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RECONCILING PUBLIC EXPENDITURE CONTROL WITH SUBNATIONAL GOVERNMENT AUTONOMY

UK and Australia

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Reconciling public expenditure control with subnational government autonomy: UK and Australia.

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Abstract: There is an inherent tension between public expenditure management and regional autonomy. The former is the responsibility of the upper tier of government, which is the only body that can govern national debt management. The latter is not meaningful unless regions have some autonomy on the tax side as well as the expenditure side; otherwise, they have no incentives to be efficient. As the UK moves towards greater tax autonomy for Scotland and Wales, comparisons with Australia may be instructive. There, the Commonwealth Grants Commission (CGC) has managed block grant transfers to the states since 1934, and has developed ways of doing it that do not crush states' incentives to make tax effort. But the consensus around the CGC's operations is currently fragile.

The first known recognition and proposed solution to this problem by Alexander Hamilton in 1790 is briefly discussed.

This paper arises from our research project ***<u>The history of UK public spending control 1993-2015</u>***

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Reconciling public expenditure control with subnational government autonomy

There is an inherent tension between public expenditure management and regional autonomy. The former is the responsibility of the upper tier of government, which is the only body that can govern national debt management. The latter is not meaningful unless regions have some autonomy over tax as well as over expenditure; otherwise, they have no incentives to be efficient. As the UK moves towards greater tax autonomy for Scotland and Wales, it may become more like Australia. There, the Commonwealth Grants Commission (CGC) has managed block grant transfers to the states since 1934, and has developed ways of doing it that do not crush states' incentives to make tax effort. But the consensus around the CGC's operations is currently fragile.

The problems discussed are more general, and of course they arise in the relationship between Puerto Rico and the continental United States. The paper does not address this, but does consider how the tension played out in the US founding era.

Subnational government autonomy, VFI, and HFE

There are four basic concepts in national-subnational fiscal relations. Two are self-explanatory: macroeconomic management and local autonomy. Local autonomy is a prerequisite for local government. The only body which can exercise public expenditure control and, relatedly, manage the national debt, is the central government. But, unless a subnational government has some policy and fiscal autonomy, it is not a subnational government at all, but merely a local branch of the national government.

The other two essential concepts may be less familiar. They are vertical fiscal imbalance (VFI) and horizontal fiscal equalisation (HFE).

VFI may be defined as the difference between two ratios: (A) the proportion of general taxation that is raised nationally to the proportion raised subnationally, and (B) the proportion of public expenditure incurred by the national government to the proportion incurred by subnational governments. The fraction A is higher than the fraction B in every modern state. The national government always has far more power to tax than the subnational government; but the latter is responsible for expensive services such as education, transport, and sometimes health and welfare. The more mobile a tax base, the higher is the optimal level of government at which it should be taxed. People are mobile, and capital even more so. Land is not. That means that the taxation of labour income is usually organised at national level, and the taxation of capital income always is. The appropriate tax bases for subnational government are expenditure and land. But the dominance of income taxation in modern budgets is what makes VFI inescapable. VFI means that the national government has to distribute some tax proceeds to subnational governments so that the latter can do their jobs.

But VFI is also inextricably linked to HFE. Every country has poorer and richer regions. Poorer regions usually have less capacity to tax per head, and always have more need to spend per head, than richer regions. So the central government must either run, or supervise, an equalisation regime, or HFE. There must be a system of transfers from richer to poorer regions in order to offer a common minimum level of services to its citizens, wherever they live. This is illustrated schematically in Fig 1 below.

