The Barnett Formula and its Consequences for Wales:

A Literature Review

Final report for the Independent Commission on Funding and Finance for Wales

Dr Gillian Bristow, Cardiff University

Contact Details for Correspondence:

Dr Gillian Bristow
School of City & Regional Planning
Cardiff University
Glamorgan Building
King Edward VII Avenue
Cardiff CF10 3WA
Tel: 029 20 875388
Fax: 029 20 874845
E-mail: Bristowg1@cardiff.ac.uk

Executive Summary

The fundamental objective of this report is to provide an overview of the literature on the operation of the Barnett formula as it relates to Wales. More specifically, it aims to provide:

- A brief history of the Barnett formula's operation in, and outcomes for, Wales;
- A detailed review of the evidence on the relative advantages and disadvantages of the formula in allocating funds to the devolved regions of the UK, with a particular emphasis on the implications for Wales;
- A review of the operation of the Barnett formula in the international context by making comparisons to existing resource allocation methods in other countries.

The report is thus based upon an extensive desk-based review and synthesis of the available academic literature on the Barnett formula and international models of territorial finance.

Key Findings

The literature on the Barnett formula is extensive but overwhelmingly focuses on two broad sets of issues:

(i) explaining the mechanics surrounding the operation of the system; and

(ii) examining the issues pertaining to the relationship between its outcomes for per capita public spending totals in Scotland and England (and its constituent regions), and levels of spending need in these places.

There is a fairly limited literature on the direct impact of the formula in relation to Wales, although devolution has drawn attention to a number of positive and negative aspects of the funding system. This highlights a number of key issues relating to the evolution of the formula, and the current gaps in knowledge relating to its impact on Wales.

The evolution of the formula:

- The Barnett formula evolved from the Goschen formula which was specifically designed to preserve Scotland's public spending advantage over England (and Wales). The formula was thus never designed specifically with Wales in mind.
- If applied rigorously, the formula should lead to convergence in levels of spending per head across the UK, although it is not clear whether this was the original intention.
- The formula preserved a spending advantage for Wales over England in the inherited baseline, although the level of this was slightly less than that implied by the Treasury needs assessment of 1979.
- There have been periodic adjustments to the operation of the formula since 1980 (ostensibly through changed population proportions). Whilst these adjustments have increased relative spending levels in Wales, it is difficult to conclude whether this has been adequate to address changing relative spending needs.
- Devolution has created greater openness and thus scrutiny of the funding arrangements and their outcomes.

The relative merits of the formula:

- The main advantages of the formula reside with its simplicity, objectivity and political expedience as a basis for making spending allocations.

- It preserves the autonomy of devolved spending authorities.

- It provides for flexibility in relation to negotiating formula bypass to meet exceptional spending demands. In some instance, this has proved advantageous in Wales.

- The major weaknesses of the formula relate to its failure to adequately meet expenditure needs, its lack of transparency and the anomalous interdependencies it creates between the budgets of the devolved administrations and expenditure decisions in English regions.

- Any disputes around financial allocations are also primarily resolved through informal negotiation. Whilst the Joint Ministerial Committee provides a formal arena in which disputes can be raised, to date this route has not been used.

- There have been a limited number of studies which have explicitly addressed the relationship between the formula and funding needs in Wales. These indicate a range of estimates as regards the 'cost' of Barnett for Wales (both in relation to spending lost and / or squeezed through Barnett's mechanism for spending convergence).

- There has been notable success in securing formula bypass since devolution (in relation to the Objective One and match funding debate), although the degree to which the 'Barnett-plus' settlements have addressed the additional funding requirement is debated.

- Devolution has created significantly greater awareness of the anomalies surrounding the application of the formula and its so-called 'consequentials', some of which create contentious outcomes for Wales. Much of the analysis of the scale and significance of these anomalies remains anecdotal.

- There is growing antagonism to the formula in much of England and it is seen to be 'nobody's child' inasmuch as it commands limited political and public support.

The Barnett formula in international context:

- The Barnett formula is internationally unique and is based upon a highly unusual institutional context.

- The distinctive feature of the system when compared to other, international systems is its lack of an inherent and effective mechanism for balancing UK-wide and territorial interests and addressing any imbalances that may arise.

- There are various reviews of alternative funding models available which typically highlight the trade-offs between efficiency, autonomy and equity.

1. Introduction and Context

There is growing academic and political debate across the UK concerning the implications of retaining the population-based Barnett formula as the mechanism for allocating changes in public expenditure to the devolved administrations. The formula funding system is internationally unique and was designed to relate incremental changes in expenditure in Scotland, Wales and Northern Ireland to the expenditure margins which existed in 1978 between these countries and England. The system was essentially devised to suit a context whereby fiscal relationships between the UK nations and regions were *inter-departmental* in nature. With the development of democratic as opposed to administrative devolution, these transfers have become *inter-governmental* in nature and thus exposed to much greater scrutiny.

The Independent Commission on Funding and Finance for Wales has identified the importance of exploring more fully the relative merits of the Barnett formula for Wales. The Commission's terms of reference are to:

- look at the pros and cons of the present formula-based approach to the distribution of public expenditure resources for he Welsh Assembly Government;

- identify possible alternative funding mechanisms including the scope for the Welsh Assembly Government to have tax varying powers as well as greater powers to borrow.

The fundamental objective of this report is thus to provide an overview of the literature on the operation of the Barnett formula as it relates to Wales. More specifically, it aims to provide:

- **a brief history of the Barnett formula's operation in, and outcomes for, Wales;**

- **a detailed review of the evidence on the relative advantages and disadvantages of the formula in allocating funds to the devolved regions of the UK, with a particular emphasis on the implications for Wales;**

- **a review of the operation of the Barnett formula in the international context by making comparisons to existing resource allocation methods in other countries.**

The report is thus based upon an extensive desk-based review and synthesis of the available academic literature on the Barnett formula and international models of territorial finance, as well as data on public attitudes to devolution and its funding, and a review of relevant government documents, parliamentary evidence and data on budgetary out-turns for Wales.

This report is now structured as follows. Section two charts the origins and evolution of the Barnett formula. Section three examines the relative merits of the Barnett formula and its broader funding system, and section 4 places this system in the context of international experience.

The findings in this report are those of the authors and do not necessarily represent the views of the Independent Commission on Funding and Finance for Wales.

A Brief History of the Barnett Formula

The Barnett formula has attracted considerable attention and debate in recent years, but it is worth emphasising at the outset that it does not wholly determine the budgetary resources made available in Wales. The budget available to the Welsh Assembly Government is determined within a highly centralised framework of public expenditure review and control alongside departments of the UK government. The block grant (or assigned budget) is contained within the devolved administrations' Departmental Expenditure Limits (DELs). Annual changes to the DEL are calculated in accordance with a population-based formula (the Barnett formula). In addition funds are allocated as Annually Managed Expenditure (AME), not calculated or varied according to changes in the Barnett formula. This covers various forms of funding passed directly to the devolved administrations, notably funding from the EU for agriculture under the Common Agricultural Policy (HM Treasury, 2007). In total, the devolved administrations on average account for between 50 – 55% of the total public spending in Wales, Scotland and Northern Ireland (see box 2.1 for further details).

The academic and policy literature on the Barnett formula is extensive and has grown exponentially with the post-1997 shift from administrative to democratic devolution. The literature overwhelmingly focuses on two broad sets of issues:

- explaining the mechanics of the formula and how it operates within the broader public expenditure system; and

- examining the issues pertaining to the relationship between its outcomes for per capita public spending totals in Scotland and England (and its constituent regions), and levels of spending need in these places.

There is a fairly limited literature on the direct impact of the formula in relation to Wales. Devolution has, however, raised the level of interest and in so doing has drawn attention to a number of positive and negative aspects of the funding system. This highlights a number of key issues relating to the evolution of the formula, and the current gaps in knowledge relating to its impact on Wales.

