



Northern Ireland
Fiscal Council

Bringing transparency to NI's public finances

Updated estimate of the relative need for public spending in Northern Ireland

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Foreword

The Northern Ireland Fiscal Council was established in 2021. It is chaired by Sir Robert Chote and the other members are Maureen O'Reilly, Professor Alan Barrett and Dr Esmond Birnie. Our aim is to bring greater transparency and independent scrutiny to the region's public finances, focusing on the finances of the NI Executive. In doing so we hope to inform both public debate and policy decisions to the benefit of everyone in NI.

Within this overall mission, our Terms of Reference require us to “*prepare [an] annual report on the sustainability of the Executive's public finances, including the implications of spending policy and the effectiveness of long-term efficiency measures*”.¹ We published our first such report in two parts – a general Sustainability Report and a special volume on sustainability in Health - on 7 and 27 September, respectively.²

In our first Sustainability Report we compared NI's need to long-term projections of the available funding. Informed by previous studies, none of them recent, we made a ballpark estimate of NI's need for additional expenditure to deliver public services of around 20 per cent higher than England. This report provides an up-to-date estimate of NI's need, using an established methodology developed by the Holtham Commission. We hope this will help inform public discussion.

Fiscal Council members are responsible for the content of the report, but we have relied on the hard work and expertise of our colleagues Jonathan McAdams, Karen Weir, Colin Pidgeon, Tamara Ferguson, Julie McIlhatton, Philippa Todd and Paul Montgomery. We are also very grateful for the input of officials from the original Holtham Commission team and other organisations including invaluable comments from the Treasury and Department of Finance. But this is an independent assessment. We have come under no pressure from NI Executive or UK Government Ministers, advisers or officials to include, exclude or change any material.

The report is structured as follows:

- Chapter 1 is an **executive summary**.
- Chapter 2 provides an **introduction to the concept of need** and to the Barnett formula funding.
- Chapter 3 summarises **previous estimates of need** in NI, including particularly the Holtham Commission's approach.
- Chapter 4 **updates Holtham's estimate of need** for NI, with minor methodological differences accounting for data and policy changes.
- Chapter 5 offers some **conclusions** from this work.

¹ <https://www.nifiscalcouncil.org/publications/initial-terms-reference>

² <https://www.nifiscalcouncil.org/publications/sustainability-report-2022> and <https://www.nifiscalcouncil.org/publications/sustainability-report-2022-special-focus-health>

1. Executive Summary

- Differences in population characteristics and socio-economic conditions mean that the cost of delivering the same standard of public services (in terms of a broadly similar level of outcomes) varies between the different parts of the UK, affecting the relative need for public spending.
- Previous studies have concluded that NI has a significantly higher need for public spending per head than the rest of the UK, but these are now long out of date.
- The purpose of this paper is to present an updated estimate of the relative need for public spending in NI compared with England based on the approach set out in the 2010 Final Report of the Independent Commission on Funding & Finance for Wales, also known as the Holtham Commission.
- Holtham used six indicators – including the old age dependency ratio and the age adjusted proportion of the population with limiting long-term illness – to derive an estimate of the overall need for public spending in each of the Devolved Administrations compared with England. It concluded that public spending needed to be 21 per cent higher per head in NI to deliver equivalent services to England.
- Updating the Holtham Commission analysis for the latest NI data and extending its scope to reflect the devolution of responsibility for policing and justice suggests that public spending in NI needs to be around 24 per cent higher than in England to deliver the same standard of public service – a relatively small change. The precise number depends on the particular assumptions and techniques used.
- Based on our updated calculation, the relative level of public spending in NI per head of population – 23 per cent above England in 2024-25 on current plans – is currently broadly in line with relative need. But this spending premium has fallen significantly in recent years (from 40 per cent as recently as 2018-19), in part because of cessation of time-limited funding packages for political agreements. This has contributed to the current pressures on NI departments.
- Following the Holtham report, the UK Government agreed to set a floor to the Welsh Government's Block Grant funding of 115 per cent of equivalent UK Government spending in England, in line with the Commission's estimate of relative need. The UK Government also agreed to provide a 5 per cent uplift to the 'Barnett consequentials' of increases in its spending to ensure that funding does not fall to this floor too quickly. Similar arrangements could be put in place for the NI Block Grant.

2. Introduction

When discussing the finances of the Northern Ireland (NI) Executive, one important focus tends to be on the amount of funding per head available relative to the rest of the UK. A recent example is the Secretary of State for NI's Written Ministerial Statement on the 2022-23 financial position which highlighted a calculation that the NI Executive Block Grant currently “...provides around 21 per cent more funding per head than equivalent UK Government spending in other parts of the UK”.³

But looking solely at relative funding levels ignores the additional costs of delivering the same standard of public services in NI as in the rest of the UK. The cost of delivering public services varies between areas due to differences in population characteristics and socio-economic conditions such as age structure, sparsity of population and deprivation. These affect the number of people receiving a public service and the cost of providing the service to each person – for example, it costs more to deliver school services in an area where schools are smaller, transport costs are higher and more children need extra support because of material deprivation.

Given the overwhelming importance of Block Grant funding and the NI Executive's relatively limited tax-raising and borrowing powers, the NI Fiscal Council has argued that fiscal sustainability in the NI context is “*best interpreted in terms of the sufficiency of the NI Executive's financing to deliver an equivalent quality and quantity of public services to that deliverable in England.*”⁴ The comparison of relative funding and relative need tends to be made at the Executive level because the provision for individual services depends on the Executive's prioritisation of the available funding as well as how efficiently and effectively the funding is deployed.

In our Sustainability Report 2022, we noted that previous studies have all concluded that the need for public spending in NI is significantly greater than in the rest of the UK. However, the most recent was more than a decade ago as part of the Final Report from the Independent Commission on Funding and Finance for Wales (the “Holtham Commission”), published in 2010.⁵

The Council therefore thought that it would be informative to examine whether changes over the past decade are likely to have had an impact on relative need. So this paper presents updated estimates of the relative need for public spending in NI compared with England based on the latest available data and the methodology adopted by the Holtham Commission. The results help set the current level and projected future trends in the NI Executive Block Grant in context.

³ <https://questions-statements.parliament.uk/written-statements/detail/2022-11-24/hcws385> This calculation of NI's relative funding level for the last financial year includes income from Business Rates but not additional funding received outside of the Barnett formula at the 2021 Spending Review or additional Block Grant allocations received over the course of the financial year – including the Reserve Claim of £297 million. When these are included, the NI premium rises to 31 per cent. The Reserve claim, however, must be repaid this financial year.

⁴ For a full discussion of sustainability in the UK and NI contexts, see Chapter 3 of NIFC Sustainability Report 2022 <https://www.nifiscouncil.org/publications/sustainability-report-2022>

⁵ Independent Commission on Funding & Finance for Wales Final report <https://www.gov.wales/sites/default/files/publications/2018-10/fairness-and-accountability.pdf>

Background

The broadest standpoint from which to compare public spending per head in NI with other parts of the UK is to look at the Treasury's estimates of 'identifiable' spending, namely that which specifically benefits the residents of a given nation or region. This includes spending by the UK Government and local councils in NI, as well as by the Executive. But it excludes spending on areas like foreign policy which benefits NI as part of the UK as a whole.

The Barnett formula determines additions or subtractions to NI's Block Grant funding with respect to spending in England, so it is NI's spending and need as compared to England that is particularly relevant for this report. Chart 2.1 shows the premium of UK spending per head in NI over England on this basis. The figures for 1985-86 onwards come from the Treasury's Public Expenditure Statistical Analysis (PESA) dataset, but those for 1959-60 to 1977-78 come from a Treasury-led study completed in 1979 and may not therefore be directly comparable.

The earlier Treasury figures show that public spending per head was lower in NI than in England in the late 1950s, but then rose well above it by the late 1970s. The later figures show the premium on a declining trend from the late 1980s onwards, but with spending per head still significantly higher than in England at the end.

