About this report

This report is the final output of a six-month study of the Barnett formula and the wider system for funding the devolved governments in Scotland, Wales and Northern Ireland. It contains 15 charts and graphics, as well as qualitative analysis of how the Barnett formula works in theory and practice.

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The Barnett formula is a well-known but often misunderstood mechanism used by the Treasury to calculate changes in the annual budgets of the devolved governments in Scotland, Wales and Northern Ireland, by reference to changes in spending on public services in England. In this report we discuss how the formula operates – both in theory and in practice.

The formula does offer some advantages, from the perspectives of both central and devolved government:

• It is simple to operate, and so provides a straightforward and predictable way for resources to be allocated between the four UK nations, without the need for regular renegotiation.

• It uses population size as its key metric for sharing any overall rise (or fall) in public expenditure, and therefore embodies a certain common-sense ideal of fairness.

• It gives the three devolved administrations a reasonable degree of certainty over their budgets and autonomy over spending decisions on matters such as health and education, while enabling the Treasury to maintain overall control of the UK public finances.¹

• In a crisis, it can swiftly deliver additional resources to the devolved nations – a total of £18.85 billion extra funding has been provided to the three devolved nations since March 2020 to tackle coronavirus. A further £4.7bn, including £2.6bn for coronavirus, has been promised for 2021/22.

But in practice, the Barnett formula produces some odd effects, with the result that many of its supposed advantages are overstated.

In particular, it preserves historical disparities in levels of public spending between the four UK nations that cannot be explained by reference to population, underlying needs or any other clear principle. The three devolved nations all benefit from higher public spending than England. In Scotland and Northern Ireland, spending on devolved public services is nearly a third higher (29%) than similar spending in England. In Wales the figure is around a quarter (23%).
In theory, the formula should provide for gradually converging levels of spending across the UK. But this has not happened, because it does not take into account different population growth. The population of Scotland and Wales has grown more slowly than that of England, so their already generous level of public spending is shared among a falling proportion of the UK population.

Scotland, Wales and Northern Ireland do seem to have higher spending needs than England – for instance, due to lower economic output and higher costs of providing services in sparsely populated areas. But their level of public spending appears to outstrip their needs.

Scotland in particular is generously treated, receiving substantially higher public spending per person than either England or Wales, despite being wealthier than Wales and many parts of England. Northern Ireland receives high spending too but this appears to be more in line with its underlying needs.

Meanwhile, within England, comparatively poor regions such as the Midlands and Yorkshire have lower-than-average public spending. The absence of strong devolved institutions at the regional level within England may make it easier for these areas to be ignored by Westminster when spending decisions are taken.

The UK government has substantial discretion over how the Barnett formula is interpreted. This can lead to disagreement between the UK and devolved governments about how allocation decisions are taken in the Treasury. In such cases, the UK government alone interprets the rules and determines the outcome of disputes. The UK government can also choose to bypass Barnett altogether. This can further disadvantage England, if additional resources are provided to the devolved nations for political reasons.

In addition, the UK government can spend money directly on devolved matters such as transport and economic development, as it apparently intends to do through the UK Shared Prosperity Fund and Levelling Up Fund. Extra funding would naturally be welcome at the devolved level. However, this approach may in practice lead to a squeeze in devolved budgets, if future resources are channelled to Westminster-run programmes. It could also produce duplication between Westminster-run and devolved schemes.

Our view is that, in principle, Barnett should be replaced by a system that shares out resources in line with a clearly stated set of funding principles, applied consistently and transparently to devolved governments across the UK and to the cities and regions of England.

Whether to shift outright to a different approach – based on needs, population share or some other principle – will be a matter of political judgement, but what is clear is that the current arrangements produce a distribution of resources that is hard to explain or justify.
However, we recognise that it is unlikely the Barnett formula will be replaced in the near future. Any likely alternative model would lead to a reduction in spending in the devolved nations, which would cause a political backlash. With Scottish independence on the agenda, the UK government is unlikely to take the risk of reducing the size of Scotland’s budget.

Further, the benefits to England either of equalising spending across the UK or of moving to a needs-based system would be small, due to England’s larger population. We estimate that in either of these scenarios, spending on public services in England might rise by 4%, while the devolved nations would face cuts of up to 20%. Consequently, the political benefits in England would be outweighed by the backlash from Scotland, Wales and Northern Ireland.

For as long as the Barnett formula survives, we propose several reforms. These include: greater transparency about levels of public spending; clearer information about when UK government decisions will lead to additional resources for the devolved nations; independent reporting (for instance, by the National Audit Office) on how the system works; and improvements in how the UK and devolved governments share information and resolve disputes.

We also propose that the UK and devolved governments should jointly commission and publish an analysis of the relative spending needs of each part of the UK, taking into account demographic, socio-economic, public health and geographic factors that affect demand for and the cost of providing public services.
**Introduction: the history of the Barnett formula**

***The Barnett formula was introduced as a short-term fix but it has lasted four decades***

The Barnett formula was devised by the Treasury in the late 1970s,¹ and named after then Treasury minister Joel Barnett, at a time when the Labour government of James Callaghan was legislating to establish a system of devolution to Scotland and Wales. The formula was designed to function as a simple, automatic tool to calculate the funding allocations of the new assemblies that were due to be created in Edinburgh and Cardiff. It would allocate new spending on the basis of population, and it was to replace a more ad hoc approach in which the Treasury had often allocated an above-population share of resources to Scotland, Wales and Northern Ireland, sometimes as a result of lobbying from politicians and others from those nations.

The expectation at the time the formula was introduced was that it would be a transitional system, to be replaced by a more complex allocation mechanism in due course, once the relative funding needs of the devolved nations had been calculated.² However, the Callaghan government’s devolution plans were abandoned, following referendums at which Wales voted heavily against devolution and Scotland’s vote in favour was discounted due to insufficient turnout.³ Despite this, the Barnett formula was put in place as planned, commencing in the 1979/80 financial year for Scotland and Northern Ireland, and a year later for Wales.⁴ Rather than being used to allocate funds to newly devolved governments, it was instead used to calculate the annual spending limits of the Whitehall departments responsible for many government functions outside of England – the Scottish Office, Welsh Office and Northern Ireland Office.

The failure of the devolution project led directly to the fall of Callaghan’s government, after the SNP voted in favour of a Conservative motion of no confidence that was carried by a single vote.³ After a decisive Conservative victory in the resulting general election, the dream of home rule for Scotland and Wales faded for a generation. Meanwhile, the continued Troubles in Northern Ireland, which had led to the 1972 imposition of direct rule from Westminster,⁴ ensured that there could be no swift restoration of devolution to Belfast either.

But while devolution did not take place as planned, the Barnett formula itself was retained throughout the years of Conservative rule as a convenient mechanism for allocating resources between the UK nations. Barnett was left intact again after 1997, when the newly elected Labour Party devolved powers to all three capitals via the Scotland, Government of Wales, and Northern Ireland Acts 1998. There was some debate in this period about potential alternative funding models,⁷ but Tony Blair’s

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¹ Wales voted 80% against devolution in 1979. In Scotland, in the same year, a turnout threshold was agreed so that 40% of the electorate had to vote Yes in the referendum. A majority did vote Yes, but turnout fell short of the required 40% so devolution was not introduced.
government chose to retain Barnett as the principal mechanism for calculating the budgets of the new institutions in Edinburgh, Cardiff and Belfast that finally came into existence in 1999.

In the 20 years since, there has been much debate about how the Barnett formula might be replaced, for instance by a mechanism that allocated resources in line with some assessment of the needs of the respective UK nations, or a system in which the devolved nations are more fully responsible for raising their own revenue. There have been specific reforms to the devolution funding system over this period. Tax powers have been transferred to all three devolved nations, and specific adjustments have been made to how the Welsh government is funded. But at the heart of the system, four decades after its introduction, Barnett remains intact.

**The Barnett formula was designed to allocate new public spending equally across the four nations**

At its core, the Barnett formula is a simple mechanism that ensures any new public spending – on devolved policy areas – is shared on an equal per-person basis across the UK’s four nations. It provides that any changes made by the UK government to public spending in England on such functions lead automatically to equivalent changes to the budgets of the devolved administrations. These changes are calculated by reference to each nation’s relative population. The end result is that changes in spending are the same on a per-person basis across the four nations.

These increases to devolved budgets (or decreases, if they result from UK government spending cuts) occur as automatic by-products of spending decisions taken in Westminster and are referred to as ‘Barnett consequentials’. Specifically, these changes are applied each year to each devolved government’s ‘block grant’, the funding provided by the Treasury, out of UK-wide tax revenue, to enable the governments of Scotland, Wales and Northern Ireland to pay for devolved public services.

For example, if the UK government decides to increase the budget of NHS England by £1bn, the Barnett formula would come into effect, as health care is devolved. Based on their respective populations of 9.7%, 5.6% and 3.4% of England’s, this would mean an additional £97m in Barnett consequentials would be added to the Scottish block grant, £56m for Wales and £34m for Northern Ireland. To put it another way, each of the devolved administrations would receive an increase in their budgets of around £18 per person, equal to the increase in per-person spending on the NHS in England.