The purpose of this section of the report is thus to review the wealth of material detailing the history and origins of the Barnett formula, and to provide a detailed history of its operation and outcomes for Wales.

This focuses on the following:

- charting the evolution of the formula from the preceding Goschen formula;

- establishing the intended role of the formula at its inception;

- understanding its retention post-devolution in 1997; and

- establishing firmly its role in determining budgetary allocations for Wales since its inception.

2.1 The evolution of the Barnett formula

Various academic studies and Select Committee enquiries have served collectively to provide a fairly robust account of the genesis of the Barnett formula. This literature serves to highlight the formula's rather pragmatic origins, its expedience and durability, and that ostensibly, it was not designed with Wales in mind.

The use of a formula to share out public expenditure between the nations of the UK has a long history. In 1891 the then Chancellor, George Goschen, introduced a formula to allocate probate duties between the countries of the UK in support of local government expenditure. According to the Treasury, the formula was based on each country's proportionate overall contribution to the Exchequer (cited in House of Commons Treasury Committee, 1997), although it has also been suggested that it was based on objective population calculations made in 1891 (Heald, 1980). The Goschen approach was subsequently used as a basis for allocating some public expenditure such as education grants.

The Goschen proportion assigned extra public spending to Scotland relative to England in the proportion 11/80. The proportion was based on Scotland's share of the population of England and Wales at the end of the nineteenth century. However, by 1901 Scotland's population proportion fell below the 11/80 ratio and has continued to fall since. Various reasons have been put forward to explain why Scotland was granted continually higher levels of public spending than England including Scotland's weak economic position relative to other parts of the UK and the extra costs incurred in delivering public services over a sparsely populated country. However, it has also been suggested that the reasons may be political, with the rise of Scottish nationalism providing a powerful incentive for the UK government to provide additional resources to placate separatism (MacLean et al, 2008). There may indeed be some credence to this argument inasmuch as Wales provided a much less credible threat of separatism and thus did not feature prominently in discussions around public expenditure allocations until the first devolution debates of the 1970s.

The Goschen formula had fallen into abeyance by the late 1950s. During the 1960s and early 1970s, public expenditure plans for Scotland, Wales and Northern Ireland were settled collectively and by negotiation within wider public expenditure surveys as for other government departments and spending programmes (House of Commons Treasury Committee, 1997). In the run up to the devolution referendums for Scotland and Wales in 1979, the Treasury began to make plans for life after devolution and, specifically, the funding arrangements that would be required. The Barnett formula - named after the then Chief Secretary to the Treasury, Joel Barnett who formulated it – was the product of these plans.

The Barnett formula was first used in relation to Scotland in 1978. Its origins are not well documented although it appears that it was introduced as a temporary expedient to determine how public expenditure should be allocated to Scotland in the context of preparations for devolution that subsequently did not occur (Treasury Committee, 1997). It was in effect an interim arrangement, pending the introduction of devolution, or a temporary expedient which became permanent. Indeed, Lord Barnett himself has subsequently stated that he did not expect the formula to last for more than a year, and certainly not for thirty (Barnett, 2000). However, the formula was extended to Wales in 1980 and has been used continuously, with some modification, ever since in public expenditure surveys. It became public knowledge in 1980 (Committee on Scottish Affairs, 1980), although there was no formal public statement about how the formula worked until March 1999 in the run-up to the elections for the newly devolved regional governments (HM Treasury, 1999). The formula is non-statutory and uses population ratios to share out changes in public expenditure plans between the nations of the UK. It does not determine their overall budgetary totals (see Box 2.1 for details on the operation of the formula).

The population proportions used for the Barnett formula were originally set at 10/85 for Scotland and 5/85 for Wales (i.e. Wales would derive 5/85ths of any increase in comparable spending in England). These were based on rounded percentages of the Great Britain populations derived from mid-1976, rounded population estimates (85 per cent England, 10 per cent Scotland and 5 per cent Wales). A parallel formula allocated 2.75% of the change in equivalent expenditure in Great Britain to Northern Ireland. The ratios were revised in the 1992 Autumn Statement such that with effect from 1993-94, Scotland received a 10.66% share of additional spending on comparable programmes in England and Wales (10.06% of programmes which were comparable with England alone); the Welsh Office was allocated 6.02% of comparable English programmes; and the Northern Ireland Office and departments received resources allocated on a 2.87% UK-based population formula applied to comparable programmes in Great Britain. The Treasury argued this adjustment was necessary to reflect population changes, whilst various academic observers argued this also reflected the Treasury's attempts to control the rate of growth of public spending totals notably to appease the growing English disquiet regarding the generosity of the funding for Scotland (Thain and Wright, 1995; Mitchell, 2003). In 1997 when publishing the principles governing the determination of the block budgets for the devolved administrations, the UK government announced that the population shares would be re-calculated annually on the basis of latest mid-year population estimates for England, Scotland and Wales published each year by the Office of National Statistics. This came into effect from 1999/2000.

Box 2.1: How the Barnett formula currently works

The bulk of the funding given to the devolved governments is awarded from UK central government (via the Treasury) in the form of an unconditional block grant. In other words, once their overall budget has been determined, spending within the non-English nations of the UK can then be determined according to their own spending priorities i.e. the spend in specific areas (for example health) does not need to be in the same proportions as in England (for fuller discussions see Heald, 1994; Midwinter, 2004a). The UK Government does not attempt to direct priorities in the devolved territories by attaching conditions to the devolved administrations funding, with the exception of some relatively minor constraints imposed by the Treasury on the use of resources generated by locally financed expenditure. For example, if, due to decisions by the devolved administrations or their respective local authorities, the costs of Council Tax Benefit subsidy paid to local authorities changes at a disproportionate rate (both higher and lower), relative to changes in England, then balancing adjustments may be made, if appropriate, to the relevant DEL.

As a consequence, the devolved administrations are free to allocate funding between services as they see fit. With very limited exceptions (such as the ability of the Scottish Parliament to vary the income tax rate in Scotland by 3%) the devolved administrations have no capacity to raise their own finance. Collection of revenue remains the responsibility of the central government and is allocated by the Treasury.

The budgets of the devolved administrations are thus determined within a highly centralised framework of public expenditure review and control alongside departments of the UK government. The block grants (or assigned budgets) are contained within the devolved administrations' Departmental Expenditure Limits (DELs). Annual changes to these budgets are calculated in accordance with a population-based formula (the Barnett formula). In addition funds are allocated as Annually Managed Expenditure (AME), not calculated or varied according to changes in the Barnett formula. This covers various forms of funding passed directly to the devolved administrations, notably funding from the EU for agriculture under the Common Agricultural Policy (HM Treasury, 2007). In total, the devolved administrations on average account for between 50 – 55% of the total public spending in Wales, Scotland and Northern Ireland. The remainder is comprised of spending on general public services, social services, and defence.

The Barnett formula works as follows. Firstly, the changes to the spending of the UK government's programme are estimated. These are then multiplied by comparability percentages, which measure the extent to which the services delivered by the relevant UK departmental programme are comparable with the services within the budgets of the devolved administrations. For each department programme, defined by DELs, a comparability percentage is calculated by examining the component (sub-programme) within that programme. Each sub-programme is weighted by its spending in the base year (i.e. the year immediately preceding the last year covered by a spending review) to give an overall level of comparability. Finally, these figures are then multiplied by each country's population as a proportion of England, England and Wales or Great Britain as appropriate (i.e. according to the coverage of the UK departmental programme to which they are applied). The population proportions used reflect the latest available mid-year estimates published by the Office for National Statistics. These calculations are made for each departmental programme in DELs and then the results aggregated to give the overall change in the block grants of the devolved administrations (HM Treasury, 2007). Thus significantly, the formula does not determine the *size* of the block grant or the baselines to which it is applied, which are largely based on the previous year's expenditure. Rather it determines the *changes* in the block in line with the changes made to the spending plans of equivalent UK government departments. It is also important to note that the Barnett formula and block grant system only covers the distribution of public spending between Scotland, Wales, Northern Ireland and England – where the latter is treated as a single block. Thus it plays no role in distributing spending across regions within England.