The rise in spending per head relative to England in the earlier period is much more marked for NI than for Scotland or Wales. The Treasury analysis said that "no systematic record exists of the reasons for these relationships", but the substantial increase in the premium during the 1970s and early 1980s presumably in part reflects the direct and indirect cost of the Troubles and relatively high unemployment. The decline in the premium over the latter period largely reflects the operation of the Barnett formula, introduced in 1979, under which increases in UK Government spending outside NI on areas for which the Executive is responsible in NI lead to equivalent cash per head of population (but not percentage) increases in the Block Grant. With spending initially higher in NI, this means that the premium remains broadly constant in cash terms but falls steadily in percentage terms.⁶

⁶ Further detail on the operation the Barnett formula is set out in the NIFC Sustainability Report 2022 <https://www.nifiscouncil.org/publications/sustainability-report-2022>

Chart 2.1 - NI Public Spending premium per head compared with England.



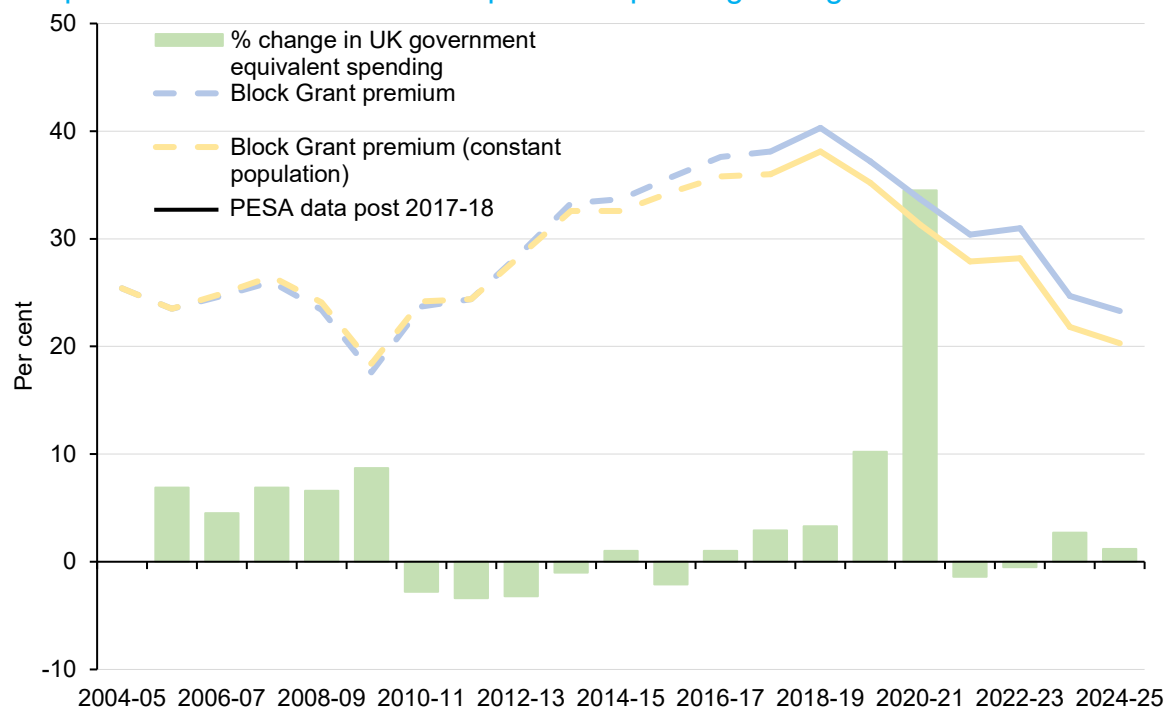
Source: HM Treasury PESA & 1979 Needs Assessment

Chart 2.2 compares the level of the NI Block Grant per head with the level of equivalent UK Government spending in England. It shows a different, narrower and more indirect measure of the NI spending premium, focused on those areas for which the Executive is directly responsible. Consistent with the Secretary of State's statement, it compares the level of the NI Block Grant per head with the level of equivalent UK Government spending in England. The NI Block Grant pays most of the day-to-day cost of public services and administration in NI, as well as debt interest and capital spending. So this comparison focuses on spending by the Executive in NI rather than by the UK Government or councils and that which is funded by the Block Grant rather than the Regional Rates or capital borrowing. So it also excludes spending on pensions and social security benefits, which the Executive is responsible for in NI but which the UK Government finances fully and automatically unless the Executive chooses to be more generous.

On this basis, the premium of funding/spending per head in NI over England was around 40 per cent as recently as 2018-19. In our first Sustainability Report,⁷ we projected that the Barnett formula would shrink this premium to 25 per cent in 2024-25, to 20 per cent by 2030-31 and to 6 per cent by 2071-72.

⁷ <https://www.nifiscalcouncil.org/publications/sustainability-report-2022>

Chart 2.2 - NI Block Grant (excluding depreciation and impairments) premium compared with UK Government equivalent spending in England.



Source: HM Treasury PESA, NIFC calculations

The Treasury noted in its 1979 study that: “It is a long-established principle that all areas of the UK are entitled to broadly the same level of public services and the expenditure on them should be allocated according to their relative needs”. But ever since NI was first established in 1921 there have been ongoing debates with the UK Government over the funding necessary to satisfy this ‘parity principle’.⁸

Parity does not mean that the same quality and quantity of service would necessarily be provided for each individual service, as this will depend on the relative priorities of the NI Executive and the UK Government. For example, the decision by successive Executives not to introduce water charges for domestic customers in NI reduces the funding available for other public services.⁹ The relative standard of services received will of course reflect not just the amount of funding received but the efficiency and effectiveness with which it is spent.

If one wishes to apply the parity principle to the NI’s Block Grant funding in a rigorous way, it is necessary to estimate the relative need for public spending in NI compared to England to assess whether the available funding is sufficient to deliver the same standard of public services, all other things being equal.

⁸ <https://commonslibrary.parliament.uk/the-barnett-formula-a-quick-guide/>

⁹ For a full discussion of super parity and sub-parity measures, see Chapter 5 of the NIFC comprehensive guide to NI public finances <https://www.nifiscouncil.org/publications/public-finances-ni-comprehensive-guide-november-2021>

3. Previous estimates of relative need for public spending in NI

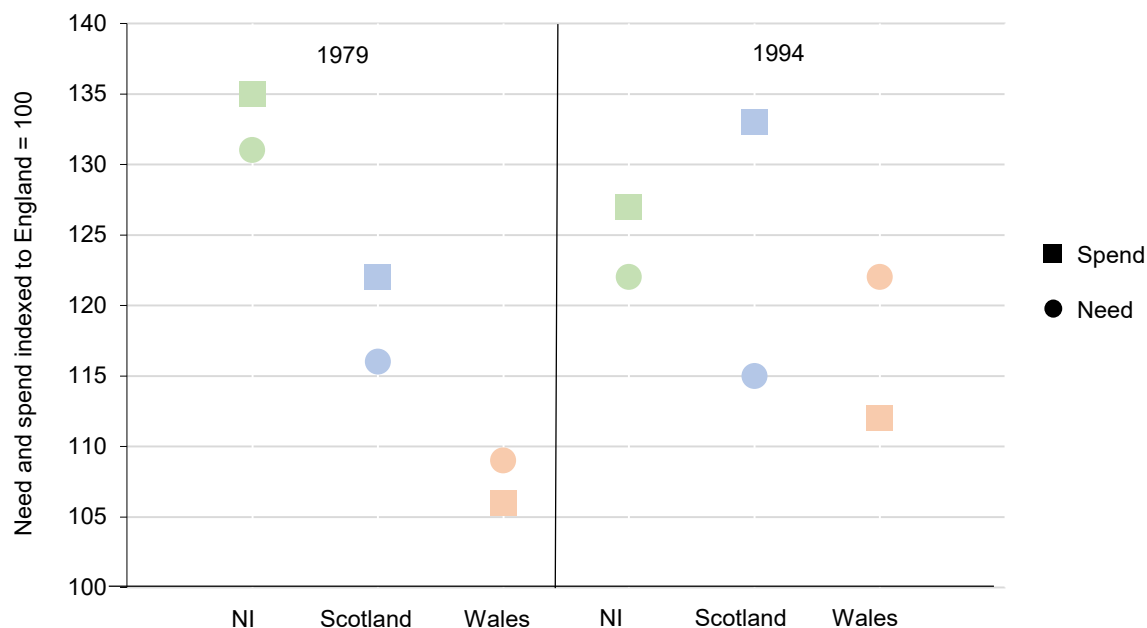
Various studies have been undertaken to assess the relative need for spending on public services in the Devolved Administrations. As referred to above (as the basis for Chart 2.1), the first official systematic Needs Assessment Study (NAS) was conducted in 1978-79 by an inter-departmental group co-ordinated by Treasury. The group developed a methodology and then applied it to six spending programmes: health and personal social services; education and libraries (excluding universities); housing; environmental services; roads and transport (excluding railways); and law, order and protective services (excluding police).¹⁰

The results were presented by showing the percentage (or proportion) of spending per head of population in England required in each region/nation to deliver the same quantity and quality of service, assuming similar policies. So a relative need of 110 would imply that a region requires 10 per cent more funding per head to deliver the same services as in England. Under this exercise, the overall need indicator for NI was estimated as 131, compared with 116 for Scotland and 109 for Wales.

