-case scenario, the government would face a choice between allowing debt to remain elevated (giving the government less flexibility in the face of future increases in borrowing costs or future economic downturns), or raising taxes or cutting spending further to bring it down. If instead there is permanent damage to the economy and public finances, the need for tax rises or further spending cuts is likely to be unavoidable.

Growing appetite for more — not less — public spending

If a fiscal reckoning is coming, it seems unlikely that public spending will bear the brunt in the way it has for the past ten years. At the 2019 general election, it was already clear

that the public were growing tired of austerity. The ruling Conservative party promised austerity was at an end and ultimately were elected on promises of more money for the NHS, the police and schools.

The response to coronavirus has further expanded the role of the state. It is too early to know yet whether the crisis has shifted public opinion sufficiently that the British

public would like to see these changes made permanent, but it might. Some of the measures — such as the unconditional payments to the self-employed — cannot be maintained in their current form. But others, such as the increase in entitlements for those on Universal Credit and the Local Housing Allowance, will be very hard to reverse, since that would entail cutting cash payments to low income households. These are

also areas in which there have been long-standing calls for the government to reverse earlier cuts (including for the reasons set out by Fetzer).

The crisis has also highlighted the important role played by the NHS and those who work in social care. The debate on how to fund these essential services is likely to gain even more prominence than before.

Had public services been cut too far?

The crisis has raised questions about whether some public services had been cut back too far during the period of austerity, leaving them unable to cope with such a shock. For example, controversy around the lack of personal protective equipment for health workers highlighted decisions, made by the Department of Health in 2017, not to stockpile visors or safety glasses because this was deemed too expensive — even though the medical advice suggested these would be needed in the event of a flu pandemic (Davies, 2020).

The focus over the past decade has been on ensuring public services are run as efficiently as possible. The main means for achieving this has been through imposing tight spending settlements. For services that are partially funded and delivered locally, the cuts to central government spending resulted in unequal cuts to services across different parts of the country. As Draca and Langella demonstrate, police officer numbers were cut more sharply in areas with initially high levels of crime. Local authority spending has also been cut more sharply in

“The crisis has raised questions about whether some public services had been cut back too far during the period of austerity, leaving them unable to cope with such a shock.”

more deprived areas than less deprived ones (Harris et al. 2019).

But the experience of Covid-19 may alter perceptions among those in government and among the public about the need for building into services resilience to low probability but high impact events. But such resilience would come at a cost.

Who will pay?

If debt or borrowing are to be reduced, or if the size of the state is to be expanded, the country will face a question that has not yet reared its head – who should pay?

The answer may depend on who is seen to have benefitted from the state's largesse. For example, Sunak hinted that his emergency support for the self-employed would be followed by changes to their tax treatment, which is more generous than that faced by employees (Marshall, 2020). There has also been much public debate already about the trade-off between limiting the number of deaths from coronavirus (which predominantly affect the old) and the economic costs (which impact the young more heavily).

Alternatively, the public might expect those with the broadest shoulders to bear the lion's share of the cost. Advani and Summers' evidence on capital gains (which are excluded from official income and inequality measures) received by those at the very top are likely to add fuel to such arguments. There has long been a disconnect between a public perception that the incomes of the very richest have pulled away from everyone else's over the past decade and the hard statistics. The official statistics show that the vast majority have fared poorly but they show that the rich have too. Advani and Summers' new work suggests the reality may be closer to the public's perception than the official statistics suggest.

Whether or not the UK state takes on a permanently larger role after the coronavirus pandemic has passed will depend in no small part on the UK public's willingness to pay more for it. That willingness will depend in turn on who is asked to pay. As my own work has highlighted (Tetlow et al., 2020), previous governments have usually struggled to impose higher taxes on anyone. But the experience of Covid-19 – which, after 10 years of public spending austerity, has highlighted the unique power of the state in such a situation, as well as the lack of safety nets in some areas and the importance of resilience in public services – could provide the conditions needed for a reassessment of the shape and size of government and who should pay for it.

The future of UK government

The UK state has temporarily taken on wide-ranging responsibility for paying employees and the self-employed, guaranteeing loans to businesses, providing generous

support to some of the worst affected industries and offering health and social care services whatever they need. In the coming months, the government will face difficult decisions about how and when to withdraw those extraordinary measures. But we may well not return to exactly where we started from: government in the UK may be reshaped forever – both what it does and how it does it. ◀

About the author

Gemma Tetlow is Chief Economist at the Institute for Government.

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Austerity: this time was different

By Nicholas Crafts

To judge from the 2019 general election campaign, the country has grown weary of austerity. With an historical perspective, this is not surprising, once we recognise the exceptional dimensions of the 2010s' fiscal squeeze. Dealing with the fiscal aftermath of a major banking crisis was a new and painful experience for the UK.

The idea of this article is simply to provide some historical perspective on the austerity policies of the 2010s. I make no attempt to evaluate macroeconomic policy. Rather, I make comparisons with two previous episodes of austerity, namely the early 1930s, when the government struggled to cope with the budgetary implications of the external shock of a world economic crisis, and the early 1980s, when the government sought to conquer domestic inflation pressures with its Medium-Term Financial Strategy.

The austerity measures of 2010 were different to those of previous decades, and centred on how to deal with the fiscal consequences of a banking crisis the like of which had not happened in Britain for well over a hundred years. Cuts to government expenditure were deeper, the period of austerity longer, and the impact on public spending and services more keenly felt than ever before. ►



1938



8861

2019



**“This time was different.
Fiscal tightening was
protracted and the reduction
in the structural budget
deficit was unusually big.”**

The context for austerity in 2010

It was widely accepted in 2010 that the aftermath of the banking crisis entailed a serious structural budget deficit, i.e. one that would persist even after recovery from the initial shock to aggregate demand. The crisis had reduced the level of potential output compared with the counterfactual of no crisis implicit in previous fiscal plans, and thus would raise government outlays and lower government receipts relative to GDP. Both the outgoing Labour and incoming Coalition governments thought that the structural budget deficit had risen by around 6% of GDP to somewhere near 8%. The IFS Green Budget in 2010 pointed out that this implied a threat to future fiscal sustainability, with the public debt to GDP ratio rising to 120% by the mid-2020s and 160% by 2040 on unchanged policies. Both the outgoing and incoming governments accepted the case for serious fiscal consolidation to maintain fiscal sustainability, although the parties differed on its composition, size and timing. So, to a considerable extent, austerity was a bi-partisan policy, although there certainly was enough fiscal space to allow some flexibility as to how to implement it.

Some fiscal facts

Table 1 shows that by 2018/19, total government spending had been reduced to 39.9% of GDP compared with 46.6% in 2009/10. The level in 2018/19 was about the same as the pre-crisis years in the mid-2000s or the early 1970s, but much larger than in the interwar years. Government receipts (predominantly tax revenues) in 2018/19 as a share of GDP at 38% were modestly larger than in 2009/10 but not since 1985/86 had this ratio been exceeded, although a total tax take of this magnitude was fairly typical of the 20 years prior to that.

The length of austerity

The cyclically-adjusted budget surplus, which is monitored by the Office for Budget Responsibility, is equivalent

“The austerity of the 2010s lasted much longer and amounted to a bigger fiscal squeeze than was imposed in the 1930s or the 1980s.”

to the structural budget deficit. When the economic environment is not subject to major shocks, changes in this ratio (reported in Table 2) reflect discretionary changes in the government's fiscal stance – an increase in the surplus (decrease in the deficit) would reflect greater austerity. On this measure, fiscal tightening continued for the whole of the 9-year period from 2009/10 to 2018/19 by which point it amounted to 6.2% of GDP, i.e. about the same amount required to repair the initial estimate of the increase in the structural budget deficit from the banking crisis. By comparison, in the Thatcher years, austerity only prevailed for three years before fiscal policy was relaxed somewhat and in the 1930s the reversal of austerity started in 1933 after four years. In both cases the full extent of fiscal tightening was smaller than in the 2010s; 5.3% and 3.8% of GDP respectively.

Public spending and services

So, the austerity of the 2010s lasted much longer and amounted to a bigger fiscal squeeze than was imposed either in the 1930s or the 1980s. This resulted in a much colder climate for public spending in the recent past, as can be seen in Table 3. Comparisons can be made for the periods of fiscal tightening or over nine years from the start of austerity in each case. Either way, the point that stands out is that 2009/10 to 2018/19 is the only period in which there were decreases in total managed expenditure per person and a key component of this, spending on public services per person, by 5% and 3.7% respectively. In 1933 and in 1981/2 these items showed small increases since the period of austerity began. By 1938, total managed expenditure per person was 30.7% above the 1929

level and by 1987/8 it was 10.1% above the 1978/9 level.

The reductions in public spending per person in the 2010s reflect a decision to impose fiscal consolidation very largely (>80%) through expenditure cuts rather than tax increases. They comprise some big cuts to parts of the public sector especially since health has been protected – each of the government departments Culture, Defence, Environment, Food and Rural Affairs (DEFRA), Education, Home Office, Justice, and Transport has had a real-terms cut of at least 10%. They are also the context for spending cuts of more than 40% in some localities by the time of the EU referendum.

Household income inequality

Even so, after this long period of expenditure-focused austerity in 2018, the redistributive function of fiscal policy working through expenditure rather than taxation was still very clear if less pronounced than pre-crisis. As is reported in Table 4, this reduced the Gini coefficient for household income inequality from 46% for original income to 28% for final income compared with 51% to 29% in 2005. Inequality in final income was the same as in 2010. Redistribution was still on a much more ambitious scale than with the smaller state of the 1930s.

This time was different. Fiscal tightening was protracted and the reduction in the structural budget deficit was unusually big. The austerity programme was implemented at a time of unprecedented productivity slowdown and this entailed cuts in real public spending per person. Re-balancing the public finances in the aftermath of a banking crisis proved an order of magnitude more demanding than a common-or-garden fiscal consolidation. ◀

Table 1. Some fiscal facts (%GDP)

| | Government Spending | Government Receipts | Public Debt |
|---------|---------------------|---------------------|-------------|
| 2018/19 | 39.9 | 38.0 | 81.7 |
| 2009/10 | 46.6 | 36.4 | 63.4 |
| 1987/88 | 37.2 | 36.3 | 31.0 |
| 1981/82 | 43.0 | 41.0 | 40.1 |
| 1978/79 | 41.5 | 37.0 | 42.2 |
| 1938 | 28.1 | 24.4 | 143.8 |
| 1933 | 26.5 | 26.9 | 179.2 |
| 1929 | 24.5 | 23.8 | 158.4 |

Sources: Middleton (2010); OBR, Public Sector Finances Aggregates Databank (September 2019).

Table 2. Cyclically-adjusted budget surplus (%GDP)

| | | | | | |
|---------|------|---------|------|------|------|
| 2009/10 | -8.2 | 1978/79 | -5.2 | 1929 | 0.4 |
| | | 1981/82 | 0.1 | 1933 | 4.2 |
| 2018/19 | -2.0 | 1987/88 | -2.1 | 1938 | -1.5 |

Sources: Middleton (2010); OBR, PSF Aggregates Databank (September 2019).

Table 3. Index numbers for real public expenditure per person

| | Total Managed Expenditure | Public Services | Social Security | Net Investment |
|---------|---------------------------|-----------------|-----------------|----------------|
| 2009/10 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2018/19 | 95.0 | 96.3 | 98.2 | 60.1 |
| 1978/79 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1981/82 | 104.3 | 105.7 | 112.5 | 51.3 |
| 1987/88 | 110.1 | 110.4 | 133.7 | 42.1 |
| 1929 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1933 | 103.3 | 104.9 | 138.1 | 81.4 |
| 1938 | 130.7 | 166.6 | 129.7 | 155.6 |

Note: 1929-38 data are for total public expenditure and gross investment.

Sources: Crawford and Zaranko (2018); Middleton (1996).