2.2 The intended role of the Barnett formula

There has been considerable debate over the years as to precisely what the intended role of the formula was, and this remains a somewhat open question. At around the time of the inception of the formula and the first plans for devolution, there appeared to be an appetite for designing a funding system which was "informed by objective data and a mutual understanding of needs and problems" across the constituent parts of the UK (HM Treasury, 1979; p. 3). Indeed in 1979, the Treasury led an interdepartmental assessment of relative public expenditure needs in England, Scotland, Wales and Northern Ireland. Whilst the Treasury led and co-ordinated this study, it was conducted in consultation with the Scottish, Welsh and Northern Ireland Offices (as well as relevant UK government spending departments), with a view to informing the annual, collaborative approach for determining the budgets for the constituent parts of the UK which, it was proposed, would form a regular part of the overall public expenditure review process post-devolution (HM Treasury, 1979). This study thus appeared to uphold the principle of allocating spending according to needs. Indeed, the report affirmed that "it is a long-established principle that all areas of the United Kingdom are entitled to broadly the same level of public services and that the expenditure on them should be allocated according to their relative needs" (HM Treasury, 1979; p. 4).

The Treasury-led needs assessment examined six main services which were to have been devolved under the Scotland and Wales Acts of 1978, namely health and personal social services; education and libraries (excluding universities); other environmental services; roads and transport (excluding railways); and law, order and protective services (excluding police). Expenditure on other programmes (mainly trade and industry) was not examined closely in this study. Using a wide diversity of objective factors for each spending area (e.g. for education these included the number of pupils, their age distribution, their geographical location and their home circumstances), the needs assessment report concluded that to achieve similar levels of service provision, per capita spending would need to be 9% higher in Wales than England, and 16% higher in Scotland than England. This suggested that Scotland and Northern Ireland were receiving more than their need would suggest, whilst Wales was receiving less (see Table 2.1). Indeed, in examining expenditure allocations between 1959 and 1977, the report drew attention to the fact that per capita spending levels in Wales had kept closely in line with England's, whereas Scotland had typically enjoyed higher and more variable per capita allocations. The report acknowledged, however, that its approach to needs assessment was partial and fraught with difficulties, a conclusion subsequently reinforced by Midwinter (1999).

Table 2.1: HM Treasury 'Needs Assessment' 1979 (data for 1976-7): Per capita Spending Ratios

	England	Scotland	Wales	Northern Ireland
Relative needs assessment	100	116	109	131
Actual spending levels 1976-7	100	122	106	135

Source: HM Treasury (1979)

As part of their research into the Barnett formula, McLean et al (2008) report how they made a Freedom of Information request in May 2005 to the Treasury to uncover further details regarding this needs assessment study. This revealed that there was some debate between the Treasury and the territorial departments as to the nature of the needs assessment exercise, with the Scots fighting hard for an assessment of health assessment that would record Scotland's 'needs' as being higher than the Treasury was prepared to concede. The matter was concluded with the collapse of the devolution campaign and the election of the Conservative government in 1979 which meant that neither devolution nor the planned needs-based system were implemented (McLean et al, 2008). The results of this study were not ultimately used in relation to the Barnett formula system and there has been no further published government analysis of spending needs across the UK since.

Instead, in practice the Barnett formula used population shares as a crude and pragmatic way of allocating increases in spending in England to Scotland, Wales and Northern Ireland (often referred to as 'the territories'). Furthermore, these were applied to the inherited, unadjusted expenditure margins which existed in 1978 between these countries and England such that the pre-existing pattern of territorial spending differences was built into the baseline. Thus one could conclude that Wales was relatively disadvantaged by the Barnett formula from the outset inasmuch as the baseline spending advantage was lower than the needs assessment implied it ought to be.

It is difficult to discern precisely what the intention was in developing this system, particularly as the peculiarities of the formula were such that over time, it would work to squeeze the spending advantages of the territories. The Treasury acknowledged in evidence to the Treasury Committee in 1997 that one of the properties of the formula was that it would produce convergence in levels of public spending per head across the UK over time (all other things being equal) (House of Commons Treasury Committee, 1997). This was based on the assumption that the population-based increments would gradually predominate over the disparate inherited levels of public expenditure thereby effecting the so-called 'Barnett squeeze'. As such, one argument is that the formula was designed to limit the financial commitments from England (the dominant UK state) to the smaller states (or to gradually reduce Scotland's spending advantage) and to provide a short-term means of obviating repeated cabinet battles over budgetary allocations. As Jim Ross, the Scottish Office civil servant in charge of devolution policy in the late 1970s has observed, "the 10/85 formula was intended gradually to reduce the then existing Scottish advantage in terms of public expenditure without creating a degree of disturbance that would have created a row" (Ross, 1985; cited in Mitchell, 2003; p. 12). In other words, the Barnett formula established a new pattern of negotiation between the Treasury and the different spending departments which legitimised existing practice. The Treasury settled its spending decisions with the main English departments first, and then subsequent changes were made to the spending allocation for Scotland through negotiation with the Scottish Secretary of State. Certainly, it was fully anticipated by the architect of the system, Lord Barnett, that by the time spending levels had converged sufficiently, the formula would have been replaced by a need-based system (Barnett, 2000; McLean, 2005). The growing incidence of Barnett-plus type arrangements (see below) is perhaps indicative that convergence was never the real intent and was instead a somewhat curious property of the formula.

2.3. The retention of the Barnett formula post-devolution 1997

The Barnett formula has operated for nearly 30 years and has survived the introduction of devolved government in 1997. Furthermore, since 1997 the UK government has consistently stated that it has no plans to reform the Barnett formula (Webb, 2007). In effect therefore, not much has actually changed and the devolved territories are allocated their share of public spending in the same way as before using the block grant and Barnett formula system. The White Papers on devolution in Scotland and Wales, published before the 1997 referendums, made clear that the continuation of the existing block and formula system of funding was the preferred option to finance devolution. As Hazell and Cornes (1999) observe, both White Papers contained the same reassurance that these arrangements had produced fair settlements for their respective regions. Thus, the Barnett formula was retained and it remained non-statutory. As such it was not included in the Government of Wales Act. Indeed, there seems to have been remarkably little debate around the time of the devolution White Papers and the subsequent referendums as to the relative need for and merits of any change.

The main change that devolution has wrought, however, is greater openness and scrutiny of the funding arrangements and their outcomes. It has clearly and significantly elevated interest across all parts of the UK in questions of territorial finance, and there has been a voluminous growth in literature on the operation and effects of the funding system since 1997. This is not surprising. The system was essentially devised to suit the context of administrative devolution whereby fiscal relationships between the UK nations and regions were *inter-departmental* in nature. With the development of democratic devolution, these transfers have become *inter-governmental* in nature and thus exposed to much greater scrutiny. Devolution has resulted in greater awareness of the differences across the different parts of the UK, in particular in respect of the contest for scarce resources. As Mitchell (2003; p. 9) observes, however, “increased interest is not, however the same as increased understanding” and Barnett has become an easy shorthand used in a variety of ways and with a variety of meanings including as a complex, technical formula; as a mechanism designed to erode the devolved regions’ share of spending; and as a mechanism designed to protect their share of spending. He also observes that it has been used in a variety of election including the London Mayoral election in 2000, where it was used to refer to wider issues of territorial public finance and largely as a means to request more public money for London.