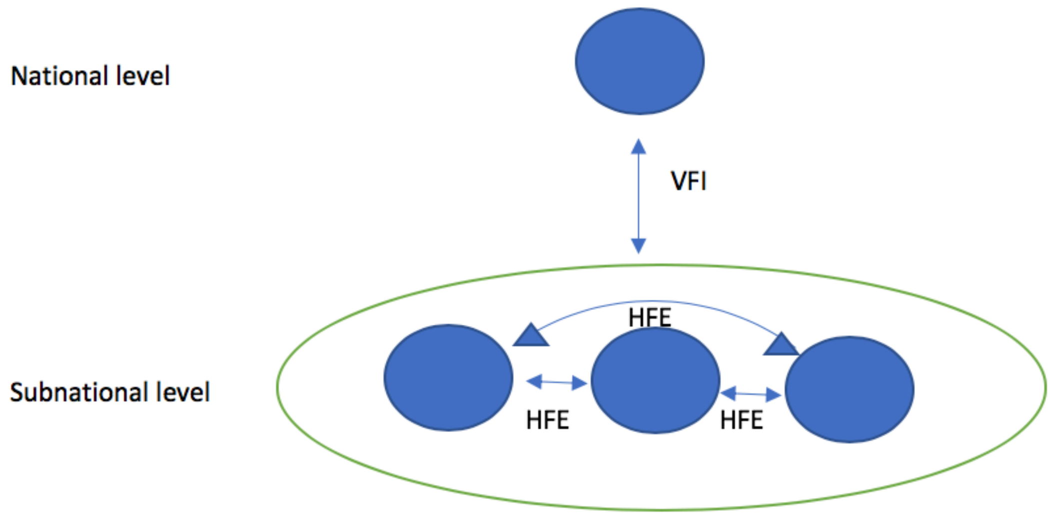

Figure 1. VFI and HFE in a fiscal system with three bodies on the subnational level

Control vs. autonomy in the UK since 1886

Because of VFI and HFE, the tension between public expenditure management and regional autonomy exists everywhere, although less obviously in a unitary state than in a federation. In a unitary state the upper(most) tier of government can create or abolish lower tiers at will. Among the things that, in principle, it can ensure is that no lower tier runs up unsustainable debts. If the United Kingdom (UK) were a purely unitary state, the problems discussed in this paper would be more tractable. But it is not. Even in 1707, the Union with Scotland ensured Scottish autonomy in certain functions of government. Rokkan and Urwin's (1982), labelling of the UK a 'union state' rather than a unitary state is helpful.

While public expenditure (except in wars, and by/for kings) was trivially small in relation to GDP, the conflict between management and autonomy was a non-issue. In the UK it became an issue in 1886. Having decided to grant 'home rule' (i.e., devolution) to Ireland, Prime Minister W.E. Gladstone drafted a bill whose most difficult areas, in his own estimation, were public finance and Irish representation in the UK Parliament. On finance, Gladstone thought that Irish grievances would be allayed if an Irish parliament was responsible for them. But how were they to be paid for? Gladstone envisaged the Irish parliament as having the power to levy its own taxes to cover the cost of its own services, while making an 'Imperial contribution' to the UK to pay for such things as foreign policy and defence. This has been labelled the 'revenue basis' to financing subnational government. It may be contrasted with the 'expenditure basis', where the upper tier government makes a grant to the lower tier in contribution for the services the latter provides. This grant may itself be calculated in various ways. There may be an assessment of relative need and/or of local tax capacity. The power to level a tax may be *devolved*, so that the lower tier has (some) control over the rates and/or the base of the tax. Or, more narrowly, the local proceeds of a tax may be *assigned* to the lower tier.

Ireland had low tax capacity and high public expenditure need. So a revenue basis for funding Irish services could not work without a massive direct grant offered without strings, which would have been an expenditure basis in all but name. The 1886 bill failed, for many reasons, so that its tax provisions were not even reached. In 1888, the succeeding Unionist finance minister, George Goschen, proposed a modest tax assignment: that the proceeds of probate duty, an ad valorem inheritance tax imposed on the whole personal property of the deceased, would be divided in the proportion 80:11:9 to England (including Wales): Scotland: Ireland.

The Goschen formula, or proportion, was no solution to the problem of funding Ireland, because it was again a revenue assignment formula for an area with low revenue from the assigned tax. But it had two consequences. In Northern Ireland, it set the framework for a bogus revenue-based system of which vestiges survive to this day. And it came to play a significant role in Scotland. The ratio 11:80 was baked into every negotiation between Scottish ministers and HM Treasury. Scottish ministers treated Goschen as a floor, not a ceiling, and made special-needs claims on top. The latter might relate to cold weather, poor health, high unemployment, the sparse population of the Scottish Highlands, or anything else that might appeal to an inventive Secretary of State or civil servant. There is ample evidence, collected by Levitt (1999, 2014), of the frustration this caused to public expenditure teams in HM Treasury for over a century.

(Northern) Ireland since Goschen: a bogus revenue system

The bogus revenue-based system in Northern Ireland was created by the Government of Ireland Act 1920. This was intended to activate devolved governments in (what are now) Northern Ireland and the Republic of Ireland, but because of Irish independence in 1921 it only ever controlled the former.