The Treasury updated the analysis in 1993 with the relative need in NI estimated to have fallen to 122 in part due to technical methodological changes. Relative actual spending had fallen by a similar amount but remained above estimated need, as shown in Chart 3.1. The model included many different indicators with judgements made on the weight afforded to each indicator as well as the strength of the relationship with need.

¹⁰ <https://publications.parliament.uk/pa/ld200809/ldselect/ldbarnett/139/13907.htm#n25> (paragraph 28)

Chart 3.1 – Spending versus estimated relative need from HM Treasury Needs Assessment Studies (NAS)¹¹



Source: House of Lords Select Committee on the Barnett Formula, First report (Table 5)

The Treasury’s estimates of relative need in NI were lower than some unofficial estimates which suggested that the level of public spending in NI was broadly in line with relative need.¹² For example, the Northern Ireland Economic Council estimated that unadjusted public spending in NI was 36 per cent higher than in Great Britain on average between 1980-81 and 1985-86 but that adjusting for need the average premium fell to 0.5 per cent.¹³

In 2001 and 2002 the NI Executive departments updated and reviewed the Treasury-led methodology as well as extending its coverage to include almost all public spending (apart from Justice, responsibility for which was not devolved at that time). This resulted in a higher overall need indicator for NI of 125. By far the highest level of relative need was estimated for Agriculture at 342, compared with, for example, 133 for Schools and 117 for Health and Personal Social Services.

A 2003 paper by Professor Iain McLean proposed the use of the inverse of relative GDP per head as a way to set the Block Grant in line with relative need.¹⁴ Over the past 20 years NI Gross Value Added per head of population in NI has ranged between 74 and 80 per cent of that in England which implies a relative need for public spending of 125-135¹⁵, broadly in line with previous estimates.¹⁶

¹¹ House of Lords - Select Committee on the Barnett Formula

<https://publications.parliament.uk/pa/ld200809/ldselect/ldbarnett/139/13907.htm#note24>

¹² Canning, Moore and Rhodes (1987) Economic growth in Northern Ireland: problems and prospects in Teague (ed), *Beyond the Rhetoric, Politics, the Economy and Social Policy in Northern Ireland*

¹³ Northern Ireland Economic Council (1981) *Public Expenditure Comparisons Between Northern Ireland and Great Britain*

¹⁴ *The Distribution of Public Expenditure across the UK Regions*, McClean I and McMillan A, Fiscal Studies (2003)

¹⁵ <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalregionalgrossvalueaddedbalancedperheadandincomecomponents>

¹⁶ <https://publications.parliament.uk/pa/cm200102/cmselect/cmtreasy/1047/2070305.htm>

In 2009, the House of Lords Select Committee on the Barnett Formula published its First Report. It presented several indicators of need (as set out in Table B.1 in Appendix B) and recommended that any needs assessment should consider the age structure of the population; low income; ill-health and disability; and economic weakness. The Committee did not calculate an overall need indicator for each Administration but concluded that England had lower need for spending than Scotland, which in turn had lower need for spending than Wales and NI.

In 2010, the Final Report from the Holtham Commission, charged with reviewing the Welsh Assembly's funding and to consider further devolution of fiscal powers, included a recommendation that the Welsh Government should seek the introduction of a simple needs-based formula as the means of determining changes to the Welsh Block Grant.¹⁷ Although the Holtham Commission was focused on Wales, it estimated a relative need of 121 for NI compared with 105 for Scotland and 115 for Wales. The estimates for NI and Scotland were referred to as "broadly indicative" because the analysis did not include policing and justice which were not devolved to Wales and therefore not included in the analysis. As set out below, including them would be expected to increase the overall estimate of need for NI. The estimates of relative need were based on the analysis set out in the 2009 Working Paper, *Replacing Barnett with a needs-based formula*.¹⁸

Based on the studies described above, the NI Fiscal Council concluded in its 2022 Sustainability Report that it did not appear unreasonable to assume that the relative need for spending in NI is about 20 per cent above that in England. Our projections suggest that the NI Block Grant premium would fall below this level by 2030-31 if no further action was taken.¹⁹

Holtham Approach

Although most indicators of relative need would not be expected to change significantly over time it is important to consider the most up to date position possible. We have chosen to update the Holtham Commission estimate because it involves a simple model but provides a rigorous measure of overall need that has been used as the basis of the additional needs adjustment for calculating the changes to the Block Grant funding for the Welsh Government. The Holtham Commission methodology is first reviewed before the analysis is updated using the latest available data.

Following the recommendation in its first report that the Barnett formula should be replaced, the Holtham Commission derived a needs-based formula as part of its final report. This was based on the principles of simplicity and completeness with a small number of needs indicators covering demographics, deprivation, and costs. These indicators were available on a consistent basis across the UK. The Commission was of the view that the indicators used should be measurable to a high degree of accuracy and subject to periodic review with the Commission preferring census data where possible. On this basis the indicators set out in Table 3.1 were chosen. The combined benefit rate indicator measure, as a proxy for deprivation, was based on

¹⁷ <https://www.gov.wales/sites/default/files/publications/2018-10/fairness-and-accountability.pdf> Chapter 3

¹⁸ <https://www.gov.wales/sites/default/files/publications/2018-10/working-paper.pdf>

¹⁹ <https://www.nifiscalcouncil.org/files/nifiscalcouncil/documents/2023-01/NIFC%20Technical%20Paper%2001-23-%20Long-term%20projections%20of%20the%20NI%20Executive%20Block%20Grant%20-%20web%20version%2012.01.23.pdf> Chart 7

Previous estimates of relative need for public spending in NI

the number of key working age benefit claimants plus children in out of work families claiming tax credits plus guarantee-only pension credit claimants.

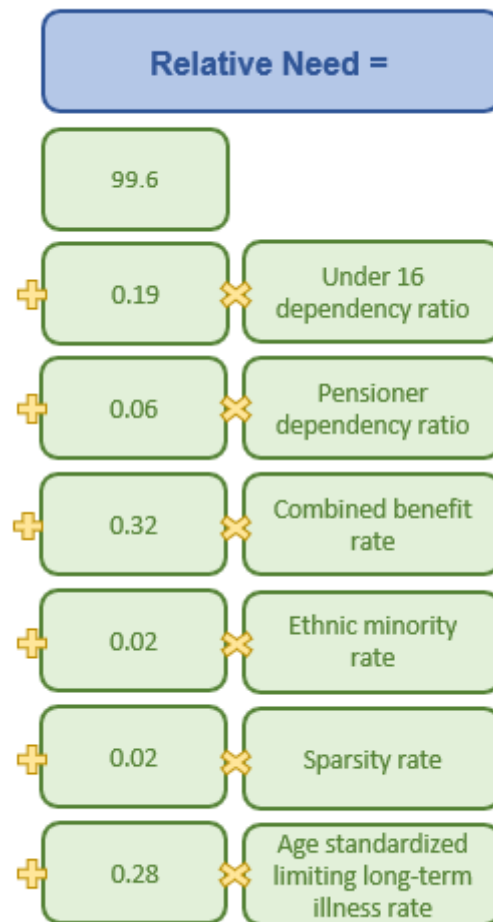
Table 3.1 - Summary of Holtham Commission need indicators