The devolved administrations, however, would be free to allocate this additional money in line with their own priorities; they need not spend it on health care if they so choose.

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Mathematically, the Barnett formula can be expressed in the following way:

\[
\text{Change in the devolved budget} = \text{Change in UK government spending} \times \text{Comparability percentage} \times \text{Relevant population share}
\]

The ‘comparability percentage’ refers to the extent to which a policy area is devolved. For individual policy areas, this will be either 100% if devolved (as for NHS spending in the example above) or 0% if not, which is the case for spending on defence or the state pension, for instance. However, not all policy areas are as clear cut. Many UK government departments have responsibility for some policy areas that are devolved and some that are not, and therefore have overall comparability percentages that fall between 0% and 100%.

Figure 1 Percentage of UK government departments’ spending responsibility that is devolved

<table>
<thead>
<tr>
<th>Department</th>
<th>Scotland</th>
<th>Wales</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Housing, Communities and Local Government</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Health and Social Care</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Environment, Food and Rural Affairs</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Transport</td>
<td>92%</td>
<td>37%</td>
<td>95%</td>
</tr>
<tr>
<td>Digital, Culture, Media, and Sport</td>
<td>68%</td>
<td>68%</td>
<td>70%</td>
</tr>
<tr>
<td>Justice</td>
<td>100%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Home Office</td>
<td>74%</td>
<td>2%</td>
<td>74%</td>
</tr>
<tr>
<td>Work and Pensions</td>
<td>20%</td>
<td>0%</td>
<td>98%</td>
</tr>
<tr>
<td>Business, Energy and Industrial Strategy</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>HMRC</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>HM Treasury</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Cabinet Office</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Defence</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Foreign, Commonwealth and Development Office</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>International Trade</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>


The comparability percentage for some departments also varies by nation, reflecting the variation in what is devolved to the three smaller UK nations. Justice is devolved in Scotland and Northern Ireland but not Wales. Instead, the UK government retains responsibility for a single legal system that spans England and Wales. This means that when the Ministry of Justice’s budget is increased, the Barnett formula generates additional funding for Scotland and Northern Ireland but not Wales, which instead benefits from the UK government’s increased spending on the justice system. In this scenario, the relevant population share used in the Barnett formula for Scotland and Northern Ireland would also change – the figure used would be the populations of these two nations as a percentage of the combined England and Wales population.

The same applies when the UK government increases spending on policing, which is also devolved to Scotland and Northern Ireland, but not Wales. Other parts of the Home Office budget, such as UK Visas and Immigration and Border Force, cover the entire UK, so none of the devolved nations receives Barnett consequentials from additional spending in this area.
1. How Barnett distributes resources across the UK

The devolved nations enjoy higher public spending – but this is not due to the Barnett formula itself

The Barnett formula is often depicted as being inherently favourable to Scotland, Wales and Northern Ireland at the expense of England. This perception is understandable, given the higher levels of public spending per head enjoyed in the three devolved nations. In January 2021, the chief secretary to the Treasury, Stephen Barclay, stated that the Scottish government’s block grant allowed for a level of spending per person in Scotland that is 29% higher than spending per person on comparable public services in England.

The Treasury does not publish the precise calculations that generated this conclusion. However, we were able to replicate this figure in our analysis of data published as part of the 2020 spending review. We also calculated that devolved spending per person is 29% higher in Northern Ireland and 23% higher in Wales compared to spending on comparable public services in England.

Figure 2 Devolved block grants per person vs. comparable spending in England, 2020/21

However, this discrepancy in public spending levels is not a direct product of the formula itself, but rather a reflection of historical differences in spending between the UK nations, as we discuss below. The Barnett formula merely ensures that changes in devolved budgets mirror comparable changes in UK government spending. During the long boom in public spending under the Blair government, for example, this meant that devolved budgets rose steadily in line with increases in UK government spending in England. Conversely, during the period of austerity that followed the financial crisis of 2007/08, devolved budgets were squeezed, as an automatic result of the constraints imposed on spending by Whitehall departments in England.

Source: Institute for Government analysis of HM Treasury, Statement of funding policy, 25 November 2020; and ONS mid-year population estimates for 2019. Further details on our calculations are in the Methodology section.
The Treasury does not publish regular data on comparable devolved spending in England, which makes it difficult to directly compare changes in devolved spending with changes in English spending over time. However, analysis of all identifiable expenditure, which includes spending on non-devolved functions such as welfare, reveals a clear pattern of spending in all four nations moving in parallel and shows how changes to devolved budgets reflect changes to UK government budgets for England.

Figure 3 Identifiable spending per person by UK nation (2020/21 prices)

Source: Institute for Government analysis of Office for National Statistics, Country and regional public sector finances expenditure tables, 20 December 2019; ONS mid-year population estimates; and HM Treasury GDP deflators for December 2020. Identifiable spending covers public spending that benefits a particular nation or region (e.g. hospitals, schools, benefit payments) but not spending that is ‘UK-wide’ (e.g. central government debt interest, defence).

The Barnett formula has provided an extra £19bn to the devolved administrations to fight Covid-19

More recently, the Covid crisis has resulted in a huge expansion in government spending. Some of this additional spending, such as on the Coronavirus Job Retention Scheme (CJRS, or ‘furlough’) and the Self-Employment Income Support Scheme, has covered the whole UK. But a large proportion of the spending, including on health care and business support grants, has been in devolved policy areas, resulting in additional money being channelled to the devolved administrations.
This additional coronavirus funding has been passed on to the devolved bodies at numerous points throughout the pandemic, including at the March 2020 budget, and further spending announcements made by the Treasury in late March, July, October, November and December 2020, and February 2021. In total, as of February 2021, the three devolved administrations had been provided with an additional £18.85bn of funding to support their responses to the pandemic. This comprises £9.7bn for Scotland, £5.85bn for Wales and £3.3bn for Northern Ireland. It is possible that there will be further late changes in the total devolved budgets for the current 2020/21 financial year.

On top of this, as part of the spending review published in November 2020, the UK government announced £4.7bn of additional devolved funding to be added to the block grants in 2021/22, of which £2.6bn is related to Covid-19. However, unlike normal increases to the devolved budgets, the additional coronavirus funding provided since March 2020 is ‘non-recurring’, meaning that it will not carry forward into a permanent uplift in the devolved block grants.
Figure 5 *Size of the Barnett block grant in the devolved nations (2020/21 prices)*

![Bar chart showing the size of the Barnett block grant in Scotland, Wales, and Northern Ireland (2016/17 to 2020/21).](chart.png)

Source: Institute for Government analysis of HM Treasury, Block Grant Transparency, 30 July 2020; HM Treasury, Spending Review 2020, 15 December 2020; other spending announcements on GOV.UK; and HM Treasury GDP deflators for December 2020. Size of block grants is based on the level before block grant adjustments are made.

The Barnett formula does not correct for historical disparities in public spending across the UK

Although the Barnett formula allocates *new* resources on a proportional basis across the four UK nations, differences in the overall level of spending per person persist. This is because the formula is applied only to *changes* in spending, and the sums calculated each year through the formula are added on to (or, occasionally, subtracted from) the previous year’s budget allocations, known as the ‘baseline’. For reasons dating back many decades, the three devolved nations, especially Scotland and Northern Ireland, enjoy higher per capita spending than England. When the formula was put in place in the late 1970s these existing differences in spending levels were locked into the system.

In theory, the devolved nations’ advantage through the Barnett formula should have declined over time, in percentage terms, due to an effect called ‘Barnett convergence’ or the ‘Barnett squeeze’. This is because cash changes in per-person spending are equal, but the devolved nations have a higher level of per-person spending to begin with, and so an equal per-person amount of extra money represents a smaller increase in percentage terms.

For instance, imagine that in Year 0 public spending per person is £10,000 in England and £12,000 in Scotland, meaning that Scotland has a 20% advantage. If the UK government then increases spending in England by £1,000 per person per year, the Barnett formula provides that Scotland too will gain an additional £1,000 per person per year in consequentials. After 10 years of such spending increases this would mean that spending in England would be £20,000 per person while spending in Scotland would be £22,000 (assuming the populations had not changed in size). The initial £2,000 differential would be retained, but spending per person in Scotland would now stand at just 10% above the level in England.
In real terms, this convergence effect is sped up by the effects of inflation, which erodes the real value of the extra spending that the devolved nations enjoy at the start. In our example, after a decade in which inflation runs at 2% per year, the £2,000 extra spending in Year 0 is worth just £1,641 in real terms by Year 10.

In practice, however, this convergence has happened more slowly than expected. One reason for this is that the Barnett formula does not fully account for differential rates of population growth. The Treasury uses the most recent Office for National Statistics (ONS) population estimates to calculate the scale of Barnett consequentials that the devolved nations should receive, so the system does take account of changes in population share when it comes to calculating annual changes to the devolved budgets. But what it does not do is adjust the size of each nation’s existing ‘baseline’ block grant, on to which new Barnett consequentials are added each year.