Table 4. Gini coefficients for household income inequality

| | Original | Gross | Disposable | Post-Tax | Final |
|------|----------|-------|------------|----------|-------|
| 2018 | 46 | 36 | 33 | 36 | 28 |
| 2010 | 49 | 36 | 33 | 36 | 28 |
| 2005 | 51 | 36 | 32 | 36 | 29 |
| 1988 | 51 | 37 | 35 | 38 | 31 |
| 1979 | 44 | 30 | 27 | 29 | 23 |
| 1937 | 37 | 33 | 29 | 29 | 28 |

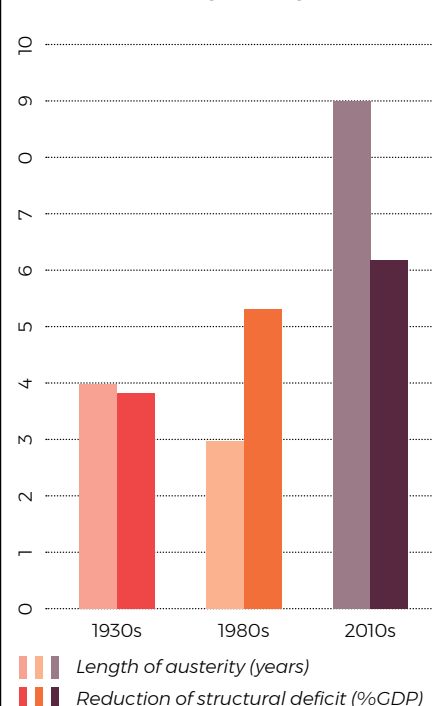
Note: Original = market income before any benefits or taxes, Gross adds cash benefits, Disposable adds cash benefits and takes away direct taxes, Post-tax adds cash benefits and takes away all taxes; Final adds all benefits including in-kind and takes away all taxes.

Source: Glennerster (2006); ONS.

Public spending per person 9 years after austerity implemented



Extent of fiscal tightening



About the author

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Law, order and austerity: Police numbers and crime in the 2010s

By Mirko Draca and Monica Langella

As the Conservatives hailed the end of austerity in late 2019, they also pledged £750 million to fund 20,000 more police officers, effectively reversing the cuts to police numbers implemented during austerity. The pledge has been described as a move to ‘make our streets safer’ in response to rising crime levels. But what has happened to police numbers across the UK since 2010 and to what extent did policing cuts affect crime rates?

The cuts to police numbers were indeed large by historical standards (14.3%), and have been more severe in existing high crime areas. Crime rates actually fell for a long period in the late 2000s and early 2010s but since 2013 there has been a sharp increase in violent crime that is hard to explain. It could be that the cuts to police numbers reached a ‘critical point’ such that violent crime was able to surge. But, as we will show, this is hard to establish conclusively with the available data. The cuts in police numbers may indeed have played a role in the violent crime surge but it’s also plausible that other dimensions of austerity policies – such as cuts to benefits and local services – may have contributed.

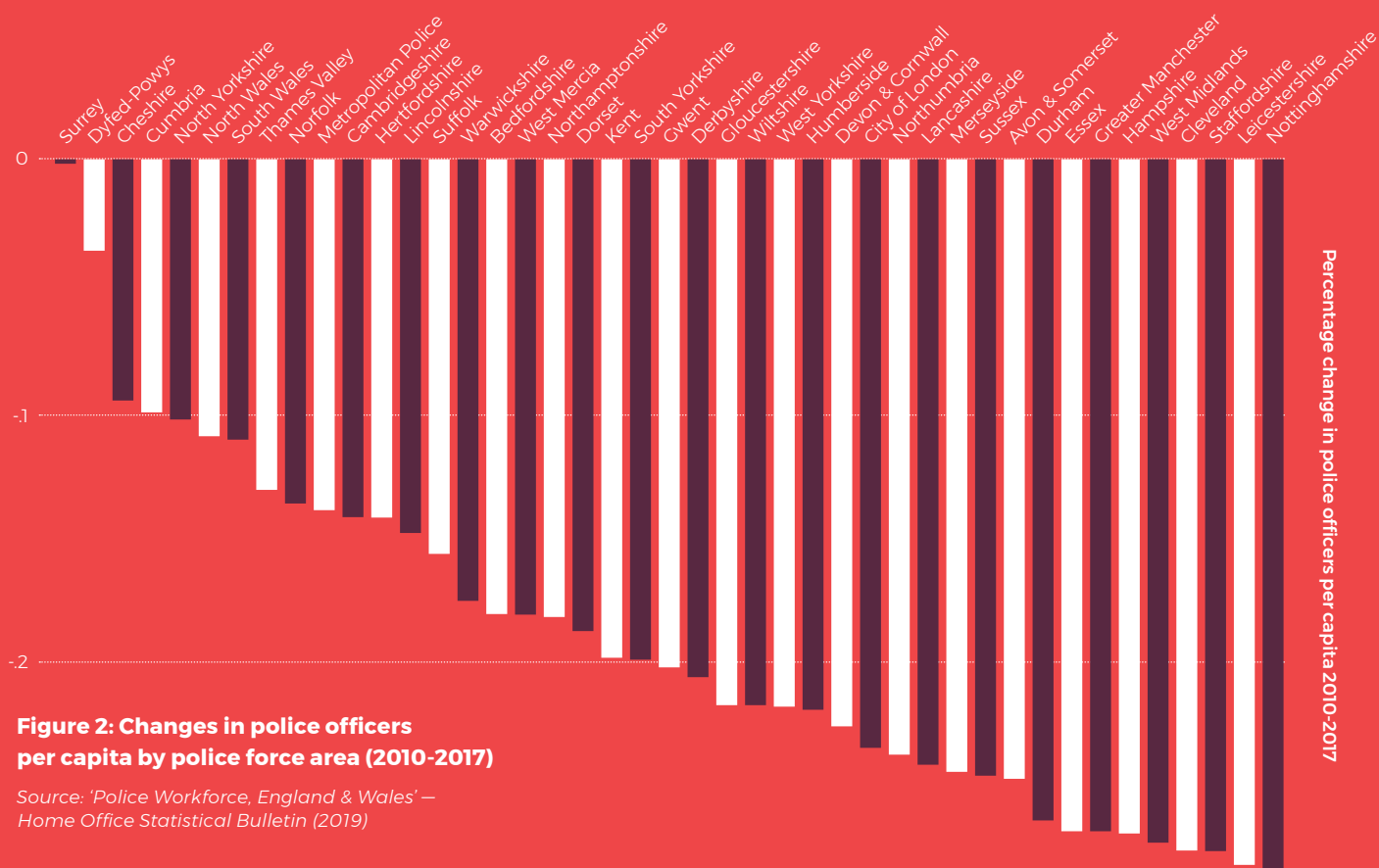


Figure 2: Changes in police officers per capita by police force area (2010-2017)

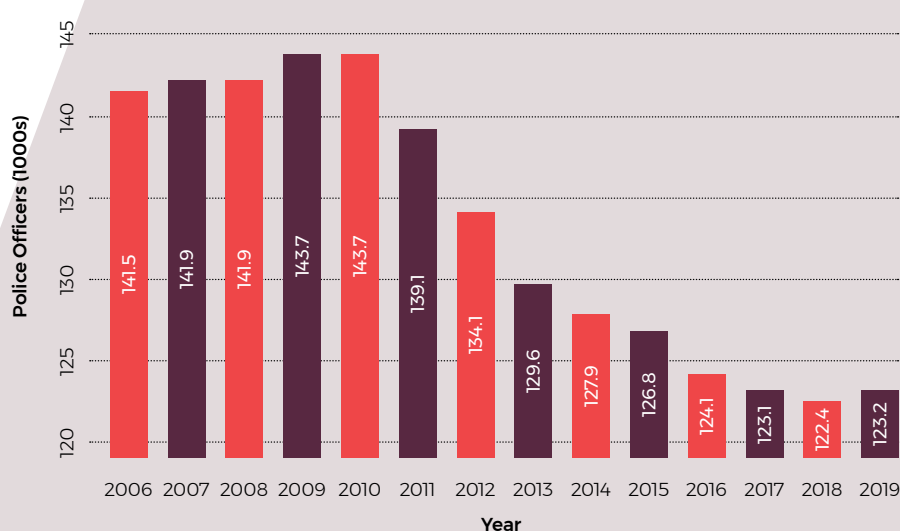
Source: 'Police Workforce, England & Wales' — Home Office Statistical Bulletin (2019)

How big was the fall in police numbers?

Figure 1 shows the trends in police officer numbers since 2006 using Home Office data. This shows that overall police officer numbers fell by 14.3% between 2010 and 2019, from approximately 143,700 to 123,200 officers. Estimates based on Freedom of Information (FOI) requests indicate that over 600 police stations closed during this period (Ungoed-Thomas et al., 2018).

The regional picture of police cuts is perhaps best conveyed in Figure 2 which uses the change in officers per head of population as the measure of police numbers. This shows some very large reductions (over 25%) in staffing levels for Police Force Areas (PFAs) in the East and West Midlands in particular. As an example, this kind of fall translates in the West Midlands as a reduction in officers from 3.1 to 2.3 per 1000 people. ►

Figure 1: Number of police officers (England & Wales), 2006-2019



Source: 'Police Workforce, England & Wales' — Home Office Statistical Bulletin (2019)

An important aspect of these regional cuts is how they relate to pre-existing levels of crime. In Figure 3 we plot the relationship between the change in officers per capita and the initial level of violent and property crimes in a PFA at the beginning of our data in 2006. This shows a clear negative correlation — police cuts were actually higher in per capita terms for existing high crime areas.

A background issue to note here is that police per capita and crime are still positively correlated with crime when we look at the cross-section of PFAs. That is, there are more police per capita in high crime areas to start with. This follows the simple logic that policy-makers have historically tended to distribute more police officers to high crime areas in order to better defend against crime.

However, the pattern of cuts after 2010 weakened this relationship. For example, the raw correlation between police per capita and violent crime fell from 0.64 to 0.47 between 2006 and 2017. In short, austerity has stripped away some of the extra layers of police resources that were allocated to crime-prone areas.

How have crime patterns evolved?

The fact that the cuts in police numbers were more severe in already high crime areas raises the question of whether austerity affected crime trends as a result. This question is complicated by the fact that there are many contributing economic and social factors that help determine crime rates. Some will have helped to lower crime during the 2010s while others will have pushed it up.

We plot total violent and property crimes for England and Wales in Figure 4. The first panel (a) plots crime levels per capita and shows a steady fall in property crime rates from 2006-2017 and a fall in violent crime up until 2013 followed by an increase. The second panel (b) gives an idea of the magnitude of these changes compared to base levels in 2006. Property crime per capita fell

by nearly 40% over the period while violent crime actually rose by 9.8%. A remarkable feature of the violent crime trends is that a 35% fall in crime rates up to 2013 was followed by a complete reversal and then an increase relative to 2006 levels. Violent crime is up nearly 10% across England and Wales relative to 2006.

Did police cuts trigger the post-2013 violent crime wave?

While the changes we trace out above are dramatic, it is hard to directly attribute the upsurge in violent crime to the cuts in police numbers. We illustrate what has been happening across PFAs in Figure 5. This plot records a zero correlation between the change in violent crime and the change in police per capita between 2010-2017. We divide this plot into four quadrants based on 'above mean' and 'below mean' values. The PFAs in quadrants I and IV fit the story of fewer police leading to more crime, but there are still a range of areas in quadrants II and III where the relationship went in the opposite direction.

The academic literature on police and crime (e.g. Draca et al., 2011, Chaflin and McRary, 2018) has long told us that the relationship is complicated by 'reverse causality' issues, in particular the fact noted above that policy-makers tend to allocate police to high crime areas. This makes it hard to establish a causal link. This type of 'endogeneity' problem is in play in the PFA data we consider here, but there are also additional austerity-related factors to consider.

Austerity policies cut police resources but they also led to some dramatic reductions in welfare benefits and local services. This in turn would have affected crime. Indeed CAGE-supported research by Fetzer, Sen and Souza (2019) indicates that housing benefit cuts are associated with increased property crime at least during the early stages of austerity.

While the government is now moving to increase police numbers and moderate austerity policies in general, we can expect the impacts to be asymmetric. That is, it's harder to reduce crime with more police and better services and benefits than it is to increase crime by cutting these public resources. In particular, a big challenge for research on these issues is understanding the extent to which the effects of austerity — especially the effects on household incomes — are likely to persist. ◀

About the authors

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Monica Langella is Research Officer at the Centre for Economic Performance at the London School of Economics.