	Need Indicator	Description of variable	Data Source
Demographics indicator 1	Number of children	Under 16 dependency ratio	Mid-year estimates (2008)
Demographics indicator 2	Number of older people	Retired persons dependency ratio	Mid-year estimates (2008)
Demographics indicator 3	Ethnicity	Percentage of the population that is from a black or minority ethnic group	Census (2001)
Deprivation indicator 1	Combined benefit rate (Income poverty)	Percentage of the population claiming income-related benefits	DWP benefits database (2008)
Deprivation indicator 2	Ill health	Age standardised percentage of the population with a long-term limiting illness	Census (2001)
Cost indicator 1	Sparsity	Proportion of people living outside settlements of 10,000 people or more	Census (2001)

Source: Independent Commission on Funding & Finance for Wales

To weight the six need indicators, regression analysis was used to estimate their relationship with past budgetary allocations for health, education, local government, Sure Start and Supporting People. Although much fewer in number than in the Treasury's NAS model, the six need indicators explained over 95 per cent of the variation in spending across the sub-regions of Wales, Scotland and England. The coefficients from the regression analysis provided the weights for each indicator in calculating the overall level of need as set out in Figure 1 below. It shows that the combined benefit rate and the age standardised percentage of the population with a limiting long-term illness have the largest weights in the formula suggesting these variables have the greatest influence on relative need.

Figure 3.1 - Holtham Commission formula for calculating relative need in the Devolved Administrations (England =100)



The Holtham Commission did not intend the analysis to be the final word on how a needs-based model would operate, but the results formed the basis of the funding floor for Welsh Government funding per head agreed in the 2016 fiscal framework agreement with the UK Government.²⁰ This funding floor remains in place as set out in the 2021 version of the Treasury’s Statement of Funding Policy.²¹

Replicating Holtham’s original estimate of NI Need

The Holtham Commission applied NI values for each need indicator to the formula above which resulted in an overall need indicator of 121 compared with England. As noted, it warned that the estimate should only be considered broadly indicative because the analysis did not include policing and justice, as this function was not devolved to the Welsh Government. In addition, the regression analysis did not include data for NI, but this would not make a material difference to the overall results due to NI’s small size.

²⁰<https://www.gov.wales/sites/default/files/publications/2018-11/agreement-on-welsh-government-fiscal-framework.pdf>

²¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1137609/Statement_of_Funding_Policy_update_Feb_2023.pdf (Paragraph 3.21)

Previous estimates of relative need for public spending in NI

In seeking to update the Holtham Commission analysis, our first step was to attempt to replicate the analysis from the 2009 Working Paper as set out in Table 3.2 below. Using this approach the overall estimate of need of 122 in Table 3.2 is only marginally higher than the Holtham Commission estimate of 121. This reworked estimate shows that although NI has a lower level of estimated need in respect of the pensioner dependency ratio and the proportion of the population who are from an ethnic minority, this is more than offset by the other indicators, particularly sparsity and the combined benefit rate. The main drivers of the scale of the higher relative need in NI are the combined benefit rate and the age standardised long term illness rate reflecting the weights set out in Figure 1. The latter is higher than implied by the unadjusted average (114) because it increases with age and NI has a relatively young population.

Table 3.2 - Estimate of relative need for public spending in NI based on Holtham Report (2009)

	Need Indicator (England =100)	Weight	(Need indicator-100) * weight
Under 16 Dependency Ratio	115	0.19	3
Pensioner Dependency Ratio	87	0.06	-1
Combined Benefit Rate	141	0.32	13
Ethnicity	8	0.02	-2
Sparsity	205	0.02	3
Limiting long term illness	125	0.28	7
Total			122
Holtham Report			121

Source: Independent Commission on Funding & Finance for Wales

The working age benefits included as part of the combined benefit rate indicator were the Employment & Support Allowance (ESA), Income Support (IS), and Job Seekers Allowance (JSA).

4. Updating Holtham's estimate of NI need

Having been able to come reasonably close to the original Holtham Commission figures for 2010, we have produced an updated estimate of the relative need for public spending in NI using the most recent data for each of the indicators while using the same GB weights as deployed by the Commission.

Under 16 dependency ratio (Census 2021)

Between 2008 and 2021 the population aged 16 and under in England increased by 8 per cent compared with only 2 per cent in NI. As a result, the under 16 dependency ratio has increased at a faster rate in England reducing the NI value for this need indicator from 115 to 111.

Pensioner dependency ratio (Census 2021)

In contrast, the number of people aged 65 and over increased at a faster rate in NI (31 per cent) than England (25 per cent) between 2008 and 2021 with the indicator amended to exclude females aged between 60 and 64. The net result is that the value of this need indicator has increased from 87 to 94.

Combined benefit rate (DWP and DfC Benefit Statistics May 2022 and HMRC Tax Credit Statistics 2020-21)

The combined benefit rate indicator was updated to May 2022 for the working age benefits with Universal Credit claimants now included, representing 60 per cent of the total for England and 38 per cent for NI. Overall, the combined number of benefit claimants was equivalent to just under one fifth of the NI population, representing an increase on 2008. However, there was a larger increase for England reducing the need indicator from 141 to 135.

Ethnicity (Census 2021)

The proportion of the NI population stating that they were not white increased from 0.8 per cent in the 2001 Census to 3.4 per cent in the 2021 Census. However, this was still substantially lower than the rate for England (19.0 per cent) with the result that the associated need indicator increased from 8 in 2001 to a still low value of 18.

Sparsity (Census 2011)

The proportion of the NI population living in a rural area fell from 39.7 per cent to 36.5 per cent between 2001 and 2011. However, there was a greater rate of decline in England with the result that the associated need indicator increased from 205 to 213.

Limiting long term illness (Census 2011)

Respondents to the 2001 Census were asked if they had a limiting long-term illness, but in the 2011 Census they were asked if they had a long-term health problem which limited day to day activities a little or a lot. This change in terminology did not have a significant impact with the value for this need indicator, which was unchanged at 125. More recent figures on ill health are available from the 2021 Census, but unfortunately they are not comparable between NI and England.

Table 4.1 - Updated estimate of relative need for public spending in NI

	Weight	Need indicator (England = 100) (Holtham 2009)	Need indicator (England = 100) (Updated NIFC)	Change in need indicator
Under 16 Dependency Ratio	0.19	115	111	-4
Pensioner Dependency Ratio	0.06	87	94	7
Combined Benefit rate	0.32	141	135	-6
Ethnicity	0.02	8	18	10
Sparsity	0.02	205	213	8
Limiting long term illness	0.28	125	125	0
Overall need indicator¹		121	120	-1
Policing and Justice	0.08		149	
Total including Policing and Justice			124	

Note¹: Overall need is calculated using the Holtham Commission formula shown in Figure 3.2

Source: Independent Commission on Funding & Finance for Wales, other various sources and NIFC calculations

Table 4.1 shows that the overall need indicator for NI has fallen to 120 due to a reduction in the combined benefit rate indicator and the under 16 dependency ratio indicator. The former appears primarily to be due to the inclusion of Universal Credit claimants, although the transition from other forms of benefit distorts the comparisons by individual benefit.

In presenting its findings the Holtham Commission warned that the overall estimates for Scotland and NI were only broadly indicative because they did not include policing and justice. It seems reasonable to assume that the distinct challenges associated with the security situation in NI require higher spending per head in this area than elsewhere in the UK, but this is hard to quantify precisely. In his evidence to the House of Lords Select Committee on the Barnett Formula, Lord Barnett highlighted policing in NI as an example of a function requiring special needs.²²

We have used the average level of spending per head on Police Services, Prisons and Law Courts in NI between 2017-18 and 2021-22 (£636) to derive a relative need indicator of 149,²³ compared with a need indicator of 183 if the same figures for 2011-12 to 2015-16 were used instead.²⁴ Weighted by total DEL spending for the Home Office, Ministry of Justice and Law Officers' Departments as a proportion of total UK Government equivalent spending over the same period (7.6 per cent²⁵), this suggests that the inclusion of policing and justice powers in the Holtham analysis would increase the overall relative need for public spending in NI from 120 to 124.