Devolution did prompt the UK government to make a firmer commitment to update the population proportions used in the formula (as noted above) and to spell out more clearly the principles underpinning the block and formula funding system. Thus for the first time in 1999, the Treasury published a detailed guide to the operation of the formula funding system (HM Treasury, 1999). This has since been updated on a regular basis, largely to reflect periodic changes to the coverage of the block grants in line with changing devolved spending responsibilities (HM Treasury, 2000; 2002; 2004; 2007).

Other contributions from various sources have also helped to improve understanding about the mechanics of the formula and its role in determining the budgets of the devolved administrations (see section 2.4 below) (notably, Heald, 2001; Heald and McLeod, 2003; 2005; McGregor and Swales, 2005; Webb, 2007). Several studies have sought to illuminate the workings of the formula specifically through a focus on its role and influence in respect of Scottish public finance, perhaps reflecting the asymmetrical powers in relation to the Scottish Parliament and the ongoing debate there in respect of greater fiscal autonomy (Scottish Parliament, 2000; Harper and Stewart, 2003; McGregor et al, 2003; Midwinter, 2004a; Ferguson et al, 2007). A research paper seeking to improve understanding of the role of the formula in respect of its implications for Northern Ireland has also been published (Northern Ireland Assembly, 2001). The formula’s role and impact in England has received only scant attention (Mitchell, 2002; McLean and Mcmillan, 2003; Bailey and Fingland, 2004).

The role of the formula in relation to Wales has received much less detailed and explicit coverage with Welsh interest in the issues seeming only to emerge from 1999 with the desire to understand its role in determining the degree of match funding that would be provided through the block grant system in support of the EU Objective One programme (Bristow and Blewitt, 1999; Bristow, 2001). The ensuing, politically charged debate prompted similar questions to be asked in Scotland (see, Bristow and Blewitt, 2000). The Richard Commission enquiry into the Assembly’s powers provided for further interrogation of the adequacy of the Assembly’s financial powers (The Richard Commission, 2004), although the Commission’s supine, holding position on the Barnett formula provoked some critical commentary (McGregor et al, 2004; Bristow, 2005). Since then, there has been a growth in interest in the ability of the formula to deliver a ‘fair’ budgetary settlement for Wales and broader interest in its overall merits and demerits (see section 3.2 below). Cognisant of the growing debate, the Welsh Assembly Government published a written statement in 2005 which explicitly outlined for the very first time the workings of the formula in relation to its budget (Welsh Assembly Government, 2005) (see also section 2.4 below).

Collectively, these studies and reports have significantly improved the level of transparency surrounding the calculation of the formula which was previously shrouded in mystery (Heald, 1994). Thus, since 1999 the Treasury has published the comparability percentages and sub-programmes of spending to which they are applied (HM Treasury, 1999). Since then, programme comparabilities have been updated at the start of each public spending review to reflect any changes in the policy responsibilities of the devolved administrations (see, for example, HM Treasury, 2007). Whilst the English spending programme figures to which the Barnett formula is applied remains opaque (Heald and McLeod, 2005), it is understood that the devolved administrations are now provided with the Treasury's calculations of spending consequentials (i.e. the impact of changes in spending in England on the block grants) to enable them to establish firmly that they represent the full extent of the share of any new money that is announced (Welsh Assembly Government, 2005). These calculations do not appear to be routinely published however.

This greater transparency surrounding the application of the Barnett formula has arguably had another effect which is to result in the formula being applied more stringently than it had been previously (Mitchell, 2003). A number of analyses have indeed focused on describing and explaining the absence of the predicted convergence in public spending levels per head across the constituent parts of the UK (Heald, 1994; Midwinter, 2004b; Bailey and Fingland, 2004; Christie and Swales, 2005). This is variously viewed as both a strength and a weakness of the formula funding system, depending on the degree to which the preservation of spending advantages in the territories is deemed desirable. Notwithstanding this, these analyses typically point to two principal explanations for the lack of convergence.

The first and primary reason reflects the fact that up until 1992, the formula's population proportions were frozen at mid-1976 levels, even though Scotland's population was falling relative to England's. Although population proportions have been updated annually since 1997, this has significantly slowed the convergence property of the Barnett formula. The second reflects the additional funding allocated to Scotland (and indeed the other territories) on an ad hoc basis outwith the operation of the formula. Some of this extra funding in the territories is accounted for by social security spending (Bell and Christie, 2005). However, much of it reflects the significant amount of funding which deliberately bypasses the operation of the formula. This occurs for a variety of reasons some of which reflect uniform adjustments across all departments regardless of population share (such as in the case of the National Health Service pay awards) and unforeseen circumstances such as natural disasters, where costs are met from the UK reserve (Heald, 1994). Other instances of formula bypass are negotiated to meet particular needs. For example, Scotland negotiated an additional £1 billion in 2002 to fund the transfer of council housing to a new housing association (Midwinter, 2004a), whilst Wales successfully secured an additional £372 million in 2000 to enable the Welsh Assembly Government to utilise available European Union Structural Funds (Bristow and Blewitt, 2001).

There is something of a debate as to whether more or less convergence in per capita spending levels will be observed in the future. What is clear is that the speed of convergence will principally depend on three factors. The first of these is the rate of increase in equivalent spending on English programmes. The slower the rate of increase in English spending programmes, the slower the rate of the Barnet squeeze. In effect, there will be less for Barnett to bite on (McLean et al, 2008). The second factor is changes in population relativities between the countries of the Union. A country with a rising share of the UK's population can expect to experience accelerated convergence in spending per head. Finally, the rate of convergence will also depend on the extent to which there are continuing incidences of formula bypass. These may be less in evidence in the future given the greater transparency surrounding expenditure allocations with devolution and the fact that progressively more spending programmes have moved into the block grants such that the Barnett formula has been applied to a wider range of spending over time.

2.4. The role of the Barnett formula in determining budgetary allocations

The recent growth in literature on the Barnett formula and funding system has played an important role in improving understanding of the precise role the formula plays in determining the budgets of the National Assembly for Wales, the Scottish Parliament and the Northern Ireland Assembly. The policy statements and academic papers on the subject thus make clear that whilst the Barnett formula plays a central role in determining how the devolved administrations are financed, it is not the sole source of public spending in the devolved territories. Furthermore, it is worth re-iterating that the formula is non-statutory and could be revoked unilaterally by the UK government (McLean et al, 2008).

The block grants (or assigned budgets) are contained within the devolved administrations' Departmental Expenditure Limits (DELs). Annual changes to these budgets are calculated in accordance with the Barnett formula. In addition funds are allocated as Annually Managed Expenditure (AME), not calculated or varied according to changes in the Barnett formula. This covers various forms of funding passed directly to the devolved administrations (HM Treasury, 2007). In total, the devolved administrations on average account for between 50 – 55% of the total public spending in Wales, Scotland and Northern Ireland.

Thus, the Barnett formula only determines changes in the size of the block grant to the devolved administrations in line with the changes made to the spending plans of equivalent UK government departments. As the Welsh Assembly Government (2005; p. 1) puts it, "the Barnett formula does not determine the size of our Departmental Expenditure Limit. It only determines changes to our Departmental Expenditure Limit in line with the changes made to the spending plans of our equivalent Whitehall Departments that deliver equivalent policies." Thus significantly, the formula does not determine the *size* of the block grant or the baselines to which it is applied, which are largely based on the previous year's expenditure.

In this regard, it is wrong to state that the Barnett formula per se is the cause of observed expenditure differentials across the UK. In fact, the differences in per capita spending are mainly the result of historic patterns of public expenditure which in the 1970s, when the formula was introduced, were according to McLean et al (2008; p. 11)) "too generous to Scotland and Northern Ireland and not generous enough to Wales". The Barnett formula, if applied rigorously and continuously, will ultimately lead to convergence in levels of spending per head in Scotland, Wales and Northern Ireland with that of England – the so-called 'Barnett squeeze' (Bell and Christie, 2001).