This feature of the system has acted to the benefit of Scotland and Wales, whose populations have declined relative to England’s since the Barnett formula was adopted. According to a House of Lords report, Scotland’s share of the UK population declined from 9.3% in 1976 to 8.7% in 1995.\(^7\) It has since fallen further, to 8.2%, according to the most recent ONS estimates.\(^8\) As a result, not only has the higher baseline level of spending in Scotland and Wales been retained by Barnett, but this higher spending has been shared among a gradually falling share of the UK population.

A second reason why spending levels between the UK nations have not converged is that during periods of austerity the convergence effect is reversed or slowed down. For instance, when spending falls in cash terms (as it did between 2009/10 and 2012/13), if spending cuts are applied equally in per capita terms, this means that as a proportion of overall spending, they represent a steeper decrease in England.

**Figure 6 How Barnett convergence occurs in different scenarios**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Devolved spending per person after 10 years</th>
<th>English spending per person starts at £10,000 and increases by £1,000 per person for a decade. Devolved spending per person starts at £12,000.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base scenario</td>
<td>+10% (£2,000)</td>
<td>+10% (£2,000)</td>
</tr>
<tr>
<td>Inflation</td>
<td>Inflation reduces the real-terms value of the initial £2,000 gap.</td>
<td></td>
</tr>
<tr>
<td>Population growth</td>
<td>Slower population growth in the devolved nation means that spending per person grows more quickly.</td>
<td></td>
</tr>
<tr>
<td>Spending cuts</td>
<td>The gap remains at £2,000 throughout, but increases in percentage terms after five years because of spending cuts.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Institute for Government analysis. Figures are hypothetical.

Spending by the devolved governments on devolved public services operates alongside direct expenditure by the UK government on reserved functions, such as demand-driven benefits. These sit outside the Barnett system and account for almost 30% of total government expenditure. They are mostly controlled by Westminster. Citizens’ individual eligibility for these non-devolved benefits is largely based on low income (for instance, Universal Credit), limits on the ability to work (for instance, Personal Independence Payments) or being of non-working age (for instance, the state pension), so the welfare system acts to automatically redistribute resources from more to less productive parts of the country. This works to the further advantage of the devolved nations, with our analysis showing that benefit spending per person in 2018/19 was higher by 6% in Scotland, 16% in Wales and 20% in Northern Ireland as compared to England.

Figure 7 Spending on benefits per person by UK nation in 2018/19 (2020/21 prices)


Variation in public spending across the UK cannot be explained by reference to underlying needs

As shown above, the Barnett formula does not allocate resources precisely in line with the respective population sizes of the four UK nations. But nor does the higher spending in the devolved nations reflect a purposeful decision to allocate resources in line with any other stated principle, such as estimated spending needs of each part of the UK.

A number of attempts have been made, both inside and outside government, to assess the relative spending needs of the different nations, by reference to various demographic, socio-economic, public health and geographic factors that affect both demand for and the cost of providing different public services. All have concluded that the existing distribution of resources is difficult to justify by reference to any definition of spending needs.
For example, a Treasury needs assessment conducted in the late 1970s, when Barnett was formulated, took into account an array of metrics, including the age distribution of the four nations’ populations and the quality of housing. It concluded that the three non-English nations had greater needs than England, but that, by comparison with England, Scotland and Northern Ireland were overfunded, while Wales was underfunded. The conclusion reached was that Wales needed 109% of what was spent per person in England but received only 106%, while Scotland needed 116% but received 122%, and Northern Ireland needed 131% and received 135%.  

Data published in a 2009 House of Lords report reveals that a second Treasury needs assessment was carried out in 1993. That assessment concluded that all three devolved nations were overfunded, again by comparison with an English benchmark, and again with Scotland returning the greatest margin. Scotland at that point received 133% of what was spent per person in England when it was estimated to need just 115%. Wales received 122% compared to estimated needs of 112%, and Northern Ireland 127% against 122%.  

In addition, in the early New Labour years there was a further attempt within the Treasury to model a needs-based allocation of funding. On this occasion, the process was connected to the regional devolution agenda within England, and the intention was to consider whether the government might move towards a more rational system of funding allocation for all parts of the UK. The alternative considered was that additional resources could be allocated to the UK nations and regions in line with the inverse of GDP per capita, meaning that over time, poorer parts of the UK would gain extra funding. The conclusion of this work was that Scotland and Northern Ireland were overfunded relative to their needs and it was decided once again to leave the Barnett arrangements intact.

None of the Treasury needs assessments has been published, so details on the methodology used are scarce. A more transparent process was undertaken in 2009–10 by the Holtham Commission, which had been established by the Welsh government to consider the funding of devolution. This commission proposed a formula that estimated relative spending needs in each part of the UK, which could replace the Barnett formula. This formula contained six key indicators of need, which were the share of the population that are: children, pensioners, benefit claimants, in poor health, ethnic minorities, and living in rural areas; with additional adjustments for cost associated with London and the Scottish islands. These indicators were derived from a statistical analysis of what factors appeared to drive the differential funding of public services between different parts of England, Scotland and Wales.

Holtham concluded that Wales was underfunded, compared to its estimated needs. Specifically, the commission argued that Wales’s spending needs stood at 14–17% per person above the English figure, while actual spending was only 12% higher. This meant that at that point in time Wales was underfunded by some £400m per year. However, in an appearance before a Welsh assembly committee in 2016, Holtham suggested that based on a “rough and ready” updating of his calculations, Wales no
longer appeared to be as significantly underfunded and was at that point receiving £1.16 for every pound spent in England on the same services.\textsuperscript{13}

In addition, since the analysis was conducted in 2010, business rates revenue has been devolved in Wales. This means that the Barnett calculations that determine the size of the Welsh government’s block grant exclude spending funded by English business rates revenue, which has the effect of increasing relative spending in Wales compared to England.

For the same set of services, the commission indicated that Scotland’s needs were around 5% higher than England’s. Based on the considerably higher levels of public spending per person in Scotland, this implied that Scotland was overfunded. For Northern Ireland, the commission suggested that needs were around 20% higher than in England.

It did note, however, that its estimates for Scotland and Northern Ireland should only be treated as “broadly indicative”, given that the analysis focused only on relative needs covering the areas devolved to Wales, therefore excluding policing and justice.

Holtham’s main recommendation – of a full replacement of Barnett – was not implemented. However, in 2016, long-standing Welsh concerns about underfunding were addressed in a ‘fair funding’ agreement between the Welsh and UK governments that implemented another of Holtham’s proposals. This guarantees that Welsh devolved spending will not fall below a ‘funding floor’ of 115% of spending on similar services in England. Aside from this small tweak, the Barnett formula was again left untouched.

**All three devolved nations appear to be funded above their level of need – but the data is uncertain**

No further comprehensive needs assessment has been carried out since 2010. Since then, several developments mean that the applicability of the figures calculated by Holtham will have diminished. First, the data for the six indicators used by Holtham are now out of date: three – on residents with limiting long-term illnesses, from ethnic minorities or living in remote areas – were based on the 2001 census (another census was conducted in 2011). Another, relating to the number of working-age benefit claimants, would need to be revised afresh if the analysis were replicated today, to account for changes in the structure of the benefits system and the introduction of Universal Credit.
Nonetheless, the analysis remains the best measure of relative needs by nation and region at our disposal. A crude analysis, comparing Holtham’s figures to recent spending data for the devolved nations, suggests that all three devolved nations are currently funded above their level of need, Scotland substantially so. However, it is possible that an up-to-date needs assessment, conducted or commissioned either by the Treasury or jointly between the four UK governments, would come to a different conclusion, and we believe that such an assessment should be carried out.

It should also be noted that there is no single, agreed way to assess needs, and every approach will on some level be based on political value judgements. An example highlighted by the Holtham Commission is the provision of Welsh language services and education in Wales, which could be seen as an indication of greater spending need or as a discretionary policy choice. This analysis should be interpreted with these caveats in mind.

Nonetheless, what every study, as well as a common sense reading of basic socio-economic data, agrees upon is that relative spending needs in the devolved nations are somewhat higher than in England. Crudely, this might suggest that the Barnett formula’s relatively generous treatment of the devolved nations compared to England is defensible. But on closer inspection, it becomes clear that the geographic allocation of spending in the UK does not closely match needs. For example, there is a strong case to be made that Wales has a need for higher spending than Scotland – largely on account of having a higher share of residents with low income or poor health – yet spending per person is higher in Scotland.

Figure 8 Indicative comparison of spending per person vs. spending needs by nation and region

Note: Figures are intended as a broad indication of actual spending compared to relative needs. Differences in devolved policy areas for each nation, differences in methodology for calculating figures for the devolved nations and English regions, and differences in dates of analysis or data availability, mean that precise comparison should be avoided.