Further reading

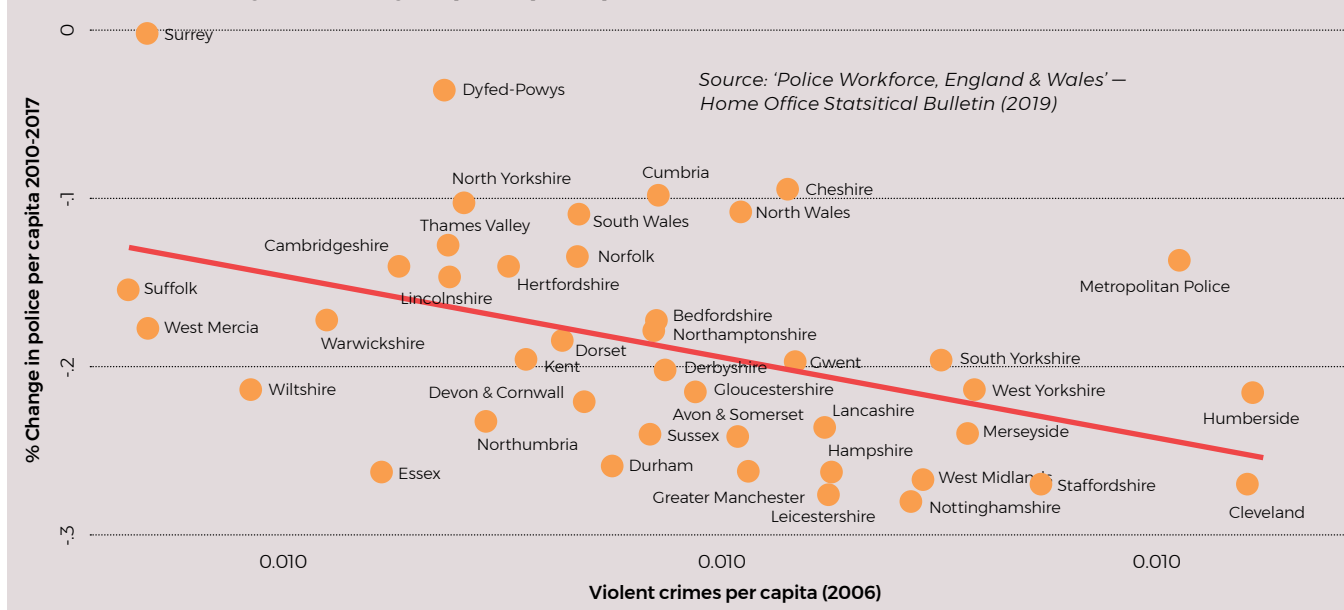
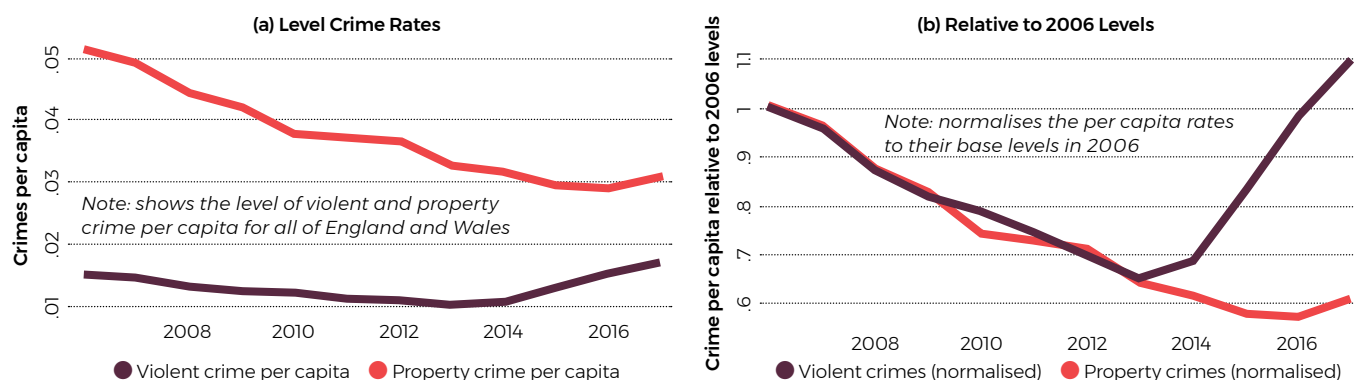
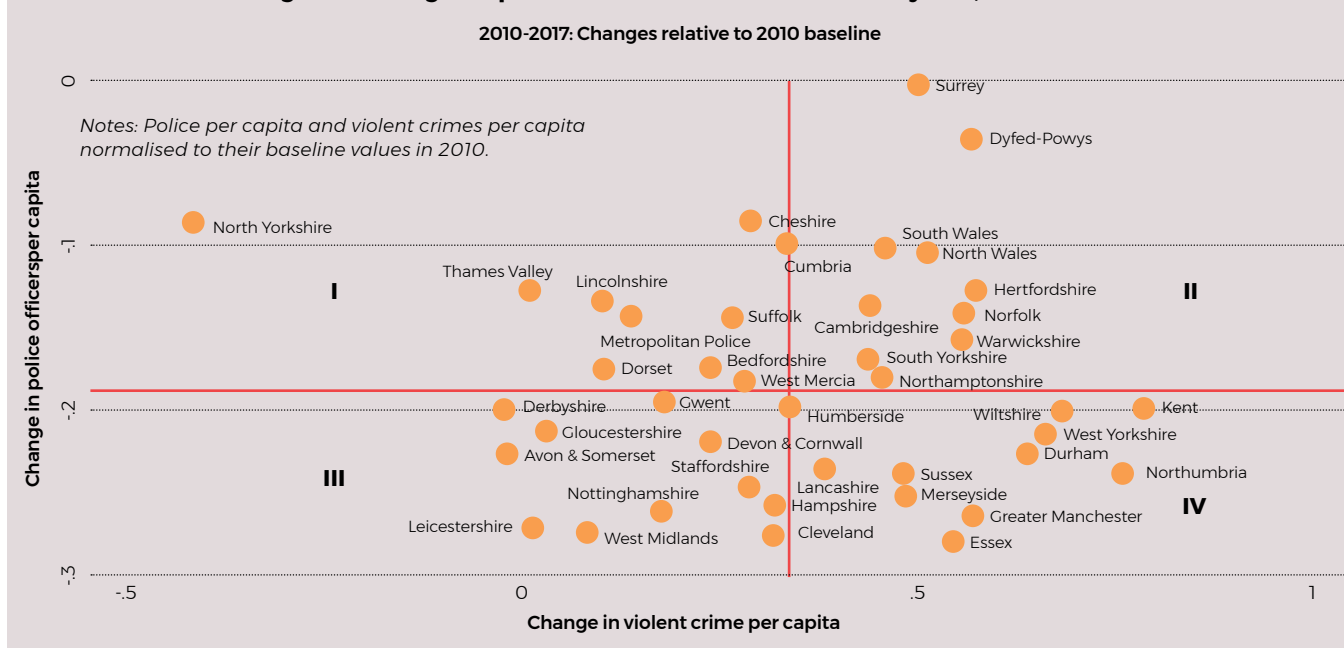
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Figure 3: Change in police per capita and initial PFA violent crime levels (2006)**Figure 4: Property and violent crimes per capita, England and Wales, 2006-2017****Figure 5: Changes in police numbers and violent crime by PFA, 2010-2017**

Education in a time of austerity

By Claire Crawford

Education benefits individuals and economies. A wealth of research suggests that acquiring additional years of education or qualifications leads to higher earnings, as well as a host of non-pecuniary benefits, including being healthier and happier. There is also a strong correlation between the education or skill level of a workforce and economic growth or productivity, although a causal relationship is harder to prove.

The potential for positive spillovers from education is just one of the reasons why governments invest in education, often significantly. The UK government, for example, spends over £90bn per year, equivalent to about 4.2% of national income. This makes it the second largest element of public service spending in the UK behind health (about 7% of national income).

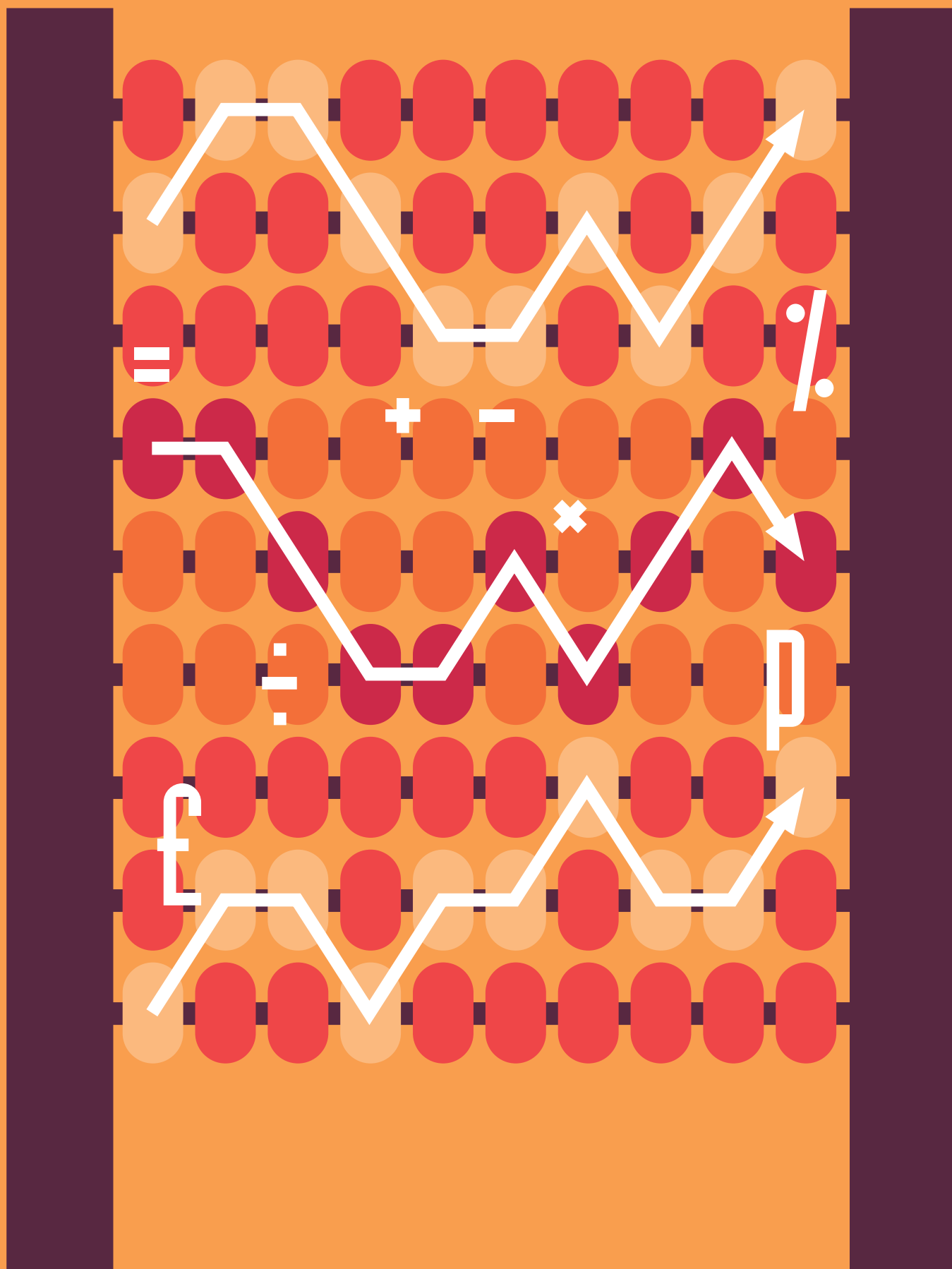
Given the importance of education to the government's objectives, including its commitment to investing in skills as part of the industrial strategy, one might expect spending on these areas to have been relatively protected from austerity since 2010. That does indeed seem to have been the case. But the overall picture of relatively little change in education spending over the last decade masks the very different patterns experienced by different areas of education.

It also provides a misleading impression of what has happened to investment in education over the last 30 years. Resources have increased across the board, from pre-school through to higher education, with austerity doing little to reverse this trend. Each phase of education has more resources to spend per child now than they did 30 years ago. But the biggest rises have been on children under the age of 11, at the expense of those in further and higher education. There has also been an increasing concentration of resources on poorer pupils in compulsory education. Taken together, these two changes have resulted in far greater equality of public spending on education by socio-economic background — although there is still a long way to go for this equality of spending to translate into equality of outcomes or opportunities.