Sensitivity Analysis

The analysis set out above is based on latest available information and adhering to the Holtham Commission approach as closely as possible. But it is important to consider the potential impact of different assumptions and indicators.

²²<https://publications.parliament.uk/pa/ld200809/ldselect/ldbarnett/139/9012804.htm> Q57 and Q59

²³ Outturn Figures for 2021-22 from <https://www.gov.uk/government/statistics/country-and-regional-analysis-2022#:~:text=The%20Country%20and%20Regional%20Analysis,%2D18%20to%202022%2D22> (Tables B.5 and B.8)

²⁴ <https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2017>

²⁵ Data for 2021-22 from PESA 2022 (Table 1.10) with comparability adjustment made to spending for Whitehall departments to reflect transferred functions in order to derive UK government equivalent spending.

Health & Social Care - needs assessment

The indicator based on limiting long- term illness of 125 in Table 4.1 is higher than the estimate previously made by Professor John Appleby of 109 in 2011 regarding the overall need for Health & Social Care (HSC) spending in NI compared with England.²⁶ The values are different because limiting long-term illness reflects only one self-reported aspect of ill-health whereas the estimates made by Professor Appleby have broader scope involving the weighted average of a range of indicators of the relative need for health and social care spending. As part of the NIFC 2022 Sustainability Report on Health, Professor Appleby confirmed that in his view there was little to suggest that this estimate will have changed.²⁷ Replacing 125 with 109 for this need indicator would result in the overall need indicator falling from 124 to 119.

Benefit Income

The combined benefit rate indicator is based on the number of claimants. This does not take into account the potential for greater severity of need between claimants as reflected in the amount of benefit received. An alternative would be to use the average income per household from benefits from the 2021 edition of the ONS dataset *Effects of taxes and benefits on household income*.²⁸ These data imply that the average level of working age benefits received by NI households minus the state pension was £5,732 in 2020-21 (12.3 per cent of total/final income) compared with £3,524 for England (6.7 per cent). Adjusting for the larger number of persons per household in NI results in a benefit need indicator of 150 and an overall need indicator of 129.

Equal weight for each indicator

The weights used in calculating the overall need indicator are based on regression analysis. While there is nothing to suggest that any of the weights are too high or too low, it is good to see what the impact would be if a different set of weights was used instead. The simplest approach is to assume the same weight for each individual need indicator. This would reduce the overall need indicator to 118.

Population density

The population sparsity need indicator used in Table 4.1 is based on different approaches for England and NI in calculating the population living in an urban area. More up to date and comparable data is available on population density as measured by the number of people per square kilometre; this was 137 in NI in 2020 compared with 434 for England. This implies a population density indicator of 317 and an overall need indicator of 126.

²⁶<https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/appleby-report-2011.pdf> Page 29

²⁷<https://www.nifiscalcouncil.org/publications/sustainability-report-2022-special-focus-health> (Table 4.5)

²⁸<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/theeffectsoftaxesandbenefitsonhouseholdincomefinancialyearending2014> (Table 17)

Table 4.2 - Impact on overall estimate of need in NI under different assumptions

Assumption	NI need	Change from baseline
Baseline	124	0
Use Appleby estimate of need for HSC rather than LLI	119	-5
Use benefit income rather than claimants	129	5
Equal weight for all indicators	118	-6
Use overall population density for sparsity indicator	126	2

Source: Various and NIFC calculations

Table 4.2 summarises the results from the sensitivity analysis with changes in the assumptions resulting in the NI overall need indicator ranging from 118 to 129.

Other issues

Variations in taxable capacity

This paper focuses on the Block Grant, but the Holtham Commission argued that “the needs-based funding regime for the devolved administrations should assess variations in the ability of each nation to raise its own resources in a consistent way”.²⁹ The Commission suggested that the ability of the Devolved Administrations to raise resources (i.e. taxable capacity) should be estimated based on relative property prices, which could be incorporated into a needs formula. It argued that adjusting for taxable capacity based on relative house prices would increase the relative level of need for NI from 121 to 124 in 2011. The Commission said that: “In our view, a strong case could be made that such an adjustment gives a purer estimate of relative need than is obtained by basing the analysis on unadjusted expenditure data”.

House prices in NI are currently 56-67 per cent of those in England³⁰ compared with the level of Domestic (Regional and District) Rates revenue per head of population which have been on average 71 per cent of Council Tax in England over the past 10 years.³¹ The relationship between house prices and Council Tax payments in England suggests that households in NI could, under similar policies as in England, be expected to contribute roughly 85 per cent of the average for England, although the differences in the systems and the complexity of the property market means that any comparison between Council Tax in England and the Rates in NI should be treated with caution. We estimate that adjusting for taxable capacity would increase the NI need indicator from 124 to 127, in line with the scale of the increase previously estimated by the Holtham Commission.³²

It is worth noting that there is significant variation in the average Council Tax payment per dwelling between local authorities in England (Chart 4.1). Although the average level of the domestic rates bill in NI is towards the bottom of the range in England, the NI average of £1,036 is not significantly different from that in Liverpool (£1,051), Sunderland (£976) or Manchester (£958).

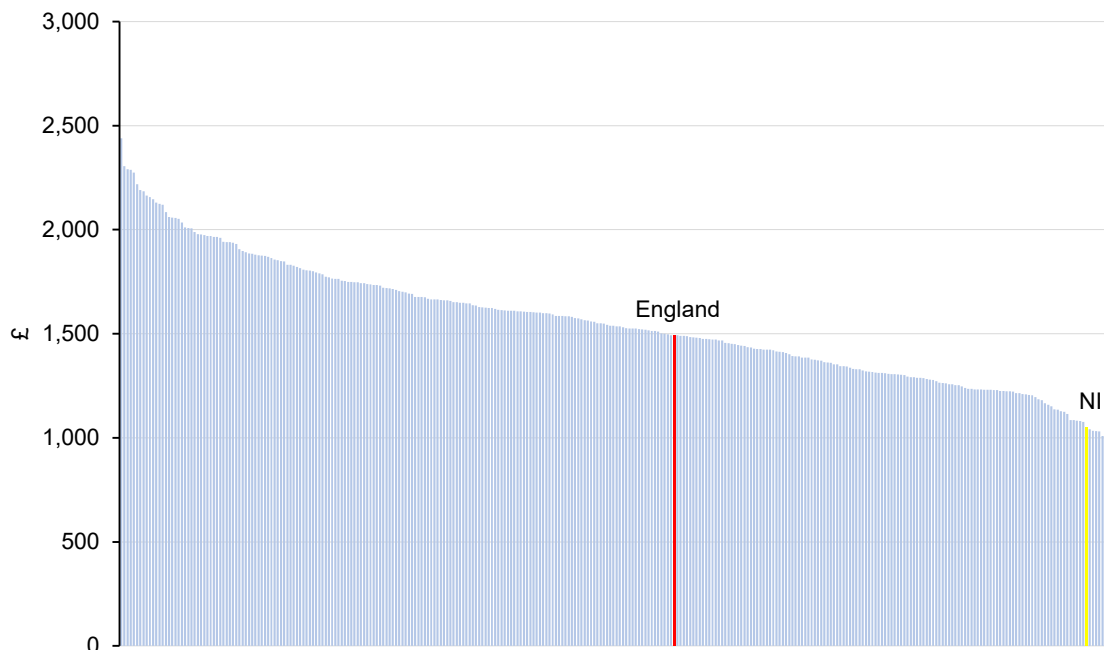
²⁹ <https://www.gov.wales/sites/default/files/publications/2018-10/working-paper.pdf> Paragraphs A9- A11

³⁰ <https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/housepriceindex/september2022>
<https://www.nationwidehousepriceindex.co.uk/reports/annual-house-price-growth-slows-to-single-digits-in-september>

³¹ <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/datasets/countryandregionalpublicsectorfinancesrevenueables>

³² The difference between 85 per cent and 123 per cent of Council Tax per head of population in England in 2019-20 multiplied by the NI population is equivalent to approximately 3 per cent of the NI Executive Block Grant in that year.