Within England, spending is also poorly correlated with estimated needs, based on our estimates of comparable spending in each English region for the services that are devolved in Wales. The five regions in northern England and the Midlands appear to be relatively underfunded while London appears to benefit from disproportionately high spending per person. However, the counter to this is that London is overall a major net contributor to the exchequer by virtue of tax revenue that is almost 50% higher per person than the UK average, while some spending ‘in’ London benefits many people who live in areas surrounding London, such as transport infrastructure that connects other regions with the capital.

The overall picture that emerges is that there is substantial variation in the level of public spending across the different parts of the UK, but no clear rationale for why this variation exists. The devolved nations do appear to have somewhat higher spending needs than England – for instance, as a result of lower economic productivity and poorer public health – but these higher needs do not fully account for the higher spending that these nations receive. This is particularly true in the case of Scotland, which enjoys markedly higher public spending than England, despite being close to the UK average in terms of economic output per person. Within England, there is also a poor correlation between spending and needs. However, data limitations make it hard to be certain about many of these conclusions.

In our view there is a case for replacing the Barnett formula with a needs-based system, to ensure that citizens of all parts of the UK can be provided with a similar standard of public services. But making such a change would be both technically complicated and politically combustible, given the likely backlash from those parts of the country that would lose out. As a result, successive governments have shied away from this issue, and the Barnett formula has remained intact.

* The Holtham Commission focused on potential funding reforms in Wales. Therefore, the analysis of relative needs is based on each region’s relative spending needs for the set of public services that are devolved in Wales (e.g. excluding policing and justice) and we have based our estimates of comparable spending for English regions on the same set of services.
2. How the Barnett formula works in practice

The Barnett formula operates automatically in theory – but disputes can still arise in practice

One positive feature of the Barnett formula is that its mechanistic properties reduce the scope for politicisation of routine decisions about the allocation of resources. Changes in devolved budgets are, in principle, an automatic by-product of spending decisions in Westminster, and therefore annual budget negotiations between the UK government and devolved administrations are unnecessary. This contrasts with many other devolved and federal systems. For instance in Canada, although sub-national government funding is based on a formula, the complex calculations mean meetings between provincial and federal level government happen frequently throughout the year to ensure all stakeholders are in agreement about the amount of money transferred to sub-national government.

However, this characterisation of Barnett as a formula operating ‘automatically’ is misleading as there is still scope for disagreement about how it should be operationalised. The formula does not operate itself, so is automatic only to the extent that mathematical inputs can be objectively determined and agreed by all sides. This is not always the case. In particular, there can be room for interpretation about how to classify which parts of the UK a given area of government spending benefits. For reasons explained above, these classification decisions carry financial consequences. If spending on a particular service or project is deemed to be for the benefit of the whole UK, then the devolved governments gain no additional resources, whereas if the spending is categorised as ‘England only’, then it triggers consequential budget uplifts for the other nations.

Decisions on geographical coverage are taken by the Treasury, which oversees and operates the Barnett formula as part of its overall responsibility for “funding policy and public expenditure allocation across the United Kingdom”.

For the most part, there is little controversy as to whether spending decisions announced by UK ministers should generate Barnett consequentials because the lines between devolved and reserved policy areas are relatively clear. As the National Audit Office (NAO) concluded in a 2019 study, applying the formula to calculate Barnett consequentials “is straightforward where services and functions are fully devolved but more complex in areas where HM Treasury’s categorisation decisions may be more subjective.”

Consequently, on several occasions there have been disagreements about how the Treasury has operated the Barnett formula. The Treasury makes plain in the Statement of funding policy, its rulebook for funding devolution, that when disagreements arise, it will engage with the devolved administrations in a way that “mirrors the arrangements between HM Treasury and United Kingdom departments”. That is to say, it will listen to representations but will retain the final say.
For instance, in 2007, the Treasury announced that spending related to the London Olympics would be categorised as a UK-wide matter, meaning that the devolved nations would receive no extra resources. This was despite the fact that much of the planned expenditure was on regeneration and transport infrastructure in London, which offered no obvious benefits to Scotland, Wales and Northern Ireland. The three devolved governments objected to this and made the case that they had been deprived of at least £330m in consequential funding as a result of this classification decision.\textsuperscript{4}

The issue was eventually settled some years after the 2010 change of government at Westminster, after being referred to a new dispute resolution protocol agreed in 2013 between the four governments.\textsuperscript{5} This process is designed to mediate disputes between the governments that cannot be resolved directly between the responsible Whitehall department and its devolved counterparts. It involves a meeting of ministers from the different governments, which is chaired by a UK minister from a non-involved department. The devolved ministers can make their case and refer to evidence that supports their position and there is scope for independent analysis to be commissioned to help find an acceptable middle ground. But the UK government cannot be compelled to change its position.

When the Olympics funding dispute was eventually settled, the devolved governments were granted just £30m in extra resources,\textsuperscript{6} just a tenth of the figure they had claimed. As the devolution analyst Alan Trench wrote as the dispute played out, the episode “illustrated the arbitrary nature of the Treasury’s power over the block grant and formula system, and how it acts as both judge and jury in its own cause”.\textsuperscript{7}

A more topical example relates to planned spending on the HS2 rail link between London and the north of England. As part of the 2020 spending review, the UK government earmarked just over £5bn to the scheme in 2021/22. This expenditure has been categorised as an ‘England and Wales’ project, meaning that it will generate Barnett consequentials for Scotland and Northern Ireland, but not for Wales.\textsuperscript{8} The justification for this decision is that “heavy railway infrastructure” is not devolved to Wales under the terms of the devolution legislation, meaning that the UK Department for Transport is responsible for railway infrastructure in Wales as well as England.\textsuperscript{9} The Welsh government argues that there is a long history of underinvestment in the Welsh railway system and that control should be devolved to Cardiff.\textsuperscript{10}

As the HS2 line will lie entirely within the territory of England, the decision to, in effect, treat this project as being for the benefit of Wales as well as England has attracted criticism\textsuperscript{11} – not least as other railway spending, including the far smaller sum of £28m allocated to the Northern Railway Strategy in 2020/21, has been categorised as for England only on the grounds that this is a ‘local’ project, and so will produce extra funding for Wales (as well as Scotland and Northern Ireland). Spending on the Crossrail project in the 2015 spending review was likewise classified as for England only.\textsuperscript{12} The contrast in treatment between these different projects suggests that these decisions were discretionary rather than an automatic product of how the Barnett formula works.
The UK government has the ability to sidestep the Barnett formula altogether

The UK government also has discretion to allocate spending entirely outwith the Barnett system, in what is termed a ‘formula bypass’. This produces other oddities. In some cases, these work to the benefit of all three devolved nations. For instance, according to the NAO, the UK government has allocated a total of more than £375m to “city deals” and “growth deals” in Scotland, Wales and Northern Ireland for the period up to 2021. This spending represents additional resources for devolved nations that falls entirely outside of the Barnett system. Meanwhile, the devolved governments are also granted Barnett consequentials from spending on such deals in England. The overall effect is that Scotland, Wales and Northern Ireland gain a double benefit.

On other occasions, the decision to bypass Barnett can lead to disagreements when one or other of the devolved governments believe themselves to have been unfairly treated. For instance, in 2017, the Conservative government struck a ‘confidence and supply’ agreement with the Democratic Unionist Party (DUP) at Westminster, as part of which an additional £1bn of public spending over two years was promised to Northern Ireland. This led the Scottish and Welsh governments to argue that they should receive a proportionate sum, calculated on a population basis as per the Barnett formula.

However, since the Barnett formula takes as its starting point changes in spending within England, there was no automatic way in which the money for Northern Ireland would generate additional resources for the other devolved nations. On this basis, the UK government ignored the protestations from Edinburgh and Cardiff and declined even to allow the matter to be treated as a formal ‘dispute’ under the dispute resolution protocol. It should be noted that England also gained no additional funding as a result of the deal with the DUP, but that unlike Scotland and Wales, England had no political representative that could attempt to challenge this decision.

A different example of how the UK government can sidestep the Barnett formula has come to light more recently. Following Brexit, a serious disagreement has emerged regarding how the UK government intends to replace European structural and investment (ESI) funds, which are used to support economic development, particularly in deprived areas across the UK. In the last round of ESI funding (2014–2020), Wales received just under €800 per person, Scotland about €180 per person and Northern Ireland about €300 per person. In total the EU allocated the UK €10.6bn, of which Wales received €2.5bn, Scotland €0.9bn and Northern Ireland €0.5bn. This means the devolved administrations were allocated about 36% of the UK total allocation – far higher than their combined population share of around 16%.

The UK government has now made clear that its proposed replacement for ESI spending, the planned UK Shared Prosperity Fund (UKSPF), will be run from Whitehall on a UK-wide basis, with the devolved governments expected to be given little say in where the money is spent in comparison with their role in allocating ESI funds. This was made plain in the spending review published in November 2020. In addition,
in a letter to Kate Forbes, Scottish cabinet secretary for finance, Stephen Barclay, chief secretary to the Treasury, wrote that the new UKSPF “will operate UK-wide, using the new financial assistance powers in the UK Internal Market Act”.