Education spending during the austerity years

If we take account of the government's expected spending on unpaid loans to higher education students, as the Office for National Statistics recommends, day-to-day education spending fell by about 3% in real terms between 2010-11 and 2018-19. This is a small fall compared to many other government departments, including the Home Office and the Ministry of Justice, which saw a reduction of more than 20% over the same period. But education was less well protected than health, which saw a rise of 14%.

This overall change in day-to-day education spending masks substantial differences between phases of education, however, as Figure 1 shows. The figure shows the percentage change in upfront real terms public spending per pupil or student for different phases of education relative to 2010-11. ►

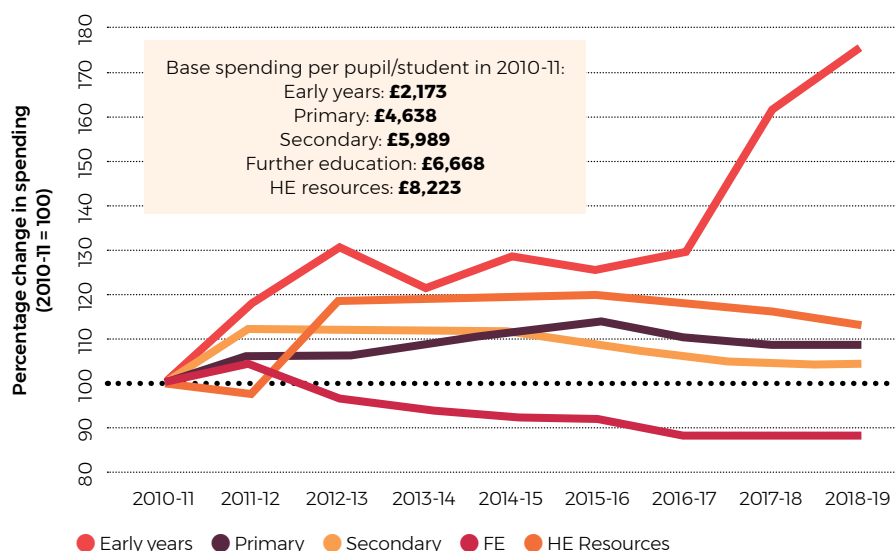


It makes clear that further education (here shown for 16-18 year olds) has borne the brunt of the cuts, seeing funding cut by 12% in real terms over this period, with sixth form colleges particularly badly affected.

The early (pre-school) years, by contrast, has seen dramatic increases in public spending, albeit from a much lower base. The figure focuses on 3 and 4 year olds. The largest component of early years spending for this age group is the 'free entitlement'. Since 2010, this has offered all 3 and 4 year olds 15 hours of free care in a formal childcare setting during term-time (38 weeks per year). Much of the rise in public spending we see over this period has been driven by an increase in the generosity of this entitlement. Since 2017-18, for example, 3 and 4 year olds with working parents have been eligible for up to 30 hours of free care per week during term-time. The total resources, both public and private, being spent on childcare have not risen as fast as these figures would suggest, however, because the increase in public spending has to some extent 'crowded out' (replaced) money that parents would otherwise have spent on childcare themselves.

The beneficiaries of public spending on childcare have also changed over time. In addition to the free entitlement, support for childcare is offered via the tax system, for working families, and via the benefit system, for lower income families. In 2010-11, less than 10% of childcare support was targeted explicitly on working families and about 45% on lower income families. By 2017-18, they each accounted for about 25% of spending. (The remaining 45-50% relates to the universal free entitlement.) This is in marked contrast to the composition of school spending, which was already skewed heavily in favour of students from poorer backgrounds in 2010, and has become even more so since the introduction of the pupil premium in April 2011 (a fund designed to improve the attainment of disadvantaged pupils).

Figure 1: Percentage change in average real-terms public spending per pupil or student per year on different stages of education since 2010-11



Source: authors' calculations based on Figure 6.1a of Britton, Farquharson and Sibieta (2019). The figures refer to average upfront public spending at each stage of education. As such, the higher education figures include some private spending – the tuition fees that graduates end up contributing via loan repayments to the government – while the figures for other phases of education exclude private spending. The apparent jump in resources for secondary schools between 2010-11 and 2011-12 is largely an artefact of the data, which saw a change in reporting related to the rise of academies. See Belfield and Sibieta (2016) for more details.

Substantive policy change has also been the key driver of the pattern in upfront spending on higher education shown in Figure 1. The large jump in average real resources for undergraduate students between 2011-12 and 2012-13 coincided with the near trebling of the cap on tuition fees, from just over £3,000 per year to £9,000 per year, after which it remained fixed in nominal terms.

Average resources per student did not treble, however, because the government simultaneously removed (for most subjects) the grants it gave universities to help cover the cost of teaching. Thus, while the last decade has not seen a substantial fall in the average real resources going into higher education, the balance of funding has continued to move away from the public purse and towards private contributions from graduates and their families, with the current system split about 50-50.

The replacement of a tiered system of teaching grants with a flat tuition fee for all subjects also means

that some subjects – those that are cheaper to teach – are now much more generously funded than others: for example, in 2016-17, funding for medicine/dentistry and courses including lab or field work was 6% and 19% higher respectively than it would have been under the 2011-12 system, while funding for the lowest cost courses was 45% higher. This has brought the debate about value-for-money and the justification of different levels of government subsidy for different subjects very much to the fore, as seen in the discussion surrounding the Augar review of post 18 education and funding (2019).

The longer view

So far we have focused exclusively on what has happened since austerity began in 2010. Doing so, however, misses the extent to which these patterns continue or depart from what came before. Figure 2 extends Figure 1, showing average upfront public spending per pupil or per student in 2019-20 prices from the

early 1990s onwards. It shows that while the real resources available for primary and secondary education have stagnated or fallen slightly over the last decade, spending per pupil remains substantially higher than it was 30 years earlier. With real funding per pupil in secondary schools 83% higher in 2018-19 than in 1990-91, and in primary schools a whopping 145% higher, austerity has clearly not come close to reversing the substantial increases in funding overseen by the Labour government in power between 1997 and 2010.

By contrast, real spending per student on further and higher education has increased by less than 20% over the same period. Together with the substantial rise in spending on the early years, this represents a significant shift of resources towards younger children – particularly in the compulsory elements of the education system, as opposed to those for which young people can opt in. Alongside the increasing concentration of spending within the compulsory education system on poorer children, this has ensured that – when looking at the resources spent on young people

from different backgrounds across their entire education lifecycle – the socio-economic differences that were previously apparent have now been almost entirely eliminated.

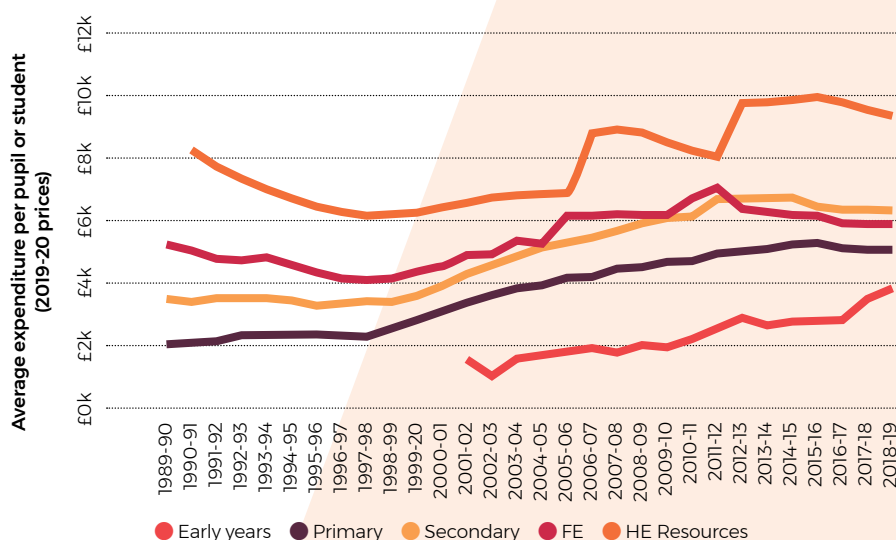
One interpretation of these patterns might be that successive UK governments have been trying to level the playing field between children from different backgrounds by following the conclusions of research by Professor James Heckman, amongst others, suggesting that the earlier you invest in children's development, the greater the potential return. But the disjointed and often contradictory nature of the underlying policy reforms arguably belie this apparent clarity of vision. In the early years, for example, the direction of travel suggests that the government is now less interested in supporting early education as a means of reducing child inequalities and more as a way of helping working parents with the cost of childcare. That is not to say the latter is not a reasonable goal, but rather that it does not fit with a vision of the education system working towards equality. There is also a big difference between equalising

“Education is the passport to the future, for tomorrow belongs to those who prepare for it today.”

Malcolm X

resources and equalising outcomes or even opportunities. Austerity has not decimated the resources going into our education system – at least not in all areas. But it is possible that taking a more holistic view across the entire sector might help to ensure that education is truly the engine of equality and productivity that the government hopes. ◀

Figure 2: Public spending per pupil or student per year on different stages of education (2019-20 prices)



Source: Figure 6.1a of Britton, Farquharson and Sibieta (2019).

About the author

Claire Crawford is Reader in Economics at the University of Birmingham and a CAGE Associate.

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The impact of the 2011 housing benefit reform

By Thiemo Fetzner

Government reforms to housing benefit introduced in 2011 were intended to save the public purse hundreds of millions of pounds. But far from saving money, the change in policy simply shifted burdens to local councils: for every pound central government saved in housing benefit, local authority spending on temporary housing costs went up by 53p.

In 2008, the local housing allowance (LHA) was introduced as a way to calculate housing benefit. The aim was to ensure that private sector tenants could afford the median level of rents for a property of specified sizes in a local housing market (Broad Rental Market Areas or BRMA). This model meant that any increase in private sector rents had a direct impact on public spending.

In 2011, after the implementation of austerity, LHA was cut to cover only the 30th percentile of rents within a BRMA. In addition to this, claimants who lived in slightly cheaper accommodation and had previously been allowed to keep the difference between their rent and the LHA applicable (the so-called 'excess payment' of up to £15 a week) had this privilege cut.

While the measures were intended to provide fiscal savings to the Department for Work and Pensions (DWP), we find that the reform was largely self-defeating. The cuts brought about a significant increase in evictions and a persistent increase in households living in insecure temporary accommodation, statutory homelessness and actual rough sleeping. The money spent by local councils to deal with these problems eroded most of the fiscal savings made by the reform.

Overall impact of the reforms

In late 2010, the DWP estimated the economic impact of the benefit cuts. Figure 1 shows the number of households affected by the cut, and the loss per affected household. ►

There is a significant variation in the intensity of the cut across the UK, with households in London being particularly affected. On average, households claiming housing benefit lost £600 a year. In some areas of London, this rose to £2000. Around 0.9 million households were affected across the UK (about 5% of all households, and 25% of households in the private rented sector). Our research analyses a range of official and individual level survey data sources to further understand the fiscal, economic and social impact of the cuts.

Evictions, temporary accommodation and homelessness

We find a 22.1% increase in evictions of private sector tenants compared to the pre-reform period. There is no discernible impact on evictions issued to the social rented sector. This strongly suggests that the increase in evictions were due to housing benefit claimants in the private sector being directly affected by the LHA cuts.