Chart 4.1 – Comparison of NI domestic rates bills to those of English regions 2022-23



Source: GOV.UK, Department for Levelling Up, Housing and Communities (DLUHC)

Minority language

The Holtham Commission suggested that that Welsh residents whose first language is Welsh could be added into the ethnic minority variable which would increase the Welsh need from 115 to 116. The results of the 2021 Census indicate that just under 6,000 people in NI have Irish as their first language. Including these with the 65,600 people within a minority ethnic group would increase the ethnicity need indicator from 18 to 20 but would not change the overall need indicator for NI.

Further work

The Hotham Commission recognised that other proxy indicators could be deployed in calculating the relative need for public spending, but it did not believe that this would result in a radically different set of results. Although it was proposed that the needs adjustment would be amended at each Spending Review, no reviews have been made public (although it is possible that some have been carried out internally).

In producing the analysis set out above, we have made a number of assumptions and pragmatic choices. The main scope for improvement we see would be in respect of the indicators for sparsity, long-term illness and the combined benefit rate as well as updating the weights used in combining the individual indicators into an overall estimate of relative need. However, none of the results appear counterintuitive and we would not expect further analysis to result in a fundamentally different outcome to that set out above i.e. that the relative need for public spending in NI is around one fifth to one quarter higher than in England.

At the same time, during the process of replicating and updating the Holtham Commission analysis it was evident that minor changes in inputs can noticeably affect the overall estimate of relative need.

Updating Holtham's estimate of NI need

Now that relative funding appears to have fallen roughly to the level of relative need in NI the Council believes there would be value in closer monitoring of the relationship between funding and need. For example, the NI Department of Finance and the UK Treasury could agree and publish regular estimates of the relative need for public spending in NI, with the potential to produce more disaggregated estimates for each department to inform discussions as part of each budget process. The publication by Treasury of relative funding per head data in the Block Grant Transparency dataset Explanatory Notes³³ has already improved understanding of the NI public finances. This would be further enhanced if future versions of the publication included comparisons of relative need as well as relative funding.

³³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040846/BGT_Explanatory_note_HMT_template_.pdf

5. Conclusions

Debate on the NI public finances often involves arguments that there is a need for additional funding for a particular service/organisation/department in NI with dire consequences if it is not forthcoming, alongside counter-arguments that the NI Executive already receives substantially more funding from the UK Government than the rest of the UK and that NI departments need to improve their use of resources. This Report seeks to move this debate forward by providing an updated estimate of the relative need for public spending in NI to compare with the relative funding.

In common with the other Devolved Administrations, NI receives significantly more funding per head of population from the UK Government than in England. However, the funding premia for Devolved Administrations are in part justified by a higher need for public spending – as the UK Government has long accepted – and have in any case been falling rapidly in recent years due to the operation of the Barnett formula. Although the NI funding premium rose during the 2010s due to the impact of reduced UK Government spending and time limited funding support, the Barnett Squeeze will soon result in the premium falling below relative need.

In response to this threat in Wales, the Holtham Commission recommended that the Barnett formula should be amended to include an adjustment for relative need, based first on a transitional rate to close the gap between current relative funding and current relative need. The Commission proposed that the Barnett formula adjustments should apply to all three Devolved Administrations, but so far it has only been implemented for Wales with a transitional uplift of 5 per cent applied to Block Grant increases until relative funding reaches the floor of 115.

The analysis set out here suggests that while the values for individual need indicators will have changed since the Holtham Commission conducted its analysis in 2009, the overall result for NI is a small (and probably statistically insignificant) reduction in the need indicator from 121 to 120. However, the Holtham Commission analysis did not include policing and justice which would increase the need indicator to 124. This seems the most relevant comparator for our purposes, although we note that if taxable capacity is included (as Holtham suggested), this would result in a further uplift to 127.

Taking all this into account suggests that the relative need for spending by NI departments is 20-25 per cent higher than England. The 24 per cent figure is in line with the current Block Grant premium, including temporary non-Barnett allocations. However, the Block Grant funding premium has fallen rapidly in recent years from 40 per cent higher than UK Government equivalent spending in 2018-19, in part due to the expiry of previous funding packages linked to political agreements.

Although the estimate of relative need implies that the funding premium was previously higher than required, the pace of the decline has contributed to the funding pressures experienced by NI departments in 2022-23 which are expected to continue in 2023-24 and 2024-25 as set out in the 2022-25 Council's Budget report.³⁴ To avoid this situation in Wales, the Treasury agreed in 2015 that a

³⁴ <https://www.nifiscalcouncil.org/publications/ni-executives-2022-25-draft-budget-assessment>

Conclusions

transitional rate would be applied to allow the Welsh Government funding premium to fall to the level of relative need, but in a phased way that could be better managed.

It could therefore be argued that a needs adjustment would ideally have been put in place already for NI Executive funding, starting as part of the 2021 Spending Review. On that argument, the higher level of relative need for NI compared with Wales suggests that either a higher transitional rate or the full needs adjustment should have been applied. Table 5.1 shows that this would have resulted in roughly £500-1,400 million in additional Block Grant funding over the 2021 Spending Review period depending on the needs adjustment, including £134-362 million in 2022-23. The table illustrates four scenarios:

- A needs adjustment of 10 per cent (Wales has a 5 per cent adjustment and NI's need is higher than that in Wales).
- 20 per cent, reflecting our update of Holtham (i.e. excluding policing and justice).
- 24 per cent, which includes our update of Holtham plus policing and justice.
- 27 per cent, which includes the update of Holtham, policing and justice, and taxable capacity (a recommendation of the Holtham Commission).

A small proportion of the funding under the 27 per cent needs adjustment would be in respect of the District Council element of Domestic Rates leaving up to around £340 million in additional funding for NI departments. This is broadly of the same scale as the Reserve claim made last financial year (£297 million) to avoid an overspend against the NI Executive Block Grant. The Reserve claim remains to be repaid in 2023-24 when the financial position is expected to be more challenging than last year.

Table 5.1 - Impact on 2021 Spending Review Barnett consequentials of additional needs adjustment

£ million	2022-23	2023-24	2024-25	Total
Barnett consequentials (actual)	1,341	1,796	1,907	5,044
Additional consequentials from needs adjustment				
10 per cent	134	180	191	504
20 per cent	268	359	381	1,009
24 per cent	322	431	458	1,211
27 per cent	362	485	515	1,362

Source: NIFC calculations

Appendix A – Funding arrangements for the NI Government and the principle of parity

Based on the House of Commons Library Briefing Paper, Parliament and Northern Ireland 1921-2021, (December 2021), David Torrance, unless otherwise stated.³⁵

As highlighted by the former Chief Economic Adviser to the Northern Ireland Civil Service, Victor Hewitt, “[S]ince the creation of Northern Ireland in the 1920s the desire for parity with Great Britain in the provision of public services has been the most powerful influence on the growth of the public sector.”³⁶

The Government of Ireland Act 1920³⁷ partitioned the island of Ireland leading to the creation of Northern Ireland (NI) in 1921. Under Sections 21-25 of the Act the fiscal powers of the NI Parliament were severely restricted as the power to levy income tax, corporation tax and customs and excise duties was reserved to the UK Parliament, although relief could be provided from income tax. The NI Exchequer was to receive its share of the revenue from reserved taxes each year minus the Imperial Contribution (for National Debt, Military and Civil (Civil List, Foreign Office etc) Expenditure) and the net cost of providing reserved services in NI. In effect NI was to be financially self-sufficient while contributing to the services provided by the UK government, in line with the views of the first NI Minister of Finance, Hugh Pollock.³⁸ The amount of reserved taxes attributable to NI and the Imperial Contribution each year were to be determined by a Joint Exchequer Board comprised of representatives from the UK Treasury and the NI Ministry of Finance.

However, from the outset the weakness of the NI economy meant that financial self-sufficiency was not sustainable with a series of ad hoc funding arrangements put in place outside the scope of the Government of Ireland Act. In 1923 the UK Government established a Northern Ireland Special Arbitration Committee chaired by Lord Colwyn to examine whether any change was required to the scale of the Imperial Contribution.