To pave the way for the introduction of the UKSPF, the UK government has conferred upon itself, via Part 6 of the UK Internal Market Act 2020, the power to spend on functions “promoting economic development... providing infrastructure... supporting cultural activities... sport... international education... educational and training activities” across all parts of the UK. All of these are matters of devolved responsibility under the existing devolution settlements. The passage of this legislation, and the apparent plan for UK ministers to take spending decisions in largely devolved areas, is viewed by the devolved administrations as an incursion into their sphere of spending autonomy.

A devolved government official told us that what is “particularly concerning” is that future UKSPF money will be a “substitute for funding that we would otherwise get ourselves”. This is because the UK government may opt to divert an increasing share of new resources into UK-wide schemes funded under the UKSPF, which would generate no Barnett consequentials, rather than into programmes for England only, which would. Over time, this would lead to a squeeze on devolved budgets and an expansion of the role of the UK government in devolved policy areas. There is also a risk that this new approach might give rise to wasteful duplication if both UK and devolved ministers develop parallel spending programmes in the same policy domains. Many of these same concerns also arise in relation to the planned new Levelling Up Fund that the UK government also announced in the 2020 spending review.

These examples all illustrate that although the Barnett formula is designed to allocate resources automatically, in reality it eliminates neither the need for judgement nor the scope for discretionary decision making. It is only the UK government, specifically the Treasury, that can decide how to put the formula into practice and only UK ministers that can decide to bypass it altogether, for political or fiscal reasons. There is no formal requirement to account for such decisions. This is a source of frustration at the devolved level and causes friction between central and devolved governments, even though, as we have shown above, the overall distribution of resources is generous to the devolved nations.

The potential for disputes is exacerbated further by political differences and poor relations at the ministerial level between UK and devolved governments, reflected in a tetchy exchange of letters in January 2021 between Scottish government and Treasury ministers over future funding for Scotland, in which Forbes argued that it was “imperative” that further funding was provided immediately, while Barclay said it was “disappointing” that Forbes had failed to mention the level of support already provided to Scotland by the Treasury.

For these reasons, there is a need for greater transparency about how the Barnett formula is used to calculate devolved budget adjustments, and a more effective
dispute resolution process for when the devolved governments disagree with decisions taken in Whitehall.

The Barnett funding system has grown more complex – with different changes made for each nation

One of the Barnett formula’s principal strengths is its simplicity. The formula requires only easily accessible numbers, such as UK government spending plans and the populations of the UK’s four nations, and the calculation itself is a straightforward multiplication. As discussed, there can be disagreement about the inputs to the formula, but it is easy to operate in comparison with more complex government funding formulas, used in both the UK (for instance, for local government in England) and overseas (for instance, to fund Australian states). The formula’s simplicity also means it can be well understood by officials and stakeholders in devolved institutions as well as the Treasury. As one devolved finance official put it to us: “Barnett is pretty well understood amongst a small bubble of people. The parameters are well understood.”

However, while the Barnett formula endures as the cornerstone of the devolved funding system, reforms in the past decade have resulted in increasingly complex funding arrangements emerging in Scotland, Wales and Northern Ireland. This has happened as a result of piecemeal changes made in response to specific pressures in each nation rather than through the consistent application of a single set of funding principles.

In Scotland, the main catalyst for reform was the rise to power of the SNP after 2007, which has persuaded successive UK governments to offer additional powers to Scotland as an alternative to independence. Legislation passed in 2012 and 2016 has, for example, transferred powers over taxation. Scotland can now set its own rates and bands of income tax and is due to take control of air passenger duty and to retain half of all VAT receipts it collects. These powers go further than the similar reforms made in Wales, where some taxes have also been devolved, namely income tax, in England, though in a more limited way. In addition, taxes over property transactions (stamp duty land tax, in England) and landfill have been devolved in full to both Scotland and Wales.

Meanwhile, in 2015, the UK government legislated to devolve corporation tax to Northern Ireland (although it is uncertain whether this will be implemented), in response to concerns about tax competition from the Republic of Ireland.

* Australia calculates transfers to state-level government based on a complex formula that incorporates how much it costs to fund public services in each state based on demographic need and the average Australian standard of public service across the whole country. The cost of service provision takes into account several factors including property values, remoteness of population, and the state’s indigenous population.
The devolution of tax powers has enhanced the fiscal autonomy of the devolved governments. This has increased their exposure to the risks of fluctuating tax revenue, while also retaining their overall reliance on block grants calculated through the Barnett formula. The technical details of tax devolution, determined in separate bilateral negotiations between the UK and devolved governments, also vary between Scotland and Wales. In both nations, the Barnett-based block grant is reduced to account for the transfer of tax revenue from Westminster to Edinburgh and Cardiff, but the precise calculation method differs.

The Scottish government’s budget, for instance, is protected if its tax revenues grow more slowly than in the rest of the UK purely on account of slower population growth. The Welsh government’s budget, meanwhile, is partially protected from being negatively impacted if increases in the tax-free personal allowance – which is controlled by the UK government – disproportionately impact Welsh tax revenue, which occurs because Wales has a higher share of low earners.\textsuperscript{22}
Figure 10  **Impact of block grant adjustments on the Barnett formula and devolved budgets**

Scenario 1: Devolved tax revenue is lower than the block grant adjustment, negatively affecting the devolved budget. This could arise if the devolved administration chooses to lower taxes, or if economic performance is weaker in the devolved nation than in the rest of the UK.

Scenario 2: Devolved tax revenue is higher than the block grant adjustment, positively affecting the devolved budget. This could arise if the devolved administration chooses to raise taxes, or if economic performance is stronger in the devolved nation than in the rest of the UK.

Source: Institute for Government analysis.

Another recent change that has added to the complexity of how Barnett operates was the Welsh ‘fair funding’ deal mentioned above. The reform was based on the notion that per-person spending needs in Wales are 15% higher than those in England.

At the time that the deal was agreed, spending in Wales was around 20% higher than in England, but there was a concern that in the long run, owing to the ‘convergence’ effect described above, Wales would lose out and end up with insufficient resources. Since the agreement, increases in Welsh spending per person have been 105% (rather than 100%) of the increase in English spending, and over time Welsh spending will converge towards a guaranteed ‘funding floor’ of 115% of English spending. After that point is reached, future spending increases for Wales will be 115% of the English figure, to keep the Welsh block grant 15% above comparable spending in England.

This change was unsurprisingly welcomed in Wales, but it was an ad hoc reform, made for reasons of political convenience rather than consistent principle. As noted above, even the figure of 115% was quite probably out of date by the time the ‘fair funding’ deal was reached. However, the Treasury and the Welsh government did not attempt to update this study or to carry out a wider needs assessment on this occasion, and the agreement includes no reference to any future review of relative spending needs between England and Wales, although there are plans for a “periodic review” of the overall fiscal framework for Wales which could include a reassessment of Welsh spending needs.

The overall effect of these changes has been to increase the complexity of operating Barnett, and the scope for misunderstanding and disagreement over how devolved block grants are calculated. For instance, the Welsh ‘fair funding’ deal means that the Treasury and the Welsh government must keep track of whether the level of Barnett-based funding in Wales is above or below the threshold of 115% of comparable spending in England. This decision will determine whether Wales gains 105% or 115%
of future increases in English spending. As a result there is potential for the UK and Welsh governments to disagree about the figures, especially since the Treasury does not currently publish its calculations to allow for independent scrutiny.

**Devolved autonomy over spending decisions is constrained in a crisis**

Yearly block grants calculated using the Barnett formula provide the devolved administrations with budgets that are protected from large and sudden changes. The grants they receive are also not ring-fenced, so they can choose their own spending priorities within areas of their competence.

This fiscal autonomy is a core feature of the system as stated in the *Statement of funding policy*: “Each administration has fiscal responsibilities and freedoms to match its executive and legislative powers within the terms of the devolution settlements and UK-wide public spending framework.” Public spending trends since 2010 illustrate that this fiscal autonomy can be used to reflect very different political priorities in the four nations.

For example, when all four UK governments had to find savings after 2010, Westminster chose to protect health care spending (in England) and make steeper cuts elsewhere – particularly for higher education. Per-capita spending on further and higher education in England fell by more than 60% in real terms between 2010/11 and 2018/19 but spending on health care was protected from austerity and rose slightly. Our analysis suggests that Edinburgh used its autonomy to protect spending on primary and pre-primary education and on the police, while Cardiff chose to shield, or in fact increase, budgets for secondary education and social care.

**Figure 11 Change in real terms per-person spending on public services by UK nation**

![Diagram showing changes in spending on various public services by UK nation]

However, this autonomy is limited in practice in several ways, and the coronavirus pandemic has brought this into sharp relief. First, because the Barnett formula takes England as its reference point, the devolved administrations are granted additional financial resources only when the UK government chooses to spend more in England. In normal times, when fiscal events are predictable, the devolved governments are usually informed of funding changes far enough in advance to plan spending allocations accordingly. However, in the context of the pandemic, having to wait for Westminster to move first before increasing spending has made it harder for the devolved governments to develop their own pandemic responses proactively.