3. The Relative Merits of the Barnett Formula

This section of the report reviews the extensive literature on the relative merits of the Barnett formula funding in allocating funds to the devolved regions, before providing a review of the relative merits of the formula funding system specifically in relation to Wales.

3.1 General advantages and disadvantages associated with the formula

Discussions concerning the strengths and weaknesses of the formula funding system appear in many studies. Some studies are exclusively devoted to examining its relative merits (e.g. House of Commons Treasury Select Committee, 1997; Midwinter, 1999; Bell and Christie, 2001; Heald and McLeod. 2002; McLean and Macmillan, 2003; McGregor et al, 2003; Gosling, 2004; McLean et al, 2008; Denham, 2008). Others examine it within broader discussions around the politics of territorial finance and securing territorial justice (e.g. Morgan, 2001; Mitchell, 2003; Jeffery, 2003; Kay, 2005), and others within critical reflections on the process and progress of democratic devolution in the UK (e.g. Hazell and Cornes, 1999; McGregor and Swales, 2005; Jeffery, 2007). This reflects the fact that questions of territorial finance are not simply confined to economic questions around efficiency, but are pertinent to broader debates around what constitutes good government.

The formula's heralded advantages as outlined in these studies are as follows:

- Its simplicity and objectivity in settling what are essentially political decisions relating to resource allocation (see, for example, Midwinter, 1999). In contrast to some needs based systems, the Barnett formula it is simple to apply and is relatively transparent and comprehensible.

- Its political expedience in obviating the need for extensive annual bargaining between central government and the devolved administrations. So, for example, there is no need for the Welsh Assembly Government to argue the case for equal treatment on each occasion that a relevant programme in England receives increased funding. It automatically receives a share of any increase in public spending in England.

- Its low administrative costs. It requires no complicated assessment of indicators, or even selection of indicators. It is not therefore onerous in terms of data collection and analysis, has very low operational costs and no associated institutional costs as such.

- Its provision of stability and certainty for the devolved administrations inasmuch as they can predict their annual entitlement. It is a rule-based system which provides for clarity in budgetary planning and obviates the need for repeated political negotiations and wrangling over spending levels and needs.

- Its flexibility to allow some degree of negotiation for additional resources, as and when circumstances require. In other words, changes to the block grant can be made outwith the operation of the formula and the formula can be bypassed, as it has been – frequently (see section 3.2 below).

- Its protection of the ability of the devolved administrations to exercise discretion over their budgets. The formula funding system is highly permissive of autonomy (at least in theory) inasmuch as it does not place any obligation on the devolved administrations to spend its share of any increase in public spending in the same way as in England. So if they receive additional money because of an increase in, for example, health spending in England, it is for them to decide how to allocate those extra resources. There may, however, be some exceptions to this (see section on cross-border interdependencies and spillovers below)

- Its continuity has also been regarded as a strength. Its retention with the progression from administrative to democratic devolution has been seen as helping smooth the process as there were clear limits on what changes could be absorbed before the devolved administrations were equipped to handle their side of intergovernmental fiscal relationships.

The formula has, however, been sharply criticised, not least because it does not directly relate to public expenditure needs, remains relatively opaque in key areas of its calculation, and creates certain anomalous interdependencies between the budgets of the devolved administrations and expenditure decisions in the largest UK state, namely England. As such, Heald and McLeod (2003; p. 82) echo many others in concluding that "the Barnett formula, at least in its present form, cannot be a permanent feature".

More specifically, the main disadvantages of the formula are as follows:

- Geographical inequity / lack of territorial justice:

Increasingly, it seems that the Barnett formula is deemed to be 'unfair' in all corners of the UK, albeit at times for different reasons, such that it has few allies or advocates. It is truly 'nobody's child' (Bell and Christie, 2001). In particular, there is growing evidence of dissatisfaction within England at the higher levels of spending being allocated to Scotland. According to the British Social Attitudes (BSA) Survey, the number of English respondents who believe that Scotland receives more than its fair share of spending has risen between 2003 and 2007 from one in five to one in three (Bryant, 2008). This antagonism is increasingly being voiced by organisations such as the Taxpayers' Alliance which has recently published a vitriolic attack on the Barnett formula focusing on its role in prolonging the situation whereby "English taxpayers [are] funding premium services in Scotland" (Denham, 2008; p. 14). Such critiques serve to highlight and reinforce the widespread perception that the increasing degree of policy variation taking place across the UK since devolution, with policies such as the abolition of prescription charges in Wales and Scotland and the introduction of free personal care for the elderly, reflects the better funding settlement accruing to the devolved territories (see also McLean et al, 2008). Yet even those benefiting from an apparent spending largesse can find cause to complain. The Scottish government regularly produces detailed analyses comparing their existing block grant allocations with what they might expect to receive should they be apportioned 'Scotland's' oil revenues, whilst the Scottish National Party has regularly complained about the unjust effects of the Barnett squeeze (see King et al, 2007; also, Denham, 2008).

What is clear is that the Barnett formula system was not explicitly designed to provide for any formal equalisation across the territories and is not underpinned by any fundamental welfare or equity rationale. The formula is a simple mechanism that is only loosely related to the actual need of the countries of the UK, based on the assumption that fiscal 'need' is related directly to population (McGregor and Swales, 2005). It takes no account of different amounts of tax paid in different areas or of any differences in the costs of providing public services caused by either higher needs for such services, or issues such as population sparsity which raise costs of their provision. Furthermore, there are clearly limits as to how far it is desirable to take convergence of per capita public expenditure (Heald and McLeod, 2003).

Thus, various studies have drawn attention to the real and perceived inequities in the funds available for regional spending across the UK. This has focused on two principal outcomes from the formula funding system: the absence of the expected convergence everywhere in per capita spending totals (as discussed earlier); and a poor relationship between spending levels and observable needs.

There are, without doubt, very substantial differences in levels of per capita spending across different parts of the UK at present (see Table 3.1).

Table 3.1: Identifiable Public Spending UK Nations and Regions 2007 – 08 (£ per head)

Nation / Region	Identifiable public spending	Adjusted identifiable public spending	Index UK = 100
North East	8,505	4,960	106
North West	8,247	4,927	105
Yorkshire & Humberside	7,590	4,477	96
East Midlands	6,936	4,086	87
West Midlands	7,555	4,430	95
Eastern	6,555	3,820	82
London	9,099	5,985	128
South East	6,512	3,874	83
South West	6,962	3,947	84
England	7,535	4,523	97
Scotland	9,179	5,676	121
Wales	8,577	5,050	108
Northern Ireland	9,789	5,684	121
UK	**7,790**	**4,670**	**100**

Source: HM Treasury, Public Expenditure Statistical Analysis 2008, Table 9.11

Table 3.1 depicts the levels of identifiable public expenditure per head across the territories, as well as England and its constituent regions. Identifiable spending is that which can be identified as benefiting the population of a region and covers approximately 80% of total public expenditure. This is then adjusted by taking out items of entitlement rather than planned spending (namely social protection and farm support) to provide a more accurate measure of that spending which the devolved administrations receive through the Barnett formula. However for a complete analysis one would require the comparable Barnett relevant expenditure allocations in England. These are not currently published. This demonstrates considerable spending disparities across the UK nations with Scotland and Northern Ireland receiving per capita spending some 21% higher than the UK average, and England as a whole some 3% less. Per capita spending in Wales is 8% higher than the UK average.

The table also illustrates the considerable variation in levels of per capita spending that exist between the English regions with spending highest in London and lowest in the East of England, although their expenditures are not directly driven by the Barnett formula. An interesting point however, is that differences in spending between English regions have remained broadly flat over the medium term. This is striking inasmuch as it highlights that whilst the Barnett formula has a convergence effect built in with respect of the devolved countries, spending across English regions does not converge. It should also be noted that comparable expenditure for England as a whole is not published by the Treasury.