Local authorities are statutorily obliged to find temporary accommodation for vulnerable households who do not have a right to occupy a property or are

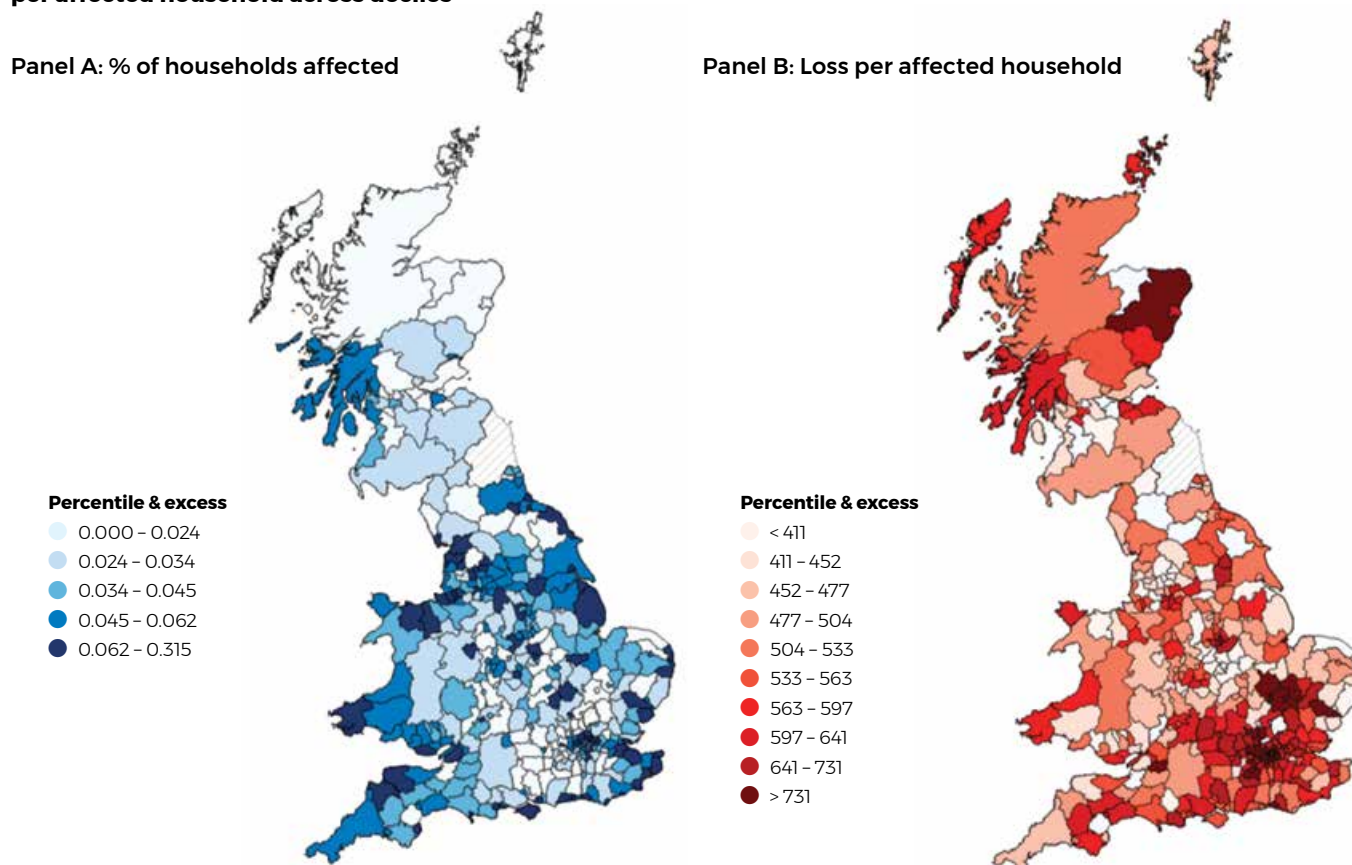
at imminent risk of becoming homeless (statutory homelessness). The data indicates a 10-13% increase in statutory homelessness and an almost 50% rise in rough sleeping rates. The number of households being placed in temporary accommodation rose by 18.8%.

Since 2011, the structure of statutory homelessness has also dramatically shifted. Rapid rises in homelessness are concentrated among working-age adults and particularly households with children. Eviction from rented accommodation is the main reason why households in districts most exposed to the housing benefit cut become homeless.

Electoral Registration and EU referendum vote

We also link exposure to the housing benefit cut to measures of democratic participation. In the 2016 EU referendum vote, turnout was significantly lower in districts more affected by the cut: a 1 Standard Deviation (SD) increase in exposure to the housing benefit cut decreased turnout by 1.3 to 1.8 percentage points. It also increased support for Leave by 2.2 percentage points.

Figure 1: Ex-ante estimated impact of LHA cut from median to 30th percentile and the removal of the excess – Panel A highlights the share of resident households affected while Panel B presents the loss per affected household across deciles



The cost of the reforms

Even though the cut to housing benefits was originally intended to provide fiscal savings to the DWP, we show that a large portion of the fiscal savings were offset by the local councils spending on anti-homelessness measures. Figure 2 shows the money saved by the DWP through the reform and the increase in local council spending on anti-homelessness measures in £'s per resident households. For every pound central government saved in housing benefit, local authority spending on temporary housing costs went up by 53p.

Our research indicates that cutting housing subsidies, while appearing fiscally attractive, may end up producing new and significant economic and social costs. The housing benefit reforms were intended to save the government money during the period of austerity, but the long-lasting effect of these reforms have put pressure on local councils, increased the number of households in insecure housing and even affected democratic participation. In the long-term, increases in housing insecurity across the UK also has the potential to negatively affect health, childhood attainment and employment. ◀

About the author

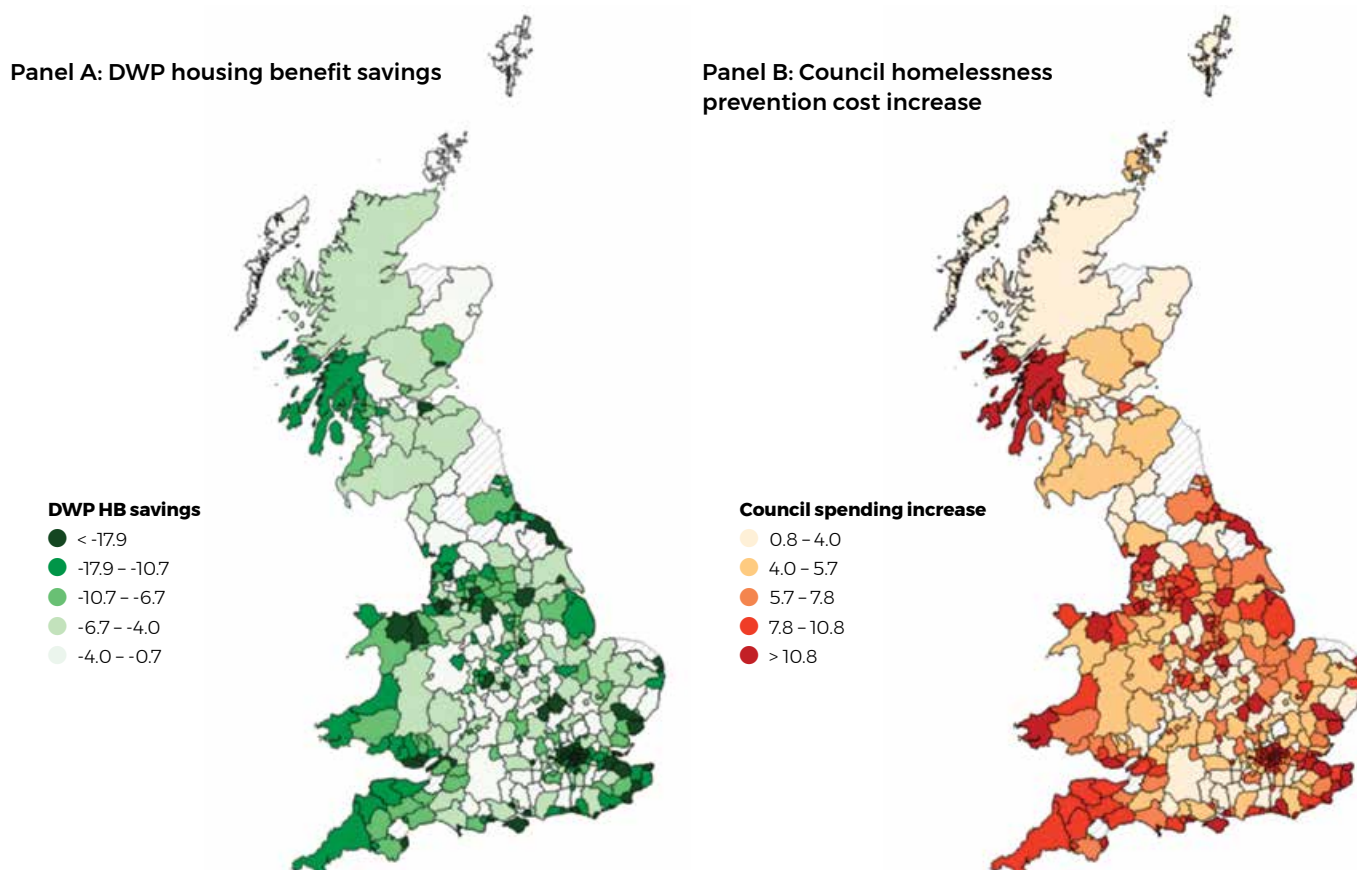
Thiemo Fetzter is Associate Professor of Economics at the University of Warwick and a CAGE Theme Leader.

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“Eviction from rented accommodation is the main reason why households in districts most exposed to the housing benefit cut become homeless.”

Figure 2: Cost-Benefit Analysis: Implied fiscal savings to central government from housing benefit cut versus higher council spending on homelessness



Capital gains and hidden inequality

By Arun Advani & Andy Summers

Looking at official inequality statistics, the past decade was bad, but it was bad for everyone. As income growth flat-lined, so too — it is often said — did income inequality. We were ‘all in it together’, to use the famous phrase. But official inequality statistics exclude ‘irregular receipts’, in particular capital gains. Once these are added to incomes, the share of resources going to those at the top actually grew substantially, while average incomes stagnated.

The ten years since austerity began have not been easy ones. Productivity, wage growth, housing and crime all worsened, with very real consequences for people’s lives. Income inequality, however, seemed to buck the trend. Whether measured by the Gini coefficient or by top income shares, inequality apparently did not get any worse. But as Aaron Levenstein put it, ‘Statistics are like [swimsuits]. What they reveal is suggestive, but what they conceal is vital.’

In this case, the key concealment is that official income inequality statistics have excluded so-called ‘irregular receipts’, particularly, capital gains (profits received on the sale of assets). When capital gains are included, the picture changes considerably. Capital gains significantly supplement the highest incomes, and this form of remuneration has steadily increased since 2010, allowing those at the top to weather austerity relatively comfortably. Far from being constant, over the past ten years inequality has been rising.

The tax system heavily favours capital gains, which are taxed between 10 and 28%, compared with income, which at the top is typically taxed at 47% but can be as high as 62%. Such favourable tax treatment has spurred growth in capital gains of almost 300% over the last decade, returning aggregate gains to a level last seen just before the Financial Crisis (Figure 1).

Figure 1. Aggregate capital gains each year 1997-2018



Whether this remarkable rise in aggregate gains matters for inequality depends on how these gains are distributed. If they are distributed in exactly the same way as income, then inequality would be the same when measured with total remuneration (income plus capital gains). But they are not.

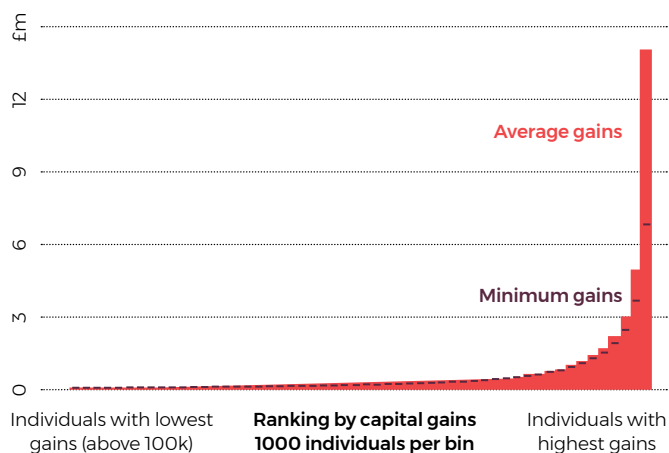
Using confidential administrative data from HM Revenue and Customs (HMRC) covering all tax filers between 1997 and 2018, our research shows that taxable capital gains are extremely concentrated. ►

An abstract illustration featuring stylized human figures in various poses, wearing swimsuits in shades of red, orange, and dark purple. The figures are set against a background of overlapping geometric shapes in warm tones. A large, semi-transparent red shape on the right side of the page contains the text.

**“Statistics are like [swimsuits].
What they reveal is suggestive,
but what they conceal is vital.”
Aaron Levenstein**

In 2017, the top 5000 individuals ranked by capital gains (0.01% of UK adults) received 54% of all taxable gains; by contrast, the comparable figure for taxable income is just 2%. Figure 2 shows the distribution of capital gains among those with more than £100,000 in gains. Even within this (very rich) group, the concentration at the very top stands out. The top 1,000 received at least £6.9 million each in capital gains, averaging £14 million. Inequality in capital gains is substantially higher than in income.