According to the 1920 Act, Northern Ireland was to have the power to levy its own taxes with some exclusions (s.21). For the main UK taxes (income tax, corporation tax, and customs and excise duties), the proceeds from Northern Ireland were to be assigned to it to pay for local services (s.22), but a first charge on its tax receipts would be the 'Imperial contribution' to services provided by the imperial (i.e., UK) government (s.23).

The whole arrangement was a sham (Mitchell 2006). The joint Exchequer Board did not function. As the cost of services in Northern Ireland exceeds the tax attributable to Northern Ireland, the Imperial Contribution has been negative since the 1930s. Furthermore, the Treasury did not concede even the shadow of a revenue system. In 1952, the Northern Ireland Finance Minister, Major Sinclair, proposed to vary two taxes that were in his gift according to s.21 of the 1920 Act: death duties and motor vehicle taxation. The Treasury minuted for its ministers:

> In order to prevent NI taxes being reduced at expense either of the Imperial Contribution or of Social Services in NI, there is an understanding that "parity" will be preserved in respect of taxation and expenditure. If there were a dispute, it would go before the "Joint Exchequer Board" – a body consisting of an official from Treasury, an official from N. Ireland Ministry of Finance, and an aged Scottish Judge (Lord Alness, who lives in Bournemouth). But it is unthinkable that there should be a dispute of this sort. ….. For our part we dislike this deviation and would be very glad if Major Sinclair could come into line, but if he insists on his rights it is up to him to raise the standard rate in such a way as to protect the Chancellor from pressure to follow the Northern Ireland example in this country (UK National Archives, T/233/1475, Note from A.T.K. Grant 7 April 1952 to Mr Trend and Mr W. Armstrong, cited by Mitchell 2006: 63-4).

The author of this memorandum did not regard Northern Ireland as part of 'this country'. Until the Good Friday Agreement of 1998, which led to the repeal of remaining sections of the 1920 Act, the Northern Irish government simply asked for a grant without strings to cover the difference between tax raised in Northern Ireland and domestic expenditure there; the UK government always paid out without cavil. Even since 1998, there have been long periods of direct rule of Northern Ireland without a functioning government there. Northern Ireland may indeed pose problems for expenditure control in the UK, but they are not problems caused by a subnational government allowing unfunded debt or deficits to pile up.

Wales and England: little local autonomy

The Welsh government and English local authorities can similarly be discounted. Wales was not given a magic ratio by Chancellor Goschen. It did not have Scotland's power to argue for a floor level of subsidy and the Welsh Office, as well as the Secretaryship of State for Wales, date back only to 1964. Therefore it is not surprising that public expenditure per head in Wales remains below that in Scotland, although Scotland is richer; nor that, despite the powers conferred by the Government of Wales Acts 1998 and 2006, Welsh debt or deficits do not appear to concern HM Treasury.

English local authorities, meanwhile, are purely creatures of statute. They can be created and abolished at will by Parliament. Those in Wales and Scotland now come under their respective parliaments, which have similar powers. Those in Northern Ireland are nugatory. Although, in aggregate, local government debt is a significant proportion of general government debt, little of it comes from their market borrowing operations. Table 1 provides a snapshot.

Table 1. Sources of English local authority capital finance

Financing of capital expenditure, 2011-12 to 2016-17

£ million

	2011-12		2012-13	2013-14	2014-15	2015-16	2016-17 (F)	
Central government grants	7,170	(a)	8,481	7,483	8,520	9,302	9,001	
EU structural funds grants	77		55	57	132	114	24	
Grants and contributions from private developers and from leaseholders etc	747		693	750	727	1,069	1,421	
Grants and contributions from NDPBs (b)	522		442	443	564	505	698	
National lottery grants	121		67	49	53	47	83	
Use of capital receipts	1,647		1,294	1,516	1,879	2,196	3,298	
Revenue financing of capital expenditure *of which:*	4,504	(a)	3,167	4,920	5,241	4,654	5,070	
Housing Revenue Account (CERA)	*324*		*466*	*578*	*686*	*775*	*1,509*	
Major Repairs Reserve	*1,160*		*1,259*	*1,491*	*1,526*	*1,815*	*1,595*	
General Fund (CERA)	*3,020*		*1,442*	*2,851*	*3,029*	*2,065*	*1,965*	
Capital expenditure financed by borrowing/credit *of which:*	18,819		4,842	4,454	4,422	4,759	9,925	
SCE(R) Single Capital Pot(c)	*338*		*88*	*70*	*0*	*0*	*0*	
SCE(R) Separate Programme Element(c)	*74*		*30*	*8*	*0*	*0*	*0*	
Other borrowing & credit arrangements not supported by central government (e)	*18,406*	(d)	*4,724*	*4,376*	*4,422*	*4,759*	*9,925*	
Total	**33,606**	(d)	**19,042**	**19,671**	**21,539**	**22,646**	**29,519**	(f)