The devolved governments have, as we show above, benefited during the course of 2020/21 from substantial increases in their block grants – the grants for Scotland, Wales and Northern Ireland increasing by 32%, 38% and 30% respectively. This money has enabled them to support public services and businesses. But welcome as this money has been, this scale of in-year budget increases is entirely without precedent and has not come without its challenges.

During the pandemic, the devolved administrations have sometimes been given little advance warning of whether spending announcements made at Westminster would produce additional Barnett consequentials and how much they would receive. As David Phillips, of the Institute for Fiscal Studies, warned at the start of the crisis, without good communication between the Treasury and its devolved counterparts, “the devolved governments could find themselves having to play catch-up once they know how much funding they will receive as a result of those announcements”.

As a result, the devolved governments can find they have insufficient time to develop policies that may be better suited to the devolved context. Instead, there is a need to respond quickly to the announcements made at Westminster, for England, and often there is political pressure to simply replicate the UK government policy. For

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**Figure 12 In-year increases in the devolved resource block grants**

![Graph showing in-year increases in devolved resource block grants from 2016/17 to 2020/21.]

*In-year Barnett consequentials means additional devolved funding allocated to be spent in the same year that it is announced.*

Source: Institute for Government analysis of HM Treasury, Block Grant Transparency, 30 July 2020; coronavirus spending announcements on GOV.UK, July 2020 to February 2021. Size of block grant is based on the level before block grant adjustments are made to account for tax and welfare devolution.

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instance, following pressure from local politicians, the Scottish government committed to passing on all Barnett consequentials relating to local government spending in England to local government in Scotland.27

In some cases, spending announcements at Westminster are also stated to result in additional consequentials when in reality they do not, which has been a source of frustration during the pandemic. For instance, on 6 January 2021, the Treasury announced that the governments in Scotland, Wales and Northern Ireland would receive £375m, £227m and £127m respectively as a result of new support for businesses in England.28 However, according to the Welsh finance minister, Rebecca Evans, this was not in fact “new money” but part of the already announced guarantee.29

Such uncertainty can make budget planning more difficult. In evidence to the Senedd Finance Committee in May 2020, Evans made this point, stating that: “We have real challenges in being able to plan ahead, because we simply don’t know what allocations the UK government might be making, and therefore, we don’t know what kind of quantum of funding that we’ll have to be able to allocate.”30

The Treasury has acknowledged devolved concerns about their uncertain funding during the Covid crisis. In July 2020, it responded by announcing a minimum additional funding guarantee for each devolved nation – £6.5bn for Scotland, £4bn for Wales, and £2.2bn for Northern Ireland for 2020/21.

This additional funding differed from normal Barnett consequentials in two important ways. First, it was not all linked to specific spending announcements for England. Instead, the Treasury sought to give the devolved administrations earlier certainty by calculating their funding based on estimates of how much additional spending would be needed in England to deal with the crisis, including for policies not yet planned and announced.

Second, the additional devolved funding was a guaranteed minimum. If spending in England was lower than anticipated, devolved budgets would not be reduced to reflect this – but if spending in England exceeded original estimates, the devolved administrations would be entitled to additional funding through the Barnett formula.

These guarantees were welcomed by the devolved administrations, as removing the uncertainty they experienced at the start of the crisis. However, towards the end of the summer, as additional spending in England began to exceed the original estimates, funding uncertainty for the devolved administrations arose again. This has resulted in the Treasury increasing its minimum guarantees four times between October 2020 and February 2021 – with the total guaranteed additional devolved funding increasing to nearly £19bn.31 Thus, and perhaps unavoidably in the context of the pandemic, devolved budgets have remained subject to late changes based on spending announcements in England.
The overall story is that the devolved administrations have certainly benefited from the sizeable additional funding provided to them through the Barnett system to deal with the impact of the pandemic. However, they have faced uncertainty even relatively late in the financial year about the total level of funding that they will have at their disposal, and this has made it harder for them to plan their overall response to coronavirus. This uncertainty is again, to some extent, unavoidable in the context of the pandemic, but we believe that the UK government could do more to keep the devolved administrations informed of upcoming decisions that will affect their budgets.

The pandemic has also highlighted the devolved governments’ limited fiscal flexibilities

The way the Barnett formula and block grant adjustments for devolved taxes operate means that the devolved budgets are largely insulated from falls in tax revenue that affect the whole of the UK, as happened during the coronavirus crisis. However, their budgets do come under strain when there are unexpected demands for higher spending, as has also happened. In those circumstances they have limited ability to respond unless the UK government allocates them more money.

Of the additional £339bn the UK government is predicted to borrow in 2020/21 as a result of the pandemic, £106bn is due to a shortfall in tax receipts. The remaining £233bn has been used to fund extra spending and discretionary tax cuts to support businesses, households and public services, including in the devolved nations.

The devolved governments have quite limited borrowing powers, which are generally restricted to borrowing either for capital investment projects or to make up for shortfalls in forecast tax revenue. In normal times, the Scottish government can borrow £450m per year for capital spending (that is, for long-term investment) up to a total of £3bn. It can also borrow £300m per year for resource spending (day-to-day expenditure), to mitigate forecast errors in tax revenue or demand-led welfare spending, up to a total of £1.75bn. The Welsh government can borrow £150m per year for capital spending, up to a total of £1bn, and £200m per year for resource spending to mitigate forecast errors in tax revenue, up to a total of £500m. The Northern Ireland executive can borrow £250m per year for capital spending, up to a total of £3bn.

These limits on devolved borrowing are imposed to avoid a scenario in which devolved bodies mount up unsustainable levels of debt, leading the Treasury with little choice but to fund a bail-out – in the way that the EU had to support debt-laden countries within the Eurozone after the financial crisis. The devolved administrations also receive a substantial share of UK government borrowing through the Barnett formula.

So there is a clear rationale for limitations on devolved borrowing powers since the Treasury is ultimately responsible for the level of public sector debt across the whole UK. But there does appear to be scope for some extension of borrowing powers, in particular to enable them to respond quickly to a crisis such as coronavirus, so long as the devolved administrations are required to bear the responsibility for paying off that borrowing in future. As things stand, the devolved administrations cannot easily run a
short-term deficit in their budget to fund higher public spending during a crisis. Nor can they usually transfer money from their capital budget into their resource budget. These controls are in place to ensure an appropriate amount is spent on investments that improve long-term economic performance, as opposed to just responding to immediate spending pressures for public services.

In addition, there are constraints on how much money the devolved administrations can move between financial years, under ‘budget exchange’ rules imposed by the Treasury to ensure that it can control the overall level of public spending in any given year. The Scottish government, for example, can accumulate a reserve of up to £700m. However, in normal times, only £250m can be drawn down from this reserve each year for resource spending. In 2018/19, this amounted to less than 1% of its resource budget. The Welsh government can build up a reserve of up to £350m, and can draw down a maximum of £125m for resource spending and £50m for capital spending in any single year.

These rules limit the freedom of action of the devolved governments and can make it harder for them to be proactive and agile in their response to a fast-moving crisis such as coronavirus. For these reasons, Scottish finance secretary Kate Forbes claimed in June 2020 that “the fiscal framework was not designed for a pandemic or an economic crisis on such a scale”. Soon afterwards, the three devolved finance ministers issued a joint statement calling for “an end to rigid fiscal rules for devolved nations”.

The Treasury has so far resisted the pressure to rewrite the fiscal rules that the devolved governments must operate within, instead focusing on providing greater certainty about funding allocations through the minimum guarantees mentioned above. In addition, in January 2021, it was announced that the technical conditions for a ‘Scotland-specific economic shock’ had been met for the first time, meaning that some additional fiscal flexibilities would come into effect. Specifically, under Scotland’s fiscal framework, this means that the Scottish government will be allowed to borrow up to £600m rather than the usual limit of £300m per year to cover any shortfall in tax revenue, and to withdraw unlimited funds from its reserve, instead of the usual annual limit of £250m. There is no such provision in the fiscal frameworks of the other devolved governments. However, in February 2021, when announcing a further £2bn of funding for the three devolved nations, the Treasury announced that any amount of this could be carried over into the next financial year.

Fundamentally, the devolved administrations must operate within a set of rules that are designed, overseen and enforced by the Treasury. This limits their room for manoeuvre, and can place them on a reactive footing, awaiting decisions in Westminster before they can take action. On the other hand, the overall level of funding that the devolved bodies have received through the Barnett formula has been broadly sufficient to meet the challenges posed by coronavirus, and the implementation of ‘minimum annual funding guarantees’ by the Treasury has helped to mitigate some of the funding uncertainty the devolved administrations have faced in this period. Once again, the Barnett formula itself has been retained as the central mechanism for allocating new fiscal resources across the UK.
3. The future of the Barnett formula

The political risks of replacing Barnett have always outweighed the potential benefits

The Barnett formula has survived for four decades in large part because of the political difficulties that would be faced by any government that tried to impose wholesale reform. Replacing Barnett with a new mechanism would inevitably create winners and losers, and those who lost out would naturally object.