Figure 2. Distribution of capital gains in 2017 among those receiving more than £100k in gains

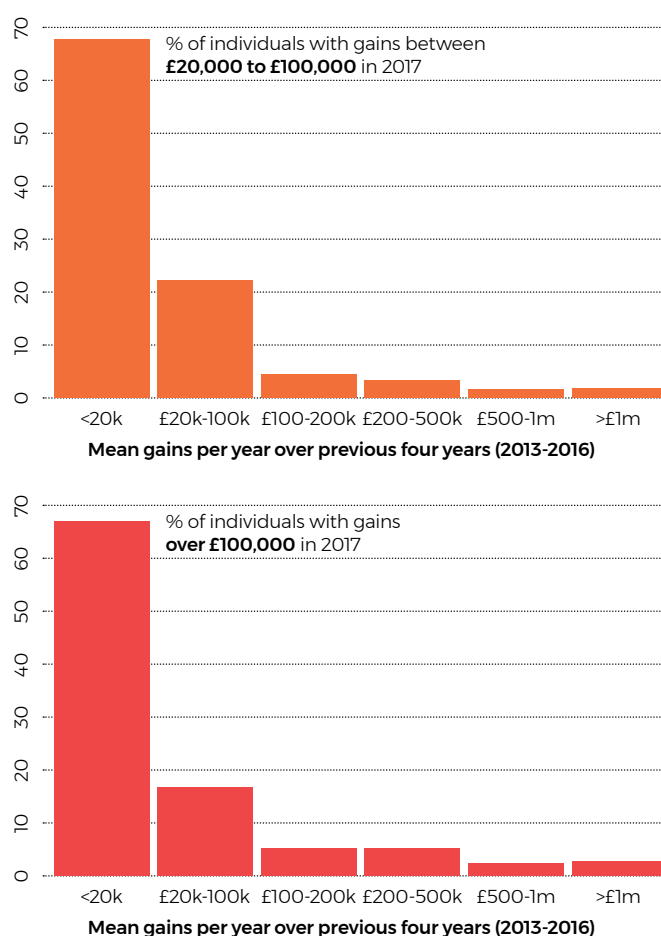


But we should also think about the persistence of capital gains. If capital gains are concentrated but go to a different set of people each year, then from a lifetime perspective their impact may average out. Indeed, the idea that receiving capital gains is a rare event is part of what has motivated its exclusion from usual income statistics—they are treated as an ‘irregular receipt’.

Our research shows that for a substantial minority of the UK’s richest individuals, capital gains are not a rare event, but a regular part of how they receive their remuneration. Figure 3 illustrates that one third of those who received gains over £20,000 in 2017, also received at least this much, on average, over each of the preceding four years. Amongst those with gains over £100,000, one in six had received over £500,000 in total, in the five-year period since 2013.

“... for a substantial minority of the UK’s richest individuals, capital gains are not a rare event, but a regular part of how they receive their remuneration.”

Figure 3. Persistence of gains: average past gains for those with gains in 2017



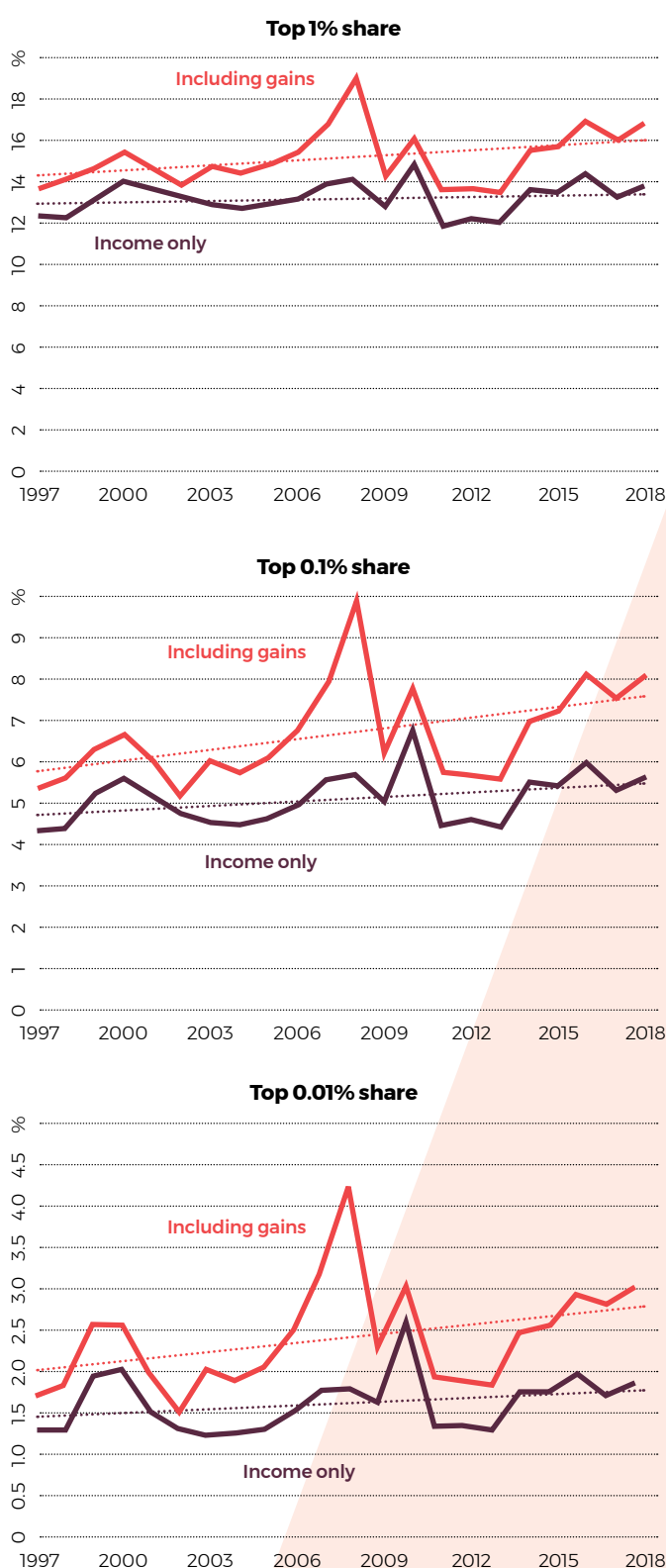
Having seen that capital gains have grown over time, are highly concentrated, and are also persistent for some, it is natural to ask what this means for our understanding of inequality. Figure 4 shows how shares of total income and total remuneration (income plus gains) have changed over the past twenty years. The top panel shows the share for the top 1% of UK adults (roughly half a million people); lower panels repeat this for the top 0.1 and 0.01%.

Looking only at incomes between 1997 and 2018 we see a familiar story: the top 1% share has hovered consistently at around 14% for the past decade, rising slightly between 1997 and the 2008 financial crisis, but hardly increasing since. But when we look at total remuneration including capital gains, we see a very different story. Not only is the top 1% share of remuneration much higher than the income share, but since 2011 it has been increasing. Between 2011 and 2018 the top 1% share of total remuneration rose by more than three percentage points from 14 to 17%; the top 0.1% share grew at an even faster rate, from 6 to 8%.

Including capital gains, the top 1% of UK adults had an average total remuneration of £392,000 in 2018, compared with an average income of ‘only’ £307,000, a 28% difference. In 2011, that difference was only 17%.

Looking at even smaller and better-off groups, the effects are even larger: for the top 0.01% (around 5000 people), including capital gains adds (on average) 62% on top of incomes in 2018, compared with 32% in 2011.

Figure 4. Share of all income/all remuneration going to people at the top



“Official statistics have missed this major trend in inequality over the past decade, delaying debate about the appropriate policy response.”

Austerity was socially and economically painful for most people, but not for everyone. Although conventional wisdom is that everyone suffered with stagnating incomes during austerity, this masks a big shift in the way that the richest received their remuneration. By ignoring capital gains and focusing exclusively on taxable income, official statistics have missed this major trend in inequality over the past decade, delaying debate about the appropriate policy response. ◀

About the authors

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Andy Summers is Assistant Professor of Law at the London School of Economics, Associate Member of the LSE International Inequalities Institute and a CAGE Associate.

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This research was funded by the Economic and Social Research Council (ESRC) through the CAGE Research Centre at Warwick (ES/L011719/1) and by LSE International Inequalities Institute, LSE Law, and Warwick Economics. This work contains statistical data from HM Revenue and Customs (HMRC) which are Crown Copyright. The research data sets used may not exactly reproduce HMRC aggregates. The use of HMRC statistical data in this work does not imply the endorsement of HMRC in relation to the interpretation or analysis of the information.

Did austerity cause Brexit?

By Thiemo Fetzer



“The austerity measures implemented by the coalition government from 2010 brought about significant spending cuts and a significant demographic realignment of public spending. Public spending per person fell by about 23% in real terms between 2010 and 2015. But how did these cuts affect UK citizens, and did they change the political preferences of UK voters?”

gathered data from UK electoral contests since 2000 and assembled a detailed individual-level panel dataset covering almost 40,000 households since 2009. My analysis reveals that cuts to the welfare system from 2010 sparked a protest vote that tipped the balance of the 2016 European Union (EU) Membership Referendum towards leaving the EU.

The effects of austerity

The 2010 austerity programme focussed on cutting public spending rather than increasing taxation. There were three core components to these measures – welfare reforms and welfare cuts; cuts to ministries; and freezes to public sector salaries, freezes to benefits, or caps on uprating to erode the real value of salaries or benefits. These cuts were felt most keenly by working age adults who lived in more deprived areas of the UK.

Figure 1 shows the effect of austerity on Government spending per capita. Between 2010 and 2015, public spending on welfare and protection (e.g. unemployment benefits, housing tax credits and disability benefits) fell by 16%, and education spending fell by 19%. Healthcare spending flatlined, but increasing demand on services owing to an ageing population, and a pay cap on staff salaries, put pressure on the NHS.

Public spending cuts were disproportionately borne by the current working age population (who are most likely to benefit from social security payments) and the future generation (who benefit from publicly funded education). Even in nominal terms, welfare spending per capita dropped sharply, while fiscally expensive spending on pensions steadily rose due to the triple lock, which guaranteed that the basic state pension would rise by a minimum amount each year (Figure 2). ►



Overall projected financial loss per working adult as a result of welfare reforms

The impact of the welfare reforms was felt the hardest in parts of the UK that were already most deprived prior to 2010. For every pound lost in transfer income, local economies contracted by around 2-2.5 pounds. The overall projected financial loss per working adult as a result of welfare reforms was £914 in Blackpool but £177 in the City of London.

Budget cuts to ministries put strain on local councils. Funding for the Ministry of Housing, Communities and Local Government, which provides local governments with a significant part of their funding, was cut in real terms by 30-40%, putting pressure on local councils to provide services. In 2017-18, English councils' core budgets totalled about 44 billion pounds, 35% of which was absorbed by the rising cost of adult social care. 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%) (Figure 3).

Government measures to save money on policing, the civil service and housing also had a local impact. Police funding from Central Government fell by 19% between 2010/11 and 2018/19 whilst local funding rose. Police staff numbers dropped by 17.4% between 2009 and 2016. The civil service shrank from 519,000 in 2010 to 411,370 in 2016 – a decline of around 20%. These staffing cuts were experienced most deeply by regions outside of London. Cuts to local housing allowance after 2011 are causally associated with an increase in evictions, statutory homelessness and rough sleeping.

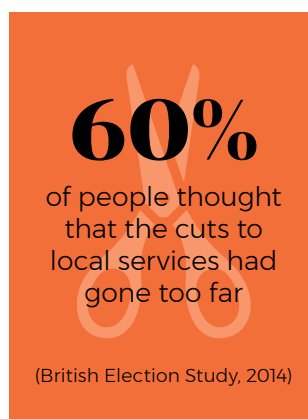
In addition to a squeeze on welfare and ministry funding, the government also sought to save money on public sector salaries. Between 2010 and 2013, salaries over £21,000 were frozen and after 2014, salary rises were capped at 1%. The public sector experienced staff retention issues, particularly in the NHS. The wage squeeze, and cuts (for example to maintenance grants that



“In addition to a squeeze on welfare and ministry funding, the government also sought to save money on public sector salaries.”

help cover the cost of training for nurses) made working in healthcare a less attractive prospect.