Instead of being the first call on the NI share of reserved taxes the Colwyn Committee recommended that the Imperial Contribution be based on the cost of maintaining non-imperial services at a standard not exceeding that in Great Britain. The initial level of spending per head of population in NI was set at £5.00 compared with £3.90 for Great Britain implying a relative need factor of 128 with the levels of spending per head in NI increased in line with Great Britain (with adjustment for changes in productivity and population). Maintaining this relative level of spending in NI meant that the Imperial Contribution was reduced significantly during the 1930s.

³⁵ <https://researchbriefings.files.parliament.uk/documents/CBP-8884/CBP-8884.pdf>

³⁶ *The Public Sector* (Victor N Hewitt) in *The Northern Ireland Economy, A Comparative Study in the Economic Development of a Peripheral Region* (1990) Edited by Harris, Jefferson and Spencer.

³⁷ https://www.legislation.gov.uk/ukpga/1920/67/pdfs/ukpga_19200067_en.pdf

³⁸ <https://www.newsletter.co.uk/news/people/remembers-hugh-pollock-northern-irelands-first-ever-finance-minister-who-served-until-his-death-3971367>

The Colwyn Committee recommendations were later described by Isles and Cuthbert in their seminal study of the NI economy³⁹ as “...*admit(ing) the principle that, so long as people in different parts of the United Kingdom are taxed with equal severity, they are entitled to the same standards of social services, regardless of whether the district in which they live yields much or little total revenue. The principle was applied more whole-heartedly to the different areas of local government in Great Britain under the Local Government Act of 1929. That Act made provision for the payment of block grants to local authorities in accordance with varying local needs, including the need to pay unemployment relief.*”

In 1938 the UK and NI Governments reached a Financial Agreement which included the provision that in the event of the latter facing a budget deficit that “...*the United Kingdom Government agree that it would be equitable that means should be found to make good this deficit in such a way as to ensure that Northern Ireland should be in a financial position to continue to enjoy the same social services and have the same standards as Great Britain*”.⁴⁰ This became known as the “parity principle”.

In the period following the Second World War it became the practice that the NI Budget was agreed between Treasury and the Ministry of Finance before submission to the Joint Exchequer Board. The application of the parity principle to the expansion of the Welfare State, initially through the Unemployment and Family Allowances (Northern Ireland) Agreement of 1946,⁴¹ and then the Social Services Agreement of 1948⁴² (which included health services) significantly increased the transfer of income from the UK Government to the NI Government. Parity in terms of the services covered was based on the UK Exchequer paying 80 per cent of the additional cost of providing the services in NI over and above 2.5 per cent of the total UK cost (the NI share of the UK population) - known as the parity proportion, which had previously been 2.2 per cent in the 1946 agreement.

Following a significant increase in NI unemployment, in 1954 the Joint Exchequer Board agreed that “leeway” i.e. the need for higher spending per head of population as well as parity (which had been based on offsetting the shortfall in tax revenue per head of population) should be taken into account when setting the Imperial Contribution. The Imperial Contribution fell from £20.6 million in 1952-53 to £5.3 million in 1960-61 and then £1.0 million in 1970-71. In addition, this resulted in special payments from Westminster to enable services such as housing, schools and hospitals to reach the standard of equivalent services in Great Britain. In the late 1960s the NI Government received an increased share of reserved tax revenue as well as advances from the UK Consolidated Fund. This meant that while the financial provisions in the Government of Ireland Act remained in place, in practice the NI Government was being subsidised to a significant extent throughout the 1950s and 1960s to maintain parity in the provision of services.

³⁹ An Economic Survey of Northern Ireland, Isles and Cuthbert (1957)

⁴⁰ [https://hansard.parliament.uk/Commons/1938-05-12/debates/034617c9-109b-4a9d-bb5e-cb338651568e/NorthernIreland\(FinancialAgreement\)](https://hansard.parliament.uk/Commons/1938-05-12/debates/034617c9-109b-4a9d-bb5e-cb338651568e/NorthernIreland(FinancialAgreement))

⁴¹ <https://api.parliament.uk/historic-hansard/commons/1946/nov/21/unemployment-and-family-allowances>

⁴² <https://api.parliament.uk/historic-hansard/commons/1949/feb/22/social-services-northern-ireland>

Although the Government of Ireland Act was not repealed at that time, Direct Rule was imposed in 1972 including the prorogation of the NI Parliament and the creation of the office of the Secretary of State for Northern Ireland. A Green Paper, *the Future of Northern Ireland: A paper for discussion*, published by the Northern Ireland Office later in 1972⁴³ indicated that NI “...has received in common with other less prosperous areas substantial material support from the United Kingdom as a whole.” The total amount of special payments, subsidies and loan advances was estimated as £300 million in 1972 (£3.9 billion in 2021-22 prices) in addition to the financial support for the aircraft and shipbuilding industries. Following the fall of the short-lived NI Executive in 1974 an extended period of Direct Rule applied until 1998 with NI governed by way of administrative rather than legislative devolution in line with the approach in Scotland and Wales.

The Government of Ireland Act was significantly amended by the Northern Ireland Constitution Act 1973.⁴⁴ Section 15 of the Act indicated that the NI Consolidated Fund would receive the NI share of UK taxes minus the cost of collection. The UK Treasury was also given the power to make deductions to reflect the contribution to the cost of excepted and reserved matters. Section 16 of the Act provided the power for the Secretary of State to provide additional funding to the NI Consolidated Fund by way of a grant, with the consent of Treasury, replacing the forms of financial assistance that had previously been in place. This Block Grant system has remained since 1974 with the exception that the NI share of UK taxation revenues is no longer identified separately. The Imperial Contribution and the Joint Exchequer Board were both abolished. While reference is made to Treasury making regulations in respect of how taxes are attributed to NI, there is no mention of how the non-tax revenue grant would be determined or to the parity principle.

Section 2 of the Northern Ireland Act 1998⁴⁵ repealed the Government of Ireland Act 1920 while Section 58 indicated that “[T]he Secretary of State shall from time to time make payments into the Consolidated Fund of Northern Ireland out of money provided by Parliament of such amounts as he may determine.” This was the final break of the link between the taxes paid by NI citizens and the funding available for public services, other than for the small amount of regional rate income. The principle of parity was referred to in Section 87 of the Act but only in terms of social security, child benefit and pensions which are funded through Annually Managed Expenditure.

From 1979 changes to the NI Block Grant (Departmental Expenditure Limit) have been determined as a population-based share of the changes in the budgets of Whitehall departments, with adjustment for the comparability of services provided by NI departments. These arrangements are commonly known as the Barnett formula and apply on a non-statutory basis to all the Devolved Administrations. Although the 1980 White Paper, *The Government of Northern Ireland, Proposals for Further Discussion*,⁴⁶ indicated that “Public expenditure in Northern Ireland will continue as at present to be assessed on the basis of need, and to be financed with support as necessary from the United Kingdom Exchequer” it did not specify how need

⁴³ <https://cain.ulster.ac.uk/hmsol/nio1972.htm#part3>

⁴⁴ Northern Ireland Constitution Act 1973 <https://www.legislation.gov.uk/ukpga/1973/36/section/15/enacted>

⁴⁵ Northern Ireland Act 1998 <https://www.legislation.gov.uk/ukpga/1998/47/contents>

⁴⁶ <https://cain.ulster.ac.uk/hmsol/cmd7950.htm>

would be assessed. While the issue has been moot for the past forty years, as the relative funding available to the NI departments per head of population compared with England has been above the estimates of relative need, the recent decline in the Block Grant premium for the NI Executive implies that this may no longer be the case.

The funding arrangements for the Devolved Administrations have been set out in the Statement of Funding Policy with the first version published in 1999 and the most recent in 2021.⁴⁷ The Statement of Funding Policy makes no reference to the parity principle although the separate 2016 Fiscal Framework Agreement⁴⁸ between the UK Government and the Welsh Government included the Block Grant funding principle that “... *the Welsh Government should have a fair level of funding based on relative need...*” with the level of relative need adopted based on the estimates from the Independent Commission on Funding & Finance for Wales. The Final Report from the Commission estimated relative need based on the amount required to provide the same level of public services in Wales as in England i.e. parity.