The lower tax revenue and higher spending per person in the devolved nations results in each having a substantial negative fiscal balance, meaning that the level of public spending in those nations is substantially higher than the total tax revenue collected (comprising both devolved and UK-wide taxes). Based on the most recent published data, relating to the 2018/19 financial year, our analysis finds that Scotland, Wales and Northern Ireland had a negative fiscal balance of £15bn, £15bn and £10bn respectively.

**Figure 13 Revenue, expenditure and fiscal balance by UK nation and region, 2018/19 (2020/21 prices)**

In per-capita terms, this meant that public spending exceeded tax revenues by a total of approximately £2,700 in Scotland, £4,700 in Wales, and £5,400 in Northern Ireland (2020/21 prices). In Scotland, per-capita tax revenue is similar to that of England, so its deficit is mostly due to the legacy of historically higher public spending that the Barnett formula has not corrected. The larger deficits of both Northern Ireland and Wales reflect both a weaker tax base and higher spending.

**Figure 14 Revenue, spending and deficit per person by nation in 2018/19 (2020/21 prices)**

![Revenue, spending and deficit per person by nation in 2018/19 (2020/21 prices)](image)

Source: Institute for Government analysis of Office for National Statistics, Country and regional public sector finances net fiscal balance tables, 20 December 2019; ONS mid-year population estimates; and HM Treasury GDP deflators for December 2020. Spending includes non-identifiable spending, based on how the ONS has allocated this to each nation.

In 2018/19 England also ran a small deficit of just under £100 per person, a total of £4bn for England as a whole, with the surplus in London and the surrounding regions more than cancelled out by deficits elsewhere in England. It is therefore incorrect to suggest that England produces a surplus that is redistributed to the other nations. Rather, UK government borrowing, which totalled £41bn in 2018/19 (£45bn in 2020/21 prices), ensures that all four UK nations can simultaneously run a deficit. But this borrowing has typically been incurred to the disproportionate benefit of the devolved nations.

Almost any likely replacement of Barnett would disadvantage Scotland. This would create substantial political headaches for the UK government, particularly in the context of the battle it currently faces with the SNP administration in Edinburgh over the future of the union. Furthermore, whether Barnett were replaced by a system that (a) equalised the overall per-capita funding of the four nations, or (b) allocated resources in line with some measure of needs, England would stand to gain far less per person than the devolved nations would stand to lose, owing to England’s far larger population.

If spending on devolved functions were completely equalised between the four parts of the UK, on a per-person basis, we calculate that spending would fall by 20% or £1,300 per person in Scotland, 16% or £870 per person in Wales, and 20% or £1,300 per person in Northern Ireland – but the resources this would free up would allow for only an estimated 4% or £200 per person increase in spending in England. So the benefits to England would be relatively limited, while the political backlash from the devolved nations could be severe.
The lesson governments should take from the Barnett formula is that once a distributional mechanism is established it can become politically entrenched and hard to move away from even if the original reasons for its creation no longer apply. Comprehensive reform of the Barnett funding system would also open up a wider debate about the fiscal powers of the devolved institutions. If Scotland’s relatively generous treatment through Barnett were to end, then the Scottish government would, almost certainly, call for the devolution of further revenue raising powers and/or the lifting of other fiscal constraints imposed upon the devolved bodies by the Treasury to compensate for their loss in grant funding.
Recommendations

For the same reasons that it has survived for more than four decades, it appears likely that the Barnett formula will survive, for the short-term at least, at the centre of the system for funding devolution. Comprehensive reform or replacement is likely to remain in the ‘too-difficult’ pile owing to the political backlash, in spite of the oddity of the funding allocations that it generates, and the fact that the stated advantages of the formula are less clear-cut in practice than in theory.

Our analysis has shown that it is Scotland that would face the most severe cuts in public spending, whether Barnett were to be replaced by a simple population-based division of resources or a needs-based formula, since Scotland currently faces a large negative fiscal balance. With the future of the union hanging in the balance, and support for Scottish independence riding high, the UK government is highly unlikely to announce a sudden cut in the size of the Scottish block grant.

However, even while the formula itself remains in place, there are ways that the operation of the wider system for funding the devolved governments could be improved.

The government should regularly publish its analysis of the level of spending on comparable public services in each nation and region of the UK

First of all, there is a need for greater transparency in reporting comparable public spending figures for each of the UK nations. There are detailed figures contained within annual publications such as the *Public Expenditure Statistical Analysis*, but what is not clearly presented is a direct comparison of how much is spent in each nation, including England, on those specific functions that are devolved to each of Scotland, Wales and Northern Ireland. This makes it difficult to make a simple calculation of whether – and why – public spending levels are converging or diverging across the UK.

It appears that this analysis does exist within the Treasury, which is why its chief secretary was recently able to claim that spending in Scotland on devolved functions was 29% higher than spending on comparable functions in England. Similarly, the Treasury has to keep track of the difference between Welsh and English spending, on devolved functions, as the Welsh block grant increases at a faster rate when it falls below 115% of the level of spending in England. For this paper, we were able to replicate the Treasury’s internal analysis but this was a time-consuming process, and it is possible that we have made some errors. It would be preferable, and would increase the accountability of the funding system, if the government would simply publish these figures on an annual basis. Ideally, this data should be published for the English regions as well.
The government should make clear alongside every spending decision whether and why it will produce additional resources for each devolved administration

A further way in which the operation of the Barnett formula could be made more transparent is at the point of spending announcements by the UK government. At present, Westminster often fails to make clear when announcing spending changes whether the announcements involve new or reallocated money.

This is important because it is only new money that triggers Barnett consequentials. When departments reallocate their existing resources in light of changing priorities this does not generate additional money for the devolved nations. There have been occasions where the devolved governments, as well as external observers, have been confused as a result, when announcements at Westminster are described as if they involve new money, before it subsequently becomes clear that this is not the case and no additional resources will be provided to the devolved nations after all.

In addition, the geographical scope of different policy announcements is often not made clear in government announcements and documentation. The Treasury has improved its retrospective transparency, publishing detailed accounts of its Barnett formula calculations from time to time, most recently in July 2020. This is good practice and marks a welcome improvement on the situation just a few years ago, when Barnett calculations were almost entirely hidden within a Treasury black box, as the Institute for Government argued in a 2017 blog.

However, what still does not routinely happen is that these calculations are published alongside spending announcements. Without this information, which the Treasury has to collect internally in real time, it is difficult for the UK and devolved parliaments, as well as external observers, to work out how much additional money each devolved administration is due. This can cause confusion at the devolved level. We see no good reason why the Treasury should not ‘show its workings’ and make clear why each individual spending announcement does or does not generate Barnett consequentials for each of the devolved nations.

The ongoing review of intergovernmental relations should seek to strengthen the joint governance of the Barnett funding system and create a stronger dispute resolution mechanism

There is also a case for strengthened intergovernmental working around the operation of the Barnett formula. At present meetings between Treasury and devolved finance ministers do not take place regularly – although this improved at least during the early part of the pandemic – and there can be a poor flow of information between UK and devolved governments. Ideally, the ‘finance quadrilateral’ meetings held irregularly between the chief secretary to the Treasury and devolved finance ministers to discuss the funding of devolution would in future take place on a regular published schedule, at least twice per year, with greater transparency about the agenda and content of these meetings.
In addition, when disagreements arise over the operation of Barnett, the main dispute resolution process is not satisfactory. It allows the UK government to determine the outcome of disputes to which it is a party, and to do so without having to give a full account of decisions such as whether a certain spending announcement produces extra funding for the devolved bodies.

These matters should be considered as part of the wider review of intergovernmental relations that is under way, and a strengthened dispute resolution protocol should be devised, perhaps involving independent mediation. UK ministers should also be required to account publicly for how they have responded to objections about how the Barnett formula has been put into practice.

**An independent body such as the NAO or OBR should report annually on how the Barnett formula has been used to calculate changes in devolved budgets**

There is also a case for independent oversight and scrutiny of how decisions are taken within the Treasury about the operation of the Barnett formula, including whether certain spending programmes should or should not produce additional funding for the devolved nations. One model that has been proposed in the past, for instance in 2009 by the House of Lords Committee on the Barnett formula, is to create a new independent body along the lines of Australia’s powerful Commonwealth Grants Commission, which oversees the system of fiscal equalisation between the different states of Australia. Such a step might have some merit, and is worth further consideration, but it is unlikely to happen any time soon owing to reluctance within the UK government to give up control of the system.

A more feasible reform would be for an existing body such as the National Audit Office or Office for Budget Responsibility to report annually on how changes in the devolved budgets have been calculated, drawing particular attention to any subjective decisions about whether certain programmes should incur Barnett consequentials or other disagreements about how the rules should be applied.