Source: Ministry of Housing, Communities, and Local Government, *Local Government Finance Statistics England 2017*, Table 4.2a. At https://www.gov.uk/government/statistics/local-government-financial-statistics-england-2017, accessed 26.02.2018.

Table 1 shows that English local government borrowing not backed by central government guarantee has been rapidly declining since 2011-12, and in the latest available financial year stands at £9 billion. Given that UK public expenditure is about £750 bn per annum, this is insignificant.

Scotland: inching towards fiscal autonomy

The Scotland and Wales Acts 1998 created parliaments in both countries. But it did not introduce a revenue-based system for either new parliament. Each was initially to be financed entirely by block grant. The only locally levied taxes were, as in England, property taxes. However, the Scottish Parliament was given the power to vary the standard rate of income tax, up or down, by up to 3 pence in the pound (Scotland Act 1998, Part IV). The idea was to introduce financial responsibility, *at the margin*. It was intended that the Scottish Parliament should face the choice of providing more services (and increasing tax to pay for them) or cutting taxes (and cutting services accordingly). The Parliament did neither. The block grant it received was so generous that it did not have to make any controversial choices.

Since 2007, the Scottish government has been controlled by the Scottish National Party (SNP): in minority government from 2007-11 and since 2016, and in a majority from 2011 to 2016. The SNP's declared policy is Scottish independence, and it promoted a referendum in 2014 on the question 'Should Scotland be an independent country?', which was rejected by 55% to 45%. Currently, public expenditure in Scotland is substantially higher than tax raised in Scotland (Scottish Government 2017). An independent Scotland would of course have to manage its external debt and deficit. Short of independence, the stated policy of the SNP is 'full fiscal autonomy'. Scotland would resemble the model proposed but never implemented for Ireland in 1920: complete control over taxes and domestic expenditure, while paying an 'Imperial contribution' to the UK for defence, foreign affairs, and macroeconomic management. Unlike Ireland in 1920, Scotland is an averagely prosperous part of the UK, so there is nothing implausible about full fiscal autonomy. Two inquiries (Calman 2009; Smith 2014), and two Acts – the Scotland Acts 2012 and 2016 – have inched Scotland towards fiscal autonomy.

The Calman report recommended to devolve some small taxes including the nicely complementary aggregates duty (a tax on digging holes) and landfill tax (a tax on filling up holes); and, centrally, for the UK government to withdraw from 10p in the pound of the standard rate of income tax in Scotland and let the Scottish Parliament decide what rate to levy. Calman also recommended increasing the Scottish government's (till then, trivial) borrowing powers.

Its fiscal recommendations had been researched by an academic Independent Expert Group (IEG), which invited leading figures in fiscal federalism from Canada and Australia, including the then chair of the Commonwealth Grants Commission, to address Calman. The scheme recommended was much more like Canadian than Australian federalism: the income tax proposal corresponds to what Canadian specialists call 'vacating tax points'. (For Canada see McLean 2005 chapter 10).

Most of Calman's recommendations were adopted in the *Scotland Act 2012 c.11*. Although the tax devolution was less than proposed (excluding aggregates duty and air passenger duty), it did include the provision for 'vacating tax points' and substituting the Scottish rate of income tax. The 1998 power to vary income tax by 3 pence in the pound, which had never been used, was repealed.