Wealthier communities and districts, on average, were better able to cope with austerity cuts as they could mobilise other sources of funding. As such, the local impact of budget cuts is likely to have further exacerbated the already vast regional economic inequalities within the UK. Austerity cuts to local services were not widely supported:

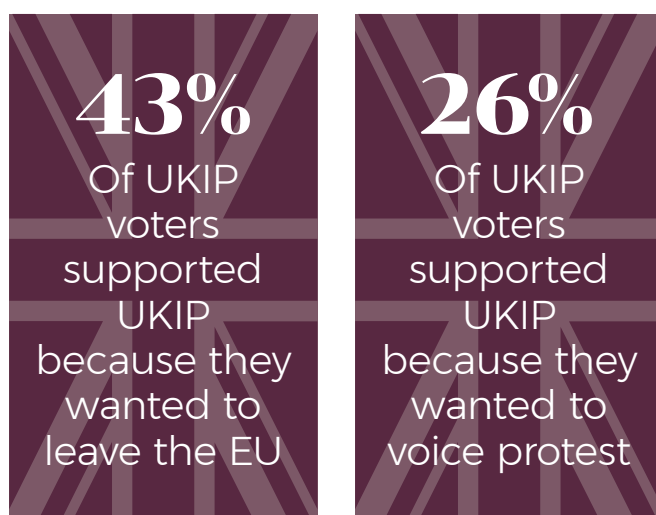


The correlation between austerity measures and the rise in the UKIP vote share

It is evident that austerity exacerbated existing social and economic cleavages across the UK. The cuts were felt most keenly by working age adults reliant on the welfare state and living in deprived areas. As a reaction to austerity, 2010 saw a change in voter preference towards supporting anti-establishment parties that promised a break with the political status quo. The UK Independence Party (UKIP) in particular saw a marked rise in popularity in local, Westminster and European elections (Figure 4).

The rise in the UKIP vote share from 2010 coincides with a notable strengthening of the correlation between support for UKIP and areas where there was a large proportion of individuals with no qualifications, or in routine, retail or manufacturing jobs. Significantly, these areas of the UK were more reliant on the welfare state and tended to be harder hit by austerity measures. The timing and geographical distribution of the sudden increase in support for UKIP suggests that austerity had an important role to play in shaping the political preferences of UK citizens (Figure 5).

Indeed, in the 2014 EU election, the UKIP vote was for many a way to protest and was not only about EU membership grievances:



The UKIP vote share and the Brexit vote

A study of the UKIP vote share is informative for understanding voter motivations to choose 'Leave' in the 2016 EU referendum. UKIP was the only party before the referendum with leaving the EU in its manifesto. During the referendum campaign, the UKIP leader Nigel Farage, was the only party leader to publicly endorse the Leave movement. UKIP policies also spoke to the dissatisfaction of protest voters squeezed by austerity. In 2015 they pledged more money for the NHS, significant cuts to immigration, and tax breaks for lower earners. The Leave campaign in 2016 mirrored many of UKIP's policies. The pledge to reroute £350 million a week supposedly given to the EU directly to the NHS implied that EU membership was expensive, and the money could be put to better use in the UK to improve public services (which were under strain owing to austerity). Posters of Syrian migrants implied that the UK was under undue pressure from migrants using its public services.

Geographically, the support for UKIP in the 2014 European elections largely replicated support for leave in the 2016 EU referendum (Figure 6). The geographical connection between voters for Brexit in 2016 and voters for UKIP in 2014, alongside the data showing a strong correlation between votes for UKIP after 2010 in areas hard hit by austerity, strongly indicates that austerity influenced some UK citizens to vote to leave the EU.

“UKIP was the only party before the referendum with leaving the EU in its manifesto.”

But did austerity cause Brexit? The data shows that individuals in some areas chose to vote for UKIP in protest of the government's austerity measures. But were these gains for UKIP enough to tip the balance of the 2016 referendum in favour of leaving the EU? The data indicates that UKIP vote share increased by between 3.5 to 11.9 percentage points due to austerity. The Leave campaign won the referendum by a margin of 3.8 percentage points. Dissatisfaction over austerity measures was significant enough to give the Leave campaign its majority. If austerity had not happened, or if it had played out differently, the UK might have remained in the EU. ◀

About the author

Thiemo Fetzer is Associate Professor of Economics at the University of Warwick and a CAGE Theme Leader.

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“UKIP's policies in 2015 spoke to the dissatisfaction of protest voters. They pledged more money for the NHS, significant cuts to immigration, and tax breaks for lower earners.”

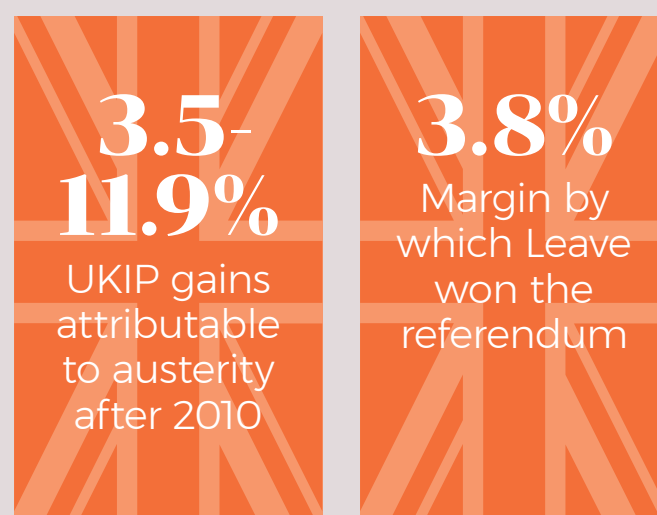


Figure 1: Government spending per capita in £

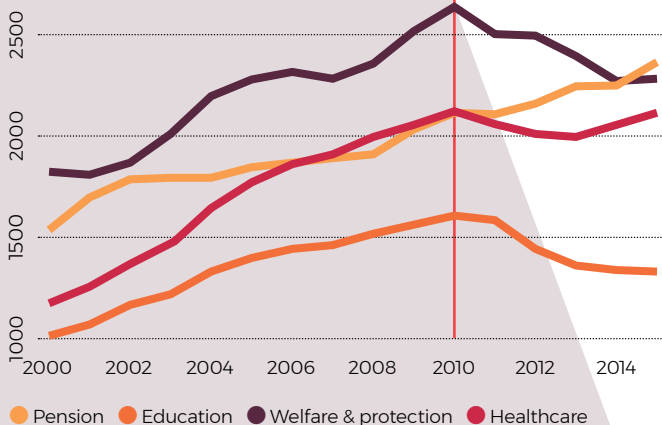
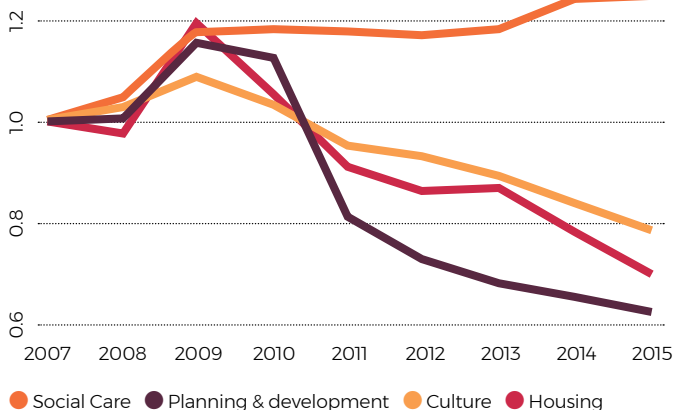


Figure 2: Social protection vs pension spending in real terms per capita



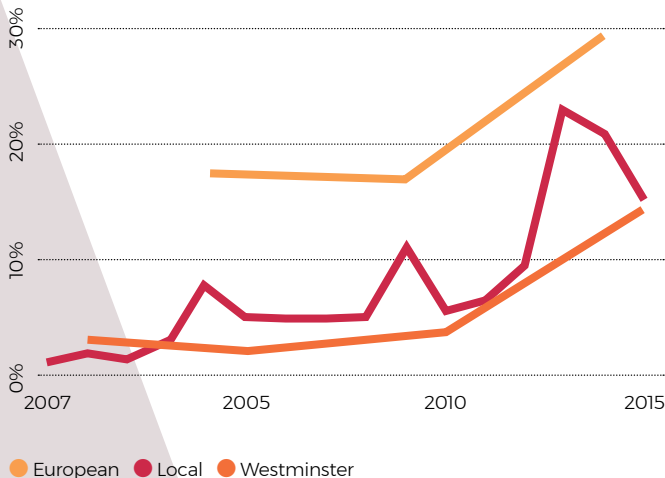
Notes: Figure plots nominal spending across major local council spending priority areas. the figures have been indexed relative to 2007. The underlying data is from the local; government financial statistics for England provided by the MHCLG.

Figure 3: Council spending across major local authority districts in the UK



Notes: Figure plots nominal spending across major local council spending priority areas. the figures have been indexed relative to 2007. The underlying data is from the local; government financial statistics for England provided by the MHCLG.

Figure 4: UKIP support across elections over time



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

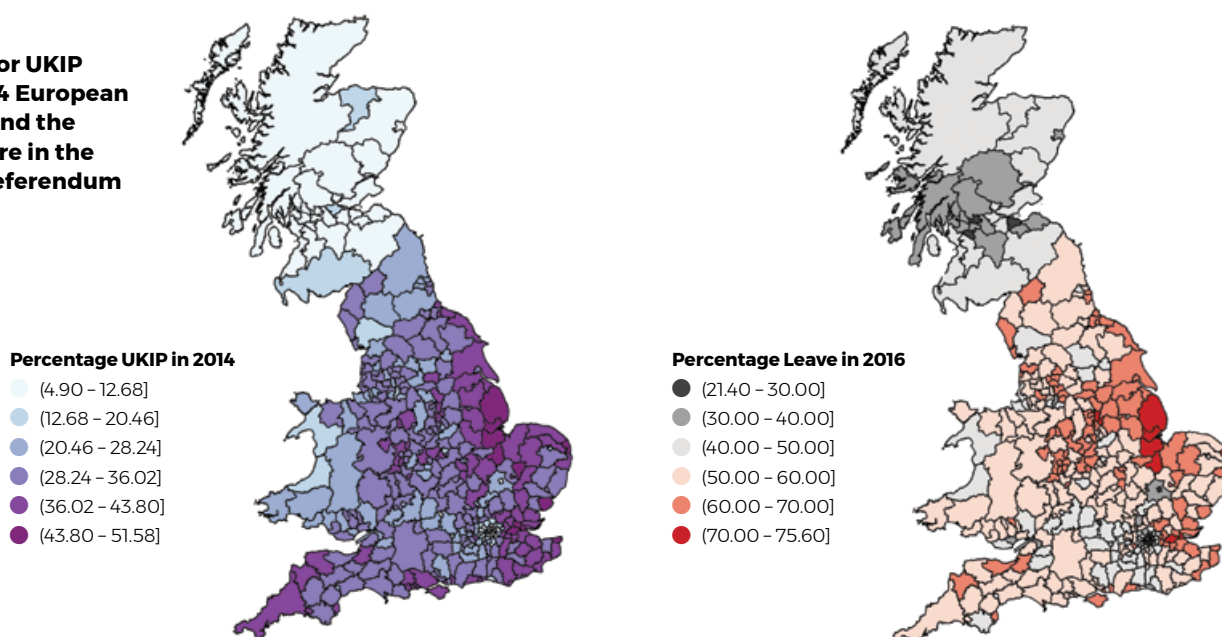
“2010 saw a change in voter preference towards supporting anti-establishment parties that promised a break with the political status quo. UKIP, the only political party at that time with leaving the EU explicitly on their agenda, saw a marked rise in popularity in local, Westminster and European elections.”

Figure 5: Effect of education qualification, socioeconomic status and sectoral employment of the resident population as of 2001 on support for UKIP over time



Non parametric effect of educational qualification, socioeconomic status, and sectoral employment of the resident population as of 2001 on support for UKIP over time.