⁴⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1137609/Statement_of_Funding_Policy_update_Feb_2023.pdf

⁴⁸<https://www.gov.wales/sites/default/files/publications/2018-11/agreement-on-welsh-government-fiscal-framework.pdf>

Appendix B – Needs indicators

Table B.1: Need Indicators from HoL Select Committee report on Barnett Formula⁴⁹

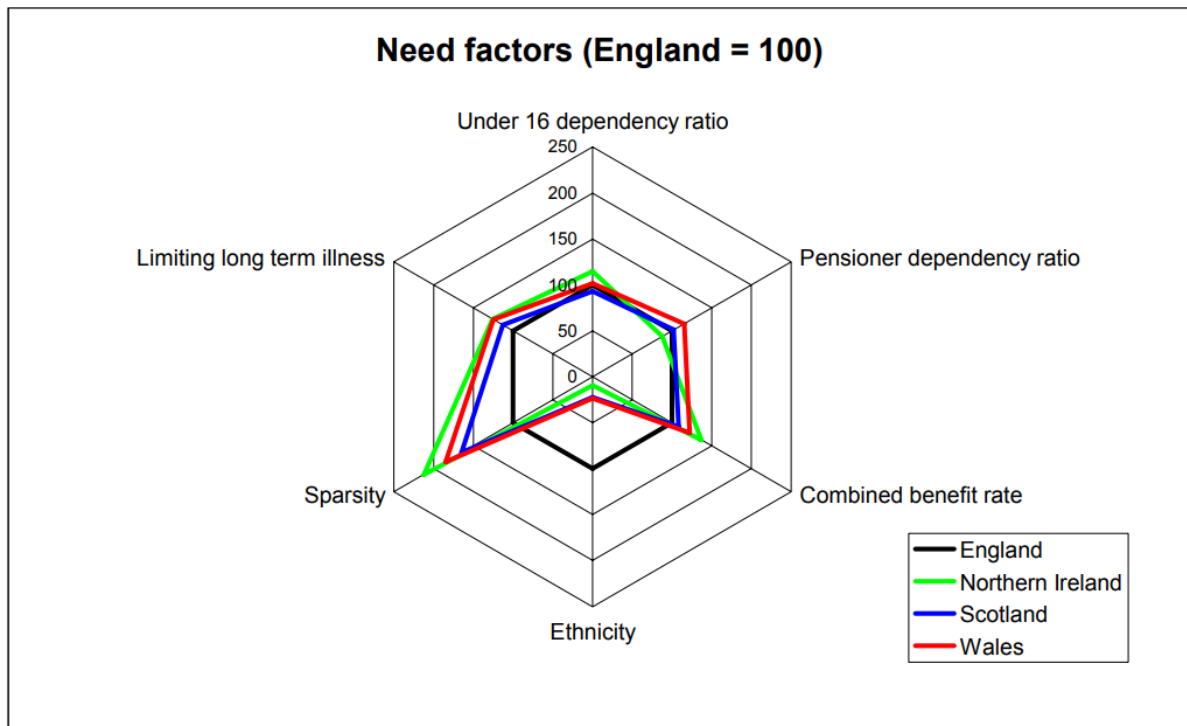
Needs measure (2005 to 2007 average except where stated)	Data source	England	Wales	Scotland	N. Ireland
The number of under 5s	ONS: Population Trends dataset	101	94	91	112
The number aged 5 to under 16s	ONS: Population Trends dataset	100	102	96	116
The number aged over 65 and under 74	ONS: Population Trends dataset	99	111	106	91
The number of over 75s	ONS: Population Trends dataset	100	111	97	82
The number of deaths adjusted for the age profile of the population ('Standardised Mortality Rate')	NISRA: Annual Report 2007	98	101	117	106
The number of people with a limiting long-term illness (2001)	2001 Census	97	126	110	110
The number of working-age adults with a work-limiting disability	Labour Force Survey	97	120	109	116
The number of working-age adults who are unemployed	Labour Force Survey	101	92	101	76
The number of working-age adults not in employment	Labour Force Survey	99	108	96	119
Gross disposable household income per head (inverse)	ONS: Regional Gross Disposable Household Income April 2009	98	114	106	115
The number of adults in households with an income below 60% of the UK median income before housing costs have deducted ('Adult poverty')	DWP: Households Below Average Income 2009	99	115	95	107
The number of children in households with an income below 60% of the UK median income before housing costs have deducted ('Child poverty')	DWP: Households Below Average Income 2009	101	118	88	119

Source: House of Lords - The Barnett Formula - Select Committee on the Barnett Formula (parliament.uk) Appendix 5

⁴⁹ <https://publications.parliament.uk/pa/ld200809/ldselect/ldbarnett/139/13916.htm>

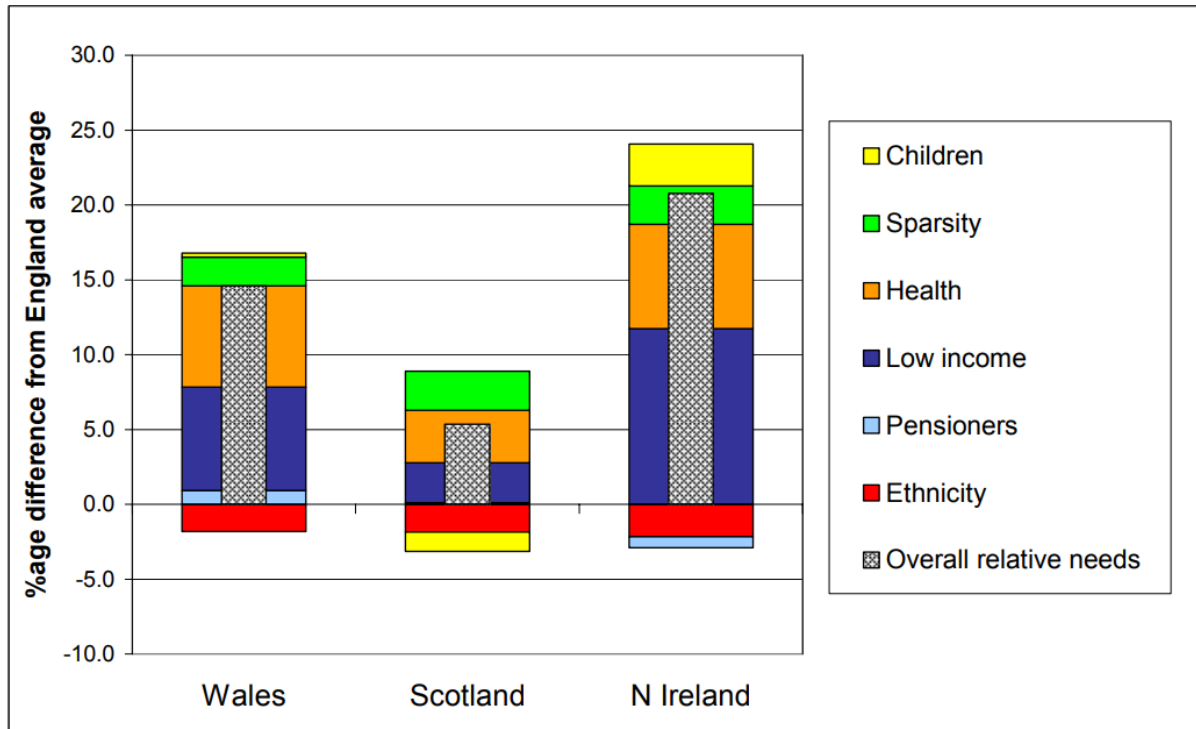
Appendix C – Charts from Holtham Commission working paper: Replacing Barnett with a needs-based formula

Chart C.1 - Distribution of needs across Wales, England, Scotland and NI



Source: Independent Commission on Funding & Finance for Wales (Holtham Commission)

Chart C.2 - Weighted expenditure need per head by need factor, difference from England



Source: Independent Commission on Funding & Finance for Wales (Holtham Commission)