Immediately before the 2014 independence referendum, *Yes* (to an independent Scotland) voting intention surged and one poll put *Yes* ahead. This led ex-Prime Minister Gordon Brown to coordinate an offer from all the unionist parties for further devolution – more steps towards fiscal autonomy. This led to the second commission, the Smith Commission (Smith 2014), which reported very quickly. It recommended the full devolution of income tax, apart from that on savings and investments, to Scotland: i.e., to give the Scottish

Parliament complete control over the rates and the base. As before, air passenger duty, landfill tax and aggregates duty were to be devolved; and 10 pence in the pound from VAT received in Scotland was to be assigned to the Scottish Parliament. For political reasons, Smith added two puzzling recommendations. One is easy to implement but inconsistent with fiscal autonomy: viz. that the Barnett Formula (see below) would continue to govern grant from the UK to Scotland. The other, labelled the 'no detriment' principle, is consistent with fiscal autonomy but impossible to implement, viz., that

> the Scottish and UK Governments' budgets should be no larger or smaller simply as a result of the initial transfer of tax and/or spending powers, before considering how these are used (Smith 2014, paragraph 95).

The outgoing UK government issued a command paper accepting some but not all of Smith's recommendations, but they acquired new urgency with the SNP's sweep of 56 out of the 59 seats in Scotland in the 2015 UK General Election. The resulting bill was delayed because UK and Scottish government representatives could not agree on the implementation of 'no detriment'. However, as enacted, the *Scotland Act 2016 c. 11* devolves the whole of income tax (except on savings and investments), as well as air passenger duty and aggregates duty; assigns the first 10p in the pound of VAT raised in Scotland to Scotland; gives the Scottish Government new borrowing powers; and creates a Joint Exchequer Council (differing in only one word from the abortive Joint Exchequer Board, see above) to administer the arrangements.

The agreement between the two governments is more informative than the Act (UK Government and Scottish Government 2016). They acknowledge ultimate responsibility of the UK government for fiscal sustainability:

> 3. Both the Scottish Government and the UK government are committed to financial responsibility and democratic accountability, incentivising the Scottish Government to increase economic growth while allowing Scotland to contribute to the United Kingdom as a whole.
> 4. Additionally, the Governments are committed to a sustainable overall fiscal position for public finances both within Scotland and the UK as a whole.
> 5. The Scottish Government will be able to exercise its fiscal powers fully and flexibly while operating within a sustainable fiscal framework for the whole of the UK.

The new borrowing powers for Scotland involve a cap on the stock of debt at £3 bn, and on the annual issue of new debt at £450 million. These limits are small enough not to trouble the overall credit rating of the UK government. The Scottish Government does not issue enough commercial paper to attract a credit rating, but in the medium term that may change.

The expenditure side: Barnett

The Barnett Formula is a procedure that HM Treasury has used since the late 1970s to manage public expenditure in Scotland, Wales, and Northern Ireland. It is named after Joel (later Lord) Barnett, who was Chief Secretary to the Treasury (CST) from 1974 to 1979, although he was not responsible for naming it. It started during (or possibly even before) his tenure as CST, but was only formally acknowledged under the succeeding Conservative government. Towards the end of his life, Lord Barnett stated that, to begin with, he had welcomed the nickname but later became very dissatisfied as the formula seemed to him to produce inequitable results (Barnett 2001; personal communication).

The formula determines the amount of additional changes to the expenditure of Scotland and Wales. Hence, it applies to the margin, not to the bulk of expenditure as determined by past decisions (Edmonds 2001). For areas of funding where the corresponding central government department funding covers England only, for example education and health, the formula for funding to Scotland, Wales and Northern Ireland consists of a baseline plus increases based on the increases in public spending in England in comparable programmes, applied in proportion to current populations:

Extra funding in Scotland, Wales or Northern Ireland	=	The change in planned spending in departments in England	×	Population proportion compared to England	×	The extent to which the relevant English departmental programme is comparable with the services carried out by the devolved administration

For example, in 2000 Comprehensive Spending Review, the Northern Irish, Scottish and Welsh populations were taken to be 3.69%, 10.34% and 5.93% (respectively) of the population of England. For programmes in the Department of Health, the comparability factor for Scotland and Wales was 99.7%. Therefore, if £1 billion was to be added to planned health expenditure in England, then the extra amount added to the Scottish block, compared to the year before, would be £1bn x 10.34% x 99.7% = £103 million, and the amount added to the Welsh block would be £1bn x 5.93% x 99.7% = £59.1 million (Edmonds 2001).