The difficulty is there is only limited contemporary evidence on what are the relative needs of the four constituent nations of the UK. Various studies have highlighted the failure of the UK territorial finance system to deliver substantive equality or to relate expenditure allocations to crude proxy indicators of need or capacities to deliver public services in UK regions. One indicator of relative need used by a number of authors is that of poverty, as measured by social security expenditure per head. MacKay and Williams (2005) argues that the case for a poverty-based measure is strengthened if one accepts the basic Rawlsian notion that a just society would have particular regard for the welfare of its most disadvantaged and vulnerable citizens. The poor have limited choice and their needs are thus greater. MacKay and Williams shows that taking dependency levels (social security) as a measure of relative need, devolved spending per head should be roughly 20% higher in Wales and Northern Ireland than in England and around 10% higher in Scotland than in England (see also Bell and Christie, 2001). McLean et al (2008) find similar results using relative household income as a measure of poverty, which also highlights that within England, London currently receives more per capita public spending than its need would suggest, whilst the East Midlands is the region that does least well.

The problem with using social security to analyse need is that it itself derives from a government programme (albeit a non-devolved one). This risks circularity with elements of the same programme appearing on both sides of the regression equation. Furthermore, it may create perverse incentives for a region to become and remain 'needy'. McLean and McMillan (2003) present an alternative option, which uses inverse GDP as a proxy for need (i.e. the increase in grant to each territory should be inversely proportional to its GDP or level of national income per head). GDP per head is arguably a more objective measure of need and is not the direct result of government policy, although it is highly correlated with certain variables that governments must seek to improve, such as health status and levels of human capital. Furthermore, GDP per head has the added advantage of being measured by an independent non-partisan body – the Office of National Statistics. MacKay and Williams (2005) shows that taking inverse GDP as the guide, devolved expenditure per head in Wales and Northern Ireland should be about 27% higher than in England, and devolved expenditure in Scotland should be around 6% higher than in England. McLean et al (2008) undertake a similar analysis using GVA per head as a proxy of economic performance and conclude that currently Scotland is receiving more than its need would suggest, whilst England receives less. Gripaios and Bishop (2005) broaden the analysis to consider the regional distribution of all public spending per head (including non-identifiable spending) and find wide variations, with London being a particular beneficiary. Their results in fact do not indicate any clear relationship between GDP per head and public spending at all; leading them to conclude that, in total, government spending is doing little to ameliorate regional inequality.

- Cross-border interdependencies and spillovers

Perhaps the most intractable and peculiar feature of the UK's system of territorial finance is its embeddedness within the UK's centralised public expenditure system and more especially, the explicit manner in which it links the determination of the devolved administrations budgets with the spending levels of the largest, non-devolved state – England. This creates significant potential for interdependence between budgets and ultimately for cross-border policy spillovers or externalities, whereby the policy adopted in one jurisdiction has either positive or negative implications for the residents of the other jurisdictions. In the absence of countervailing corrective mechanisms, this serves to reinforce and thus legitimise the asymmetries between UK regions and nations.

The Barnett system is built around the dominance in spending of England in the UK. Not only does this make the formula untenable in the context of any further devolution to England (which might require the dismantling of the notional English 'block') (Hazell and Cornes, 1999), but it also has substantial knock-on effects (or consequentials to use Treasury terminology) on major parts of the welfare state in the devolved territories. The Barnett formula translates any increase in, for example, health expenditure in England into the same cash increase per capita for Wales. This, however, results in a smaller percentage increase in spending in Wales, which does not relate to need or cost and does not address the historical imbalance of health expenditure in favour of England. If the Welsh Assembly wants to match the current percentage rate of increase of health spending in England and account for the higher expense of delivering those services, the inevitable corollary is reduced spending in other areas – in effect, reducing autonomy over policy choices (see Hazell and Cornes, 1999; also Bristow, 2001; Heald and McLeod, 2003). A further issue is that if an English spending department changes in capital allocations, then this has to be mirrored in devolved budgets. For example, if the Department for Health cuts capital expenditure, the Welsh Assembly Government gets a cut in its capital allocation even though it may have a higher need to spend on capital projects. The linking of budgets and spending priorities in this way is less problematic in an era of public expenditure largesse (which characterised UK devolution up until 2005) but becomes more pertinent in a climate of public expenditure restraint.

The limited fiscal autonomy built into the Barnett system also results in a disjuncture between spending and revenue raising responsibilities and thus a soft budget constraint for the devolved administrations. This may be disadvantageous to them inasmuch as it fails to provide an adequate incentive for them to pursue policies to boost economic growth and thus tax revenues. It also reduces their freedom to choose their desired level of spending and institutionalises a blame culture between jurisdictions when spending levels (and thus taxation rates) rise (House of Commons, 2007). Taxation and charges which are only applied in one of the UK nations or regions can also have anomalous impacts (in a manner analogous with the impact of decisions regarding the comparability of spending programmes discussed above). Whatever the nature and scale of the spillover effected (and arguably there is a need for greater evidence here), the outcome appears incongruous in the context of devolution's assertion of the importance of policy variation.

- Inadequate transparency and legitimacy – procedural injustice

The literature also highlights the failure of the Barnett formula to deliver procedural justice i.e. the principle that any fair division procedure should be just in relation to its processes as well as its outcomes. Procedural fairness requires the existence of rules (formal or informal, explicit or implicit) which are consistently applied over space and time. Both Morgan (2001) and more recently McLean et al, (2008) have argued that in order to be sustainable, the mechanisms used to distribute public spending resources need to be transparent and fair in terms of both outcomes and the mechanics of their distribution.

Whilst much more is now known about the process and mechanics of the formula, the literature still highlights the lack of transparency which surrounds it, particularly in relation to the numbers and the calculation of formula consequentials. Indeed, a considerable degree of discretion surrounds the classification of spending programmes by the Treasury and the decisions regarding which are deemed to be 'English' programmes (for which there is a calculable Barnett consequential for the devolved block grants), and those which are deemed to be 'UK spend' (i.e. which ostensibly benefits the whole of the UK and thus not subject to the Barnett formula and generative of additional spending for the devolved administrations). These decisions can potentially have significant budgetary consequences for the devolved administrations however and provoke incendiary debate and reaction. Two recent examples reported in the Welsh press highlight the growing dissatisfaction in Wales in this regard. The decision to regard spending on the 2012 London Olympics as 'UK spend' has cost Wales an estimated £437 million in incremental spending to the Assembly budget (Shipton, 2007). Similarly, the decision to classify the spending by Cycling England as UK spend cost Wales a further £8 million when Cycling England was awarded an additional £140 million in government funding (Livingstone, 2008). The implications of these decisions on the devolved budgets are not well understood or documented and in some cases the 'headlines' do not reflect the eventual impact on the Welsh budget.

The consequence is that the formula is increasingly and widely perceived to be unfair, and continuing debates brings uncertainty and undermines confidence in and the legitimacy of the system. The increased incidence of formula bypass (discussed above) presents a case in point. The formula bypasses that occurred prior to devolution did so not because of pure political lobbying, but as an outcome of bureaucratic negotiations and wrangles. The Comprehensive Spending Reviews since 1997, which determine the budgets of the devolved administrations, however have produced political lobbying from the devolved governments in respect of specific, ad hoc funding demands or 'needs' (as discussed above).