**Figure 6:
Support for UKIP
in the 2014 European
election and the
Leave share in the
2016 EU referendum**





Happiness trends in the UK over the last decade

By Andrew Oswald & Nattavudh Powdthavee

What has been happening to UK wellbeing since the austerity period began after the financial crisis of 2007-8? Using data from the Office for National Statistics (ONS), we examine trends in wellbeing in the United Kingdom over the last 10 years. Despite what some newspaper commentators may believe, the UK's citizens have become markedly happier, more satisfied with life, less anxious, and believe more strongly that life is worthwhile. Strikingly, and to our own surprise, the happiness gap between highly educated people and other groups has narrowed substantially.

We use ONS data from the Annual Population Survey — a survey of 1.1 million randomly sampled citizens of the United Kingdom — which includes the measurement of data on 'feelings' and personal wellbeing. These measures have recently become a significant part of the information-collection efforts of government economists and statisticians.

It is not possible with this source to track every year from the financial crisis in 2007-8. Consistent data begins only from the year 2011. Hence it is these numbers — over the recovery but still 'austerity' years — that we examine.

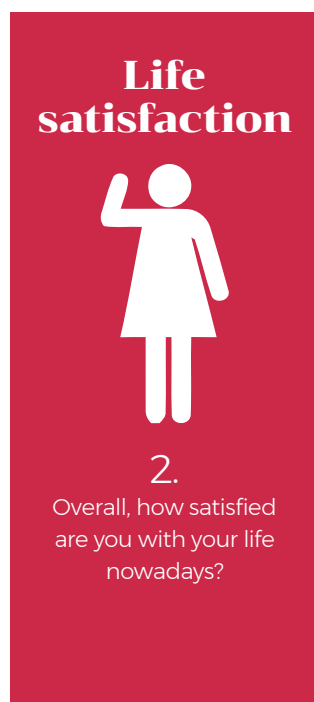
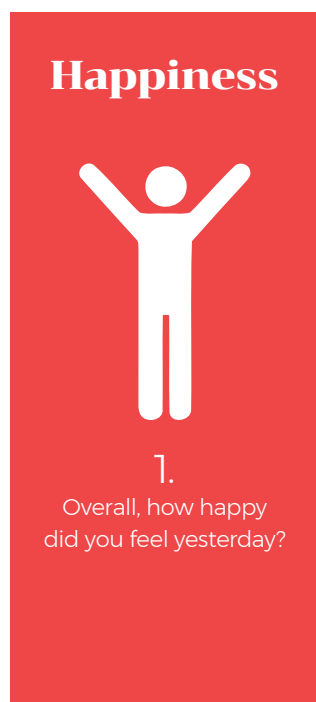
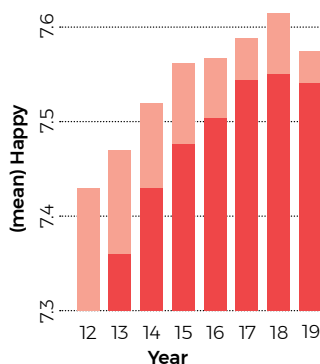
The background to this kind of empirical enquiry, and also partly the reason for the inclusion of personal wellbeing questions in the Annual Population Survey, is a research literature that sprang up in economics and social

science in the 1990s. A precursor had been the eventually influential, and for a long time the lone, contribution of Richard Easterlin, who in 1974 (now famously) pointed out that over long periods of time the level of recorded happiness in the USA had not been rising despite the rising GDP of that country. The scientific literature began to blossom slowly in the 1990s, with early work by researchers such as Easterlin, Diener and Oswald, and is now an enormous one, as described, for example, in Frey and Stutzer (2002), Powdthavee (2010) and Clark (2018). Some of the early articles include Diener and Biswas-Diener (2002), Easterlin (2003), and Oswald (1997).

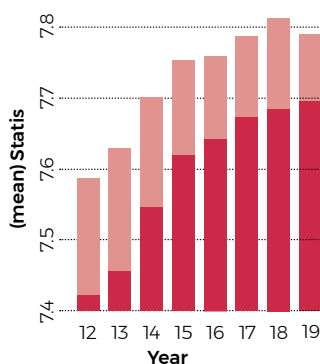
We draw upon answers to the four wellbeing questions now asked regularly of UK citizens by the Office for National Statistics. They are given overleaf. ►

Table 1: Four measures of personal well-being

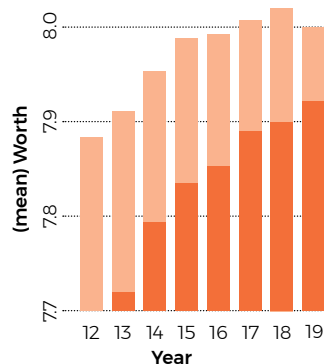
'I would like to ask you four questions about your feelings on aspects of your life. There are no right or wrong answers. For each of these questions I'd like you to give an answer on a scale of 0 to 10, where 0 is "not at all" and 10 is "completely".

**Figure 1: Happiness in the UK since 2011**

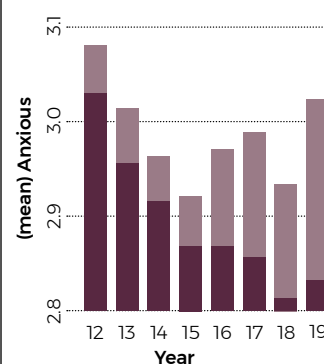
● Having a university degree
● Without university degree

**Figure 2: Life Satisfaction in the UK since 2011**

● Having a university degree
● Without university degree

**Figure 3: Worthwhileness in the UK since 2011**

● Having a university degree
● Without university degree

**Figure 4: Anxiety in the UK since 2011**

● Having a university degree
● Without university degree

Sample size 1.1 million randomly sampled citizens.
Source: Office for National Statistics

Randomly selected people are asked to give a wellbeing score (from zero to ten, where ten is the highest possible) to describe their feelings about their life.

This kind of analytical approach is broadly familiar to many kinds of behavioural scientists, including psychologists and psychiatrists. For some traditional economists, however, it can still seem unusual. Economists, a critic might assert, have not been particularly open to the possible role of human feelings.

Our findings

Figure 1 gives the mean level of happiness in the United Kingdom from 2011 to 2019 inclusive. We have divided the data series into two segments of the population. The upper pink bars show the average recorded happiness of citizens who have a university degree. The lower red bars show the average happiness of all others, namely, those with lower levels of education. It should be borne in mind here that these simple averages might mask the fact that some other characteristics of the people in the two samples will differ. For example, the highly-educated group will tend to be slightly younger on average (because having a degree has become more common through the years), will tend to be richer and slightly healthier, and will tend more often to live in the South East of England.

The first thing to note about Figure 1 is that the UK has become happier since 2011. The rise — about one quarter (0.25) of a happiness point on a cardinal scale — might sound small. However, that conclusion would be misleading, because we know that major life events like divorce and unemployment induce changes in a person's happiness of about 0.3 to 0.5 points. Hence an improvement in the whole country's happiness of slightly over 0.2 seems substantial. One possibility for this is that the nation has been going through a kind of psychological recovery from the 2007-8 financial crisis. It is certainly known, for example, that unemployment has dropped strongly since those crisis years.

What seems significant about Figure 1 is that in the last few years there has been a marked narrowing of the happiness 'premium' enjoyed by university-degree holders. We believe we are the first to show this statistical fact. The explanation at the time of writing is unknown. As the narrowing seems to have started around 2016, it may be that it is the decision by the country to leave the EU that has reduced the wellbeing of the highly educated in a disproportionate way.

A narrowing, although one that is milder in form, can be seen in Figures 2 and 3 for life satisfaction and worthwhileness of life. In Figure 4, the 'anxiety gap' between the educational groups has widened very noticeably (it has been known for a while that, perhaps paradoxically, the highly educated always report more anxiety than other citizens). In that sense, the highly educated have, over the last few years, suffered more than others.

“We have shown in this brief article that four kinds of wellbeing measures all show improved levels since 2011, which is when consistent data began to be collected.”

Conclusions

It is now possible, thanks to modern ONS data, to look at time trends in 'feelings' in this country. We have shown in this brief article that four kinds of wellbeing measures all show improved levels since 2011, which is when consistent data began to be collected. Our article has also pointed to a vanishing 'happiness premium' between the highly educated and other groups. This narrowing gap deserves greater attention from social scientists and policymakers. There is much yet to be understood. ◀

About the authors

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Parting shot

By Mirko Draca
Director, CAGE

Reviewing the evolution of economic policy over the last decade, I'm struck by the stunning retreat from Austerity that occurred in the wake of the 2017 election. A programme that was 'conventional wisdom' amongst a big section of the policy-making class suddenly became anathema, with few strong defenders existing now outside of the former Osborne-Cameron circle.

I'm further struck by the fact that the May and now Johnson governments have not articulated a clear direction for post-Austerity tax and spending policy. The initiatives and changes announced so far seem to be remedial (for example, restoring police spending) rather than being elements of a systematic agenda. But as I write (late March 2020), the COVID-19 virus is also doing its best to subvert any expectations we might have about what a systematic policy agenda might look like.

Given this, rather than being one of those pundits who announces what policy-makers should do before the dust has settled, I want to instead highlight what trends are likely to be important for a post-Austerity economy and society.

The second coming of the 'Productivity Paradox'

Robots, drones, talking TVs, and phones that first got really tiny but are now big mobile computers. Technology is all around us, but it is not improving productivity according to the statistics. This previously happened in the 1980s as part of a 'Productivity Paradox' that was resolved by the Information and Communications Technology (ICT)-driven productivity surge of the mid-1990s.



“The wolf is beyond the door. The wolf is in the living room. This is the anthropocenic condition. This is how we live. This is force majeure. It’s here. It’s very obvious.”

So, following recent work by Brynjolfsson, Rock and Syverson (2018), if the pattern of the 1980s and 90s holds, we are in the midst of a productivity downturn and waiting for a wave of new technology (in short, Artificial Intelligence (AI) and robotics) to pull us out. This would change the game, giving us more output per head to work with. The questions are how big this surge might end up being and importantly, how it will be distributed?

“AI and robotics are set to automate a range of tasks and processes that have traditionally required human judgment, organisation and discretion.”



Reinventing government... again

AI and robotics are set to automate a range of tasks and processes that have traditionally required human judgment, organisation and discretion. This could change the nature of government services in significant ways. In particular, service delivery could be streamlined using tools such as chatbots, linked databases, expert systems, predictive analytics, and behavioural ‘nudges’ tested at scale. A useful way to think about this development is that these tools will allow us to chip away at the fundamental economic problems of asymmetric information and moral hazard that have bedeviled both government and anything that involves building a bureaucracy. New ideas are great, but the 1970s’ wave of economic theory in the area of ‘information economics’ — how lack of information can effect economic decision making — is due for a revival of interest and (crucially) a popularisation, as we see these new technologies develop.

Everything’s gone grey

The Covid-19 virus has acutely exposed us to the fact that a big segment of our society is ageing or vulnerable in other ways. The Office for National Statistics’ (ONS) figures indicate that the current population share of those aged 65+ is around 18.4%. Furthermore, the 65+ group is the fastest growing part of our population — it’s projected that nearly a quarter of the population (24.2%) will be 65+ by 2038. As a benchmark, this compares to an 11.8% share in the 1960s. The biggest implication will be health: illness rates haven’t necessarily been going up too much, but the volume of illness in the population is increasing as society ages. This has obvious fiscal costs along with effects on well-being. In short, a bigger fraction of the population will be experiencing regular pain and limitations in their lifestyles due to acute or chronic illness.

This will be the ‘Thundering Twenties’

Finally — you must have known this was coming — climate change. The 2020s are going to give us more storms, fires, floods, droughts (and yes, pandemic threats). We will have to build these regular climate threats into the management of society and some geographic areas might become uninhabitable. Get ready to talk about the weather a lot more.

One of my favourite writers is a guy called Bruce Sterling (look him up). He summarised the situation well in a speech back in 2011:

“I will pass the rest of my lifetime in the shadow of climate change. It’s not about warning people in 2011, or trying to avert or defuse a misfortune. The wolf is beyond the door. The wolf is in the living room. This is the anthropocenic condition. This is how we live. This is force majeure. It’s here. It’s very obvious.” ◀

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About CAGE

CAGE is a research centre based in the department of Economics at the University of Warwick. We conduct independent policy-driven research informed by culture, history and behaviour. Our aim is to move beyond traditional measures of economic success to consider broader influences on global prosperity; from happiness and cultural attitudes to voter preferences and political institutions. We analyse historical and contemporary data to draw out lessons for modern policy. CAGE is supported by the Economic and Social Research Council (ESRC).

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