**The UK government should respond fully to proposals for greater devolved fiscal flexibilities, and consider the case for reform as part of a review of the devolved fiscal frameworks**

The UK government should also publicly respond to proposals from the devolved level for greater fiscal flexibilities, such as those made over the course of the past year, designed to allow the devolved governments to respond better to crises. The Treasury’s reluctance to extend short-term borrowing powers, or to allow the devolved governments to move money between either capital and resource budgets or between fiscal years, is rooted in a sensible and necessary caution. However, this caution can go too far and make it harder for the devolved governments to respond appropriately to unexpected pressures.

We do not propose a specific set of reforms to the fiscal rules within which the devolved bodies must operate, but suggest that these issues should be fully considered as part of a full review of the devolved fiscal frameworks.
The Treasury and devolved administrations should jointly conduct or commission a new assessment of the relative spending needs of each part of the UK

We have also discussed the case for a new assessment of the respective public spending needs of each part of the UK to be carried out. This could therefore inform any future proposals to replace Barnett with an alternative system, based on more consistently applied allocation principles. However, carrying out a needs assessment would be valuable even if there is no immediate plan to replace Barnett, as it would at least enable a more informed public and political debate about whether resources are fairly distributed across the UK.

The difficulty of the task should not be understated. There is no single agreed methodology for carrying out such an analysis and this creates scope for disagreement about how the process should be carried out. However, the fact that the Treasury has on more than one occasion conducted such an exercise, as did the independent Holtham Commission over a decade ago, suggests that with political will, a reasonable attempt at this could be made.

Lessons could also sensibly be drawn from international experience about the appropriate way to conceptualise the idea of spending needs. For instance, within the Canadian federal system, there is a system of redistribution between provinces guided by the overriding objective that such a system must "ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation".

Given the fraught political relationships between the UK and devolved governments at present, if the Treasury were to carry out such an analysis on its own, the results might well struggle to gain acceptance across the UK. A better approach might therefore be for the UK and devolved governments to jointly commission such a study, and then perhaps to repeat the exercise every five years. This analysis could be conducted and published without any commitment to replace Barnett with a needs-based allocation mechanism, but it could inform public debate about the funding of the different parts of the UK.

But the UK government may well prefer not to open this can of worms. An alternative approach, therefore, would be for a relevant committee of the UK parliament, such as the Treasury Select Committee, to carry out this work, perhaps in partnership with the finance committees of the devolved legislatures.

Over the longer term, the objective should be to move towards a system that shares out resources in line with a clearly stated set of funding principles, which are applied consistently and transparently to devolved governments across the UK. Whether to shift outright to a needs-based approach will be a matter of political judgement. But what we think is clear is that the current arrangements produce a distribution of resources that is hard to explain or justify.
Annex: Methodology

Figure 2: Devolved block grants per person vs. comparable spending in England, 2020/21

For every department with some devolved policy areas, we calculated how much of the department’s spending relates to various territorial combinations of the UK (e.g. England only, England and Wales, Great Britain etc.) using the tables on pages 51 to 73 in the Statement of funding policy, 2020. For example, BEIS had an allocation of £17bn in 2020/21, with £15.8bn covering the whole UK, £1.1bn covering England only, £63m covering Great Britain, and £45m covering England and Wales.

Using this, and ONS mid-year population figures for 2019, we calculated spending per person for each department for each nation. For example, BEIS spent £258.4 per person in England (£237.1 on UK-wide policy areas, and £21.4 on devolved policy areas), £238.8 in Wales, £238.1 in Scotland, and £237.1 in Northern Ireland. This meant that BEIS’s comparable spending on devolved policy areas was £19.6 per person in Wales, £20.4 in Scotland, and £21.4 in Northern Ireland.

Combining these figures for all departments, as well as for small and independent bodies (using figures on pages 46 and 50) gave us the figure for total comparable per person spending by the UK government on areas devolved to each of Scotland, Wales and Northern Ireland. This is then compared to the per-person value of the Barnett block grant in each nation, using figures on page 45 and ONS population figures.

Figure 8: Indicative comparison of spending per person vs. spending needs by nation and region

Our figures for relative spending in Scotland, Wales and Northern Ireland come from the analysis for Figure 2. The figures for relative spending needs come from the chart on page 139 of the Holtham Commission final report. Our indicative estimates of relative spending in each English region are based on trying to estimate how much is spent in each of these regions on the set of policy areas devolved to Wales, using figures in chapter 9 and 10 in HM Treasury’s Public Expenditure Statistical Analyses (PESA), which break down spending in the English regions according to the UN Classification of the Functions of Government (COFOG).

For each region, we counted in full spending on:

- Economic affairs: agriculture, fisheries and forestry
- Transport: national roads
- Transport: local roads
- Transport: local public transport
• Housing and community amenities
• Health
• Education
• Social protection: personal social services

We fully excluded spending on:
• General public services: international services
• Defence
• Public order and safety
• Economic affairs: science and technology
• Economic affairs: employment policies
• All social protection spending except personal social services

For ‘general public services: public and common services’ we calculated that roughly £19 per person was spent on UK government functions in each of Scotland, Wales and Northern Ireland, with the remainder spent on local or devolved government functions. For each English region, we therefore deducted £19 per person from the spending figure for ‘general public services: public and common services’ and counted the remaining spending as fully comparable.

For the remaining categories, we calculated comparability percentages based on the percentage of spending in the category that is devolved to Wales, using PESA table 9.21.

• For ‘economic affairs: enterprise and economic development’, we calculated a comparability percentage of 61%.
• For ‘environment protection’ we calculated a comparability percentage of 84%.
• For ‘recreation, culture and religion’ we calculated a comparability percentage of 76%.
• For ‘transport’, we assumed that the national roads, local roads and local public transport sub-categories were fully devolved, and that therefore UK government spending was concentrated within the railway and other transport sub-categories. For each of these sub-categories we calculated a comparability percentage of 25%.
For spending in each of these categories in each English region, we calculated the corresponding share of spending that is comparable with devolved spending in Wales, and included this in our total comparable spending for that region.

**Figure 11: Change in real terms per person spending on public services by UK nation**

These figures for health, education and public order and safety are based on data in chapter 10 of HM Treasury’s *Public Expenditure Statistical Analyses* (PESA) between 2015 and 2020, which breaks down identifiable spending in each nation by the categories and sub-categories outlined in the UN Classification of the Functions of Government (COFOG). Each publication includes five years of data, so for the cumulative percentage changes since 2010, we combined percentage change figures (in real terms, per person) from consecutive publications.

Our data for health is based on the corresponding COFOG category, and our data for pre-primary and primary education, secondary education, police, courts and prisons is based on the corresponding COFOG sub-categories. Our data for post-secondary education is based on combining the post-secondary non-tertiary education and tertiary education categories. Our figures for local government are based on data in PESA chapter 7. We exclude spending already counted under health, education or public order and safety from the totals, and further exclude housing benefit spending, which is non-discretionary spending administered by local government. This spending is then divided between spending that is on social protection (largely comprising of social care) and other local government spending.

**Figure 15: Hypothetical reallocation of funding by nation, based on population size or relative needs**

*Redistribution based on equal spending per person*

This is based on calculating ‘excess’ spending in each of the devolved nations, based on the extent devolved spending exceeds comparable spending in England (see methodology for Figure 8). For example, in Scotland, the block grant is worth £6,408 per person compared to £5,165 of comparable spending in England. This means that Scotland has £1,243 of excess spending per person above the English level, or £6.8bn in total. This, combined with £2.6bn excess spending in Wales and £2.5bn in Northern Ireland, amounts to a total of £12bn excess spending to be reallocated.

Total spending across the UK, on policy areas devolved in at least one country, was calculated to be £376bn. With £12bn of this excess spending to be reallocated, this results in a 3.3% uplift for the remaining £364bn (including for the devolved budgets, so the Scottish devolved spending is reduced by £1,243 to £5,165, but then increased by 3.3% to £5,334, representing a total spending reduction of around £900).
Redistribution based on socio-economic needs
Relative spending needs in each nation are based on the chart on page 139 of the Holtham Commission final report – Fairness and accountability: a new funding settlement for Wales, with relative needs 5.5%, 14.6% and 20.8% higher in Scotland, Wales and Northern Ireland respectively compared to England. Based on this, ‘excess spending’ is once again calculated, based on the extent to which devolved spending exceeds the amount it would be if it were based on comparable spending in England and applying the Holtham based needs-factor. For example, in Scotland, the block grant would be £5,449 per person if it were based on comparable spending in England (£5,165) and the Holtham needs-factor (5.5%). Actual spending per person exceeds this by £959 per person, or £5.2bn in total.

Across the three devolved nations, there was a total of £6.1bn of excess spending to be redistributed. This was then allocated to each nation based on both population share, and also the needs-based factor (so the amount reallocated to Scotland was £94 per person, 5.5% more than the £89 per person reallocated to England).
References

Summary


Introduction


2. Ibid.


1. How Barnett distributes resources across the UK


2. How the Barnett formula works in practice


13. Ibid.


Recommendations


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As ever, all errors and omissions are the responsibility of the authors.
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