Moreover, there are few formal arenas within which to discuss these issues. Intergovernmental dialogue within the UK is largely informal and characterised by a range of unsystematic, ad hoc interactions between civil servants and ministers. Indeed, one of the most striking and distinctive features of the Barnett formula system is its informality and the absence of any institutional machinery or fiscal constitution for settling claims in an open, transparent and inclusive manner (Heald and McMLeod, 2003; McLean, 2005). With variable lobbying powers evident in the context of asymmetric devolution, the inevitable claim is that those better equipped to voice their demands have an unfair advantage (Bristow, 2001). The Joint Ministerial Committee (JMC) is intended to provide one possible, more formal arena in which such matters can be discussed. This is a forum whereby the UK Government and the devolved administrations can meet to discuss matters relating to devolution, and in which any disputes around matters of finance can be raised, To date, however, this route has not been used.

The Barnett formula resides firmly within Treasury hands and its application rests upon tradition, convention and ostensibly goodwill between the different tiers of government. This has worked without major conflict to date largely because of the similarities in political colours of the devolved administrations and UK government, a situation which clearly may change in the future. There is thus no formal mechanism in place for considering the scale and significance of policy spillovers and their consequences. According to McGregor and Swales (2005) this betrays the UK Treasury's explicit failure to acknowledge and appreciate that the UK consists of a series of interdependent regional economies and jurisdictions, characterised by a range of economic and fiscal linkages. Not surprisingly as a result, there is no collective assessment of, or obvious policy instrument in place to mitigate, the ultimate consequences.

For these reasons, there is growing debate about the possible alternatives for reform. This debate is, however, beyond the remit of this study. What is pertinent to note here, however, is that any review of funding alternatives has to acknowledge that resource allocation in government is a finely meshed collaboration of political and technical judgements (Midwinter, 1999). This implies that what matters in that the political assumptions underpinning resource allocation are made explicit and are open to debate.

3.2. The relative merits of the formula funding system for Wales

A small number of studies have drawn attention to the particular advantages and disadvantages of the formula for Wales.

(i) Needs and the changing economic and social conditions in Wales since 1978;

Several studies explicitly make the claim that Wales has been disadvantaged by the Barnett formula (e.g. Morgan, 2001; Bristow, 2005; MacKay and Williams, 2005). This is largely on the basis that whilst public spending levels in the region have been preserved at levels higher than the UK average, the baseline advantage was less than generous and economic and social conditions have deteriorated. This therefore raises significant questions around the extent to which the formula meets public spending needs in Wales. As indicated above, MacKay and Williams (2005) estimate that public spending per head in Wales should be between 20 and 27% higher than in England, whilst McLean et al (2008) reach similar conclusions. However, these studies use only proxy indicators of need (such as social security and relative household income) and do not constitute the results of comprehensive needs assessment exercises.

There is little doubt that economic and social conditions have changed dramatically in Wales since the last Treasury needs assessment in 1979 and that on the majority of socio-economic indicators of need, the disparity between Wales and England has grown. Indeed, GDP per head has fallen from 88 per cent to less than 80 per cent of the UK average. There may also be a case for higher public spending in Wales in relation to both the level of demand for public services and the costs of service provision. Relative to the UK average, for example, a higher proportion of the Welsh population are of pensionable age, reflecting the attractiveness of Wales as a place for retirement. This places greater pressure on the cost of health care. According to McLean and MacMillan (2003; p. 46) "Wales has already been a victim, not a beneficiary, of Barnett" in that although its prosperity has fallen whereas Scotland's has risen it has enjoyed relatively less beneficial public expenditure outcomes than Scotland. This, they argue, reflects the fact that Wales has traditionally presented a less credible threat to the union than Scotland. Strict application of the formula will of course further reduce the level of public spending per head in Wales relative to England.

Indeed, some analysts suggest that the squeeze is now starting to operate in Wales where the level of public spending has declined from 13% above the UK average in 2002-03 to 8% above the UK average in 2007-08, and also in Northern Ireland where spending per head fell from 38% to 21% above the UK average during the same period (McLean et al, 2008). Indeed, one estimate is that since 1999 the Barnett squeeze has cost Wales approximately £1 billion (ap Gwilym, 2006). If it had not been for the formula bypasses mentioned above, the reduction in available funding would have been considerably more severe. It should be noted however, that because the Treasury does not publish Barnett comparable budgetary allocations for England, the above analysis does not directly measure Barnett comparable public spending allocations for the Countries of the UK or the ‘Barnett Squeeze’.

Two other arguments are worthy of note here. Firstly, the Barnett squeeze has become more significant since 1999 because the effect is greater when there are high nominal increases in public expenditure on services in England, which, in the case of Wales, are devolved. Put simply, the higher the increase, the greater the squeeze. Secondly, Wales may in effect subject to a double squeeze caused by the need to find match funding for the Objective One programme from within the existing block grant. This is because although the formula was bypassed to provide an additional ‘Barnett plus’ settlement to support European programmes, there have long been questions around whether a sufficiently generous settlement was reached to allow the Assembly government to meet its match funding commitments without having to reduce spending on other programmes such as health and education (Bristow and Blewitt, 2001; Bache and Bristow, 2003).

A further point to consider is the broader impact of the Barnett squeeze on the level of demand in the Welsh economy. In a paper in 2004, McGregor et al (2004) assert that government expenditure is an important component of regional demand that has significant impacts on economic activity and employment. They estimated that rigorous adherence to the Barnett formula would eventually result in a contraction in GDP in Wales of at least 2.9% (3.9% if population weights were updated annually). In other words, any squeeze on government spending would reduce the total level of income circulating in the Welsh economy, thereby reducing spending on goods and services and so impacting negatively on the total value of income and output in the economy.

(ii) the degree to which the formula permits or constrains policy autonomy on the part of the Welsh Assembly Government;

There is limited evidence on the degree to which the formula permits or constrains the Assembly’s policy autonomy. Whilst the Richard Commission in 2004 acknowledged concerns about the adequacy of the budget, it emphasised that the Assembly Government has found the resources to diverge from standards of provision in England in a number of areas including student support, subsidised transport and prescription charges. In other words, the Assembly's budget had been sufficient to allow policy innovation to occur. The Commission did provide a health warning here however and state that the formula funding system means that the Welsh Assembly Government's overall budget is constrained by public spending decisions taken in Whitehall. At the time of its report, the climate had been relatively benign and the early years of devolution coincided with high levels of spending growth. In more stringent public expenditure conditions the scope for policy innovation may be more limited and relations between Cardiff and London more strained as a result (Bristow, 2005). The growing popular debate in Wales around the Barnett squeeze and the anomalies of formula consequential (discussed above) is indicative of reduced confidence in the system.

(iii) extent to which it leads to inefficiency

Since the Barnett formula is solely concerned with expenditure, the territories arguably have no incentive to ensure that the structure of taxation within their boundaries is efficient or equitable. In other words, since they have no responsibility for raising their own revenue through taxation, they arguably have no clear incentive to be careful in how they spend money. This could lead to irresistible upward pressure in their spending or ‘formula drift’ – that is, in effect they will continually ask for more money and resources from central government. This is the classic argument for giving devolved administrations greater fiscal responsibility through the granting of some revenue-raising powers. In a recently published paper exploring this issue in relation to Wales, Foreman-Peck and Lungu (2009) argue that Wales has experienced the greatest relative rise in its public spending ratio in the UK and thus the greatest problem of inefficiency. They further demonstrate that a reduction in public spending in Wales would actually encourage net employment growth. This is because they argue that higher public spending arguably crowds out more effective private sector activity.

(iv) public opinion within Wales as to the equity and appropriateness of the system.

Whilst there is a growing body of data on public attitudes towards devolution in Wales, there is very little in the way of evidence on public opinion as regards the equity and effectiveness of the formula funding system or the appetite for reform.

4. Barnett in the International Perspective

Every decentralised state faces the challenge of striking the appropriate balance between territorial equality and diversity in policy outcomes across its regions. Where a potent logic of a common state or territorial solidarity exists, any differences in territorial financial capacity will need to be evened out through horizontal fiscal equalisation or payments to offset region-to-region variations in revenue-raising capacities or public service cost. International experience reveals a wide range of equalisation models exist in practice.

This section of the report aims to place Barnett in its international context and provide a review of the relevant international experience on territorial finance systems. The review focuses on providing an overview of the literature on the similarities and differences between methods applied in countries similar to Wales, and the Barnett formula and funding system.

4.1 The uniqueness of Barnett

When examining the Barnett formula in its international perspective, it becomes clear that it is highly unique and unusual in a number of respects:

- No other country allocates public expenditure at a sub-national level using a formula based on *changes* to expenditure programmes. Most other countries either use some mechanism that adjusts the *level* of funding according to some measure of needs, or permit a degree of fiscal decentralisation.

- No other country ties the spending allocations to its regions to its largest constituent state. In most other countries as a result, the problems of *cross-border spillovers and interdependencies* are unlikely to apply.

- Unlike most quasi-federal and federal systems of finance, it has no clearly established principles of mutual solidarity and equalisation. Most international systems assert the principle of horizontal fiscal equalisation such that each region or state should have the capacity to provide a range and standard of government services comparable to other states and territories, subject to a comparable revenue-raising effort and average level of operational efficiency. Thus the greater the adherence to this principle, the less the likelihood of the problem of *territorial injustice* or inequity in outcomes being the result.

- Similarly, the Barnett formula system stands out from most quasi-federal and federal system of finance because of its lack of a fiscal constitution or pertinent institutional machinery to underpin and provide coherence and legitimacy to it. Countries with a greater institutional apparatus and finance constitution arguably are less likely to suffer problems of *procedural injustice*.

4.2. Literature on relevant international experience

There is a growing body of literature highlighting the strengths and weaknesses of different systems of territorial finance. For example, a special issue of the journal *Regional and Federal Studies* in 2003 (volume 13, number 4) was devoted to comparing systems of territorial finance in Canada, Australia, Germany, Spain and Belgium. Similarly, chapter 3 of the 2006 report of the Steel Commission enquiry into the Scottish constitutional settlement focused on considering key lessons from exactly the same countries for Scotland (the Steel Commission, 2006). Finally, and more recently, an independent report for the Calman Commission on Scottish Devolution has also described the differing methods employed in Germany, Switzerland, Spain, Canada and Australia (Independent Expert Group for the Commission on Scottish Devolution, 2008).

This literature highlights some general lessons of relevance to current debates about reforming Barnett in the UK.

(i) Generic lessons from international experience:

- There is no single model of territorial finance arrangements that is universally applicable everywhere, such that one cannot simply pick institutional models from off a shelf. Even where almost identical institutions have been adopted, different circumstances may make them operate differently.

- There are a number of common elements affecting intergovernmental financial arrangements. These include:
    - The appropriate allocation of taxation powers and resources to different orders of government;
    - The allocation of spending responsibilities to different levels of government;
    - The size and nature of vertical and horizontal imbalances and the role of transfers adjusting these;
    - The scope and form of equalisation transfers;
    - And the political processes and institutions established for adjustment of these.

- The main differences between territorial systems relate to the different weights they put upon different criteria. These criteria include:
    - economic efficiency;
    - equity objectives in terms of equality of opportunity, economic security and quality in the provision of public services;
    - autonomy to ensure genuine self-rule in the constituent units;
    - transparency and accountability in the interests of democratic government;
    - political stability and minimising internal conflict;
    - and adaptability to changing circumstances over time.

- The literature clearly emphasises that there is no definitive solution to the problems of designing a system of territorial finance, and there will always be trade-offs between the different criteria of efficiency, equity and autonomy.

- Intergovernmental financial arrangements are not simply technical affairs but are also inevitably the result of political compromises. No system is entirely free from political lobbying and bargaining processes. Different systems simply design different mechanisms for managing politics based on an understanding of the political contexts in which they occur.

- Territorial finance systems, processes and institutions have to be dynamic and adapt to changing socio-economic circumstances and changing political attitudes and realities.

(ii) Country-specific lessons

There is particular interest in the academic literature in the Australian system, largely because of its parallels to the UK in respect of a strong dependence on inter-governmental fiscal transfers to the states and its shared institutional heritage, coupled with its comprehensive and well-established mechanism for allocating spending across its states and territories according to differential needs (see, for example, McGovern et al, 2002; Kay et al, 2005; McLean et al, 2008; Pickernell et al, 2008). The example of Spain also seems to have particular relevance to the UK given its recent process of devolution which is similarly asymmetric across different parts of the country. Indeed, both Spain and Australia feature prominently in the reviews of international experience mentioned above. Their key features and lessons are therefore summarised here:

Australia:

The Australian system of fiscal distribution is one of the most studied in the world. It is also widely acclaimed. Indeed, Matthews (1994, p. 16) has stated that “Australia has developed the most comprehensive, effective and equitable system of fiscal equalisation in the world.”

- Australia, like the UK, is characterised by a high degree of vertical fiscal imbalance i.e. the Commonwealth (central) government raises most of the taxation revenue, whilst the states and territories principally spend.
- The key feature of the Australian system is its use of an independent institution, the Commonwealth Grants Commission, to assess claims made by the Australian state for financial support from central government.
- It advises on the per capita ‘relativities’ which are then used to determine equalisation between the states. Per capita relativities involve assessing both states’ capacity to raise revenue and their expenditure needs (i.e. their relative needs).
- The system thus places high value on territorial equity which is defined as a situation whereby each state is given the capacity to provide the average standard of state-type public services assuming it does so at an average level of operational efficiency and raises an average effort to raise revenue from its own sources.
- Another key facet of the Australian system, that holds particular relevance for the UK, is its well-developed and transparent system of Specific Purpose Payments (SPPs). These are payments given by the federal government to the states for specifically designated programmes and expenditures, particularly in health and education. These provide a transparent mechanism for dealing with payments to address particular public expenditure needs and thus might offer lessons to the UK in respect of its current and rather ad hoc system of formula bypass (Pickernell et al, 2008). Thus, at a minimum in the UK, SPPs could replace formula bypass for specific elements of health and education, while the possibility exists for greater use of SPP arrangements to ensure (for the UK government level) a minimum per capita spend in these areas and / or incorporation of some measure of need and cost. The type of SPP is important however. Experience from Australia demonstrates that there is a tendency for the federal government to attach more conditions to these and thus to seek to control how they are spent.
- The system’s main strengths relate to its emphasis on equity; its non-manipulability through the arms-length status of the Commission; and its political entrenchment and legitimacy.
- Its weaknesses are its possible disincentives to state tax efforts; its lack of political accountability (the Commission is effectively a ‘quango’); its complexity (and thus administrative cost); and the temptation it gives the central government to try to influence where public spending is allocated in the regions.

Spain:

- Spain has an asymmetric model of progressive decentralisation of power to its autonomous communities, in line with its history of regional and cultural diversity and complex political negotiation and approval processes.
- The main asymmetry in the Spanish system lies between the foral regime, which applied to the Basque Country and Navarra and is characterised by almost complete autonomy and considerable devolution of spending responsibilities, and the common regime which applies to other regions which have progressively acquired greater spending responsibilities and some influence over revenues.
- Spain’s system of territorial finance has a ‘solidarity’ measure to protect the level of funding across its different regions and provide equalisation. The mechanisms to achieve this are:
    - An adequacy fund, based on population distribution;
    - Specific health funds for health cohesion;

- A relative revenue fund, for communities with lower per capita income; and
- An inter-territorial compensation fund.

- The system's main strengths are: its responsiveness to diverse conditions across the country; greater fiscal autonomy without loss of macroeconomic control; improving incentives for regional efficiency; and some tax sharing without tax competition.
- The main weaknesses are: the higher priority given to politics rather than economics in decentralisation processes; the relatively low contribution made by rich foral regions to the solidarity fund; the revenue constraints faced by poor common regime regions; and the complexity of the asymmetric system.

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