It has always had two main aims, one publicly acknowledged, the other well known within the Treasury. They are linked. To introduce them, here is a Treasury memorandum from 1977:

> [T]he Scots and Welsh – and for that matter the Northern Irish – were indeed able to 'have it both ways' in the sense of automatically receiving extra according to the traditional formula whenever English Departments got more and further additions for special problems peculiar to their own countries. The Scots, over a long period of time (and the Northern Irish in the early 1970s), played this game skilfully and effectively; the Welsh much less so. The result was to build up public expenditure per head on Scottish Office (and NIO) programmes to something of the order of 25% more than England; and in Wales to something like 5% more. . .. [W]e should at least stop the rot by ***preventing further increases in the differential***. (P. Cousins, HMT, 25.09.1977, in Levitt 2014: 237. My emphasis).

By 'the traditional formula', Cousins means the 11/80ths Goschen proportion. Barnett was designed to address the relative overspending in Scotland (and, when applied there, Northern Ireland). It was structurally unfitted to address the relative underspending in Wales. The reasons have been explained elsewhere (McLean 2005). The core purpose of Barnett was the one not publicly acknowledged: 'preventing further increases in the differential'. The public purpose was linked to the more covert one. By making allocations to the devolved administrations (DAs) automatic, it prevented a round of annual horse-trading between the Chief Secretary and his officials on one side, and ministers and officials in the territorial departments on the other. It has been said that Barnett has no friends except the Chief Secretary of the day.

The Treasury intended to allow Barnett to run until such time as expenditure had reached the 'right' level, and then replace it by a needs formula. This has never happened. The continuation of Barnett in Scotland has been baked into the formula approved by the Smith Commission and the intergovernmental agreement of 2016.

Implications for public expenditure control in the UK

What does this imply for the dilemma outlined at the start of this paper? The top tier of government is responsible for public expenditure control. This includes expenditure on debt servicing, for debt held at all levels of government. The interest payable on government debt depends on the markets' and rating agencies' view of the creditworthiness of the issuing government, and its related ability to control aggregate public spending. If subnational governments have no tax or spending autonomy, no issues arise. We have shown, however, that Northern Ireland has had substantial spending autonomy since 1921; Scotland since

1888; and Wales since 1964. Although the Barnett formula was intended to curb (what the Treasury has always seen as) overspending in Northern Ireland and Scotland, it has not done so.

On the tax side, only Scotland has achieved serious autonomy, which has grown and will continue to grow as the Scotland Acts 2012 and 2016 come into full effect. Although the implications for public expenditure control have probably not troubled Chancellors or Chief Secretaries since Joel Barnett, the system has grown up piecemeal, with neither rational design nor control features. Could Australia be a possible model for the UK once the 2016 Scotland Act system has matured, or for other federations?

Subnational government autonomy in Australia

As in the USA, Canada, and Switzerland (but not, e.g., in Germany or Spain), the Australian federation was formed by its constituent units. The Commonwealth of Australia was created in 1901 from five of the six existing British colonies on the continent, after the second of two constitutional conventions. Presaging later difficulties, Western Australia initially voted not to join.

Taxation, tariffs, and fiscal federalism occupied a great deal of time in the Australian constitutional conventions. Before Federation, the colonies got most of their revenue from customs and excise – 76% in 1896-7. A purpose of Federation was to reduce barriers to trade such as State tariffs and railway break of gauge at State borders (the latter not yet achieved). What the states lost in revenue from tariffs against each other, they must regain from either common Australian tariffs against the rest of the world, or some other tax base. As in other federations, the States were divided in their relative exposure to the world economy, and hence in their median voter preference over tariff policy. The Constitution failed to carry in referendum in New South Wales. In subsequent bargaining, the Premiers of New South Wales and Victoria persuaded the other states to insert a clause (now s.96 of the Australian Constitution) empowering the Commonwealth to make grants to the States.

The first Australian party system was organised around the cleavage between Protection and Free Trade, these being the first Commonwealth party labels. The free-trading outlier was Western Australia (WA). It faced tariffs on its inputs and did not benefit from tariff protection for its outputs. Indeed it stood to suffer in the event of international retaliation. Tasmania was in a similar situation.
The Great Depression exacerbated WA's relative position, and in a 1933 referendum its voters voted by a margin of 2 to 1 to secede from the Commonwealth. This induced Prime Minister Joseph Lyons (to date the only Tasmanian to hold that post) to legislate for a statutory commission to report on any application from a State for financial assistance under s.96 of the Constitution. The Commonwealth Grants Commission (CGC) was constituted in the same year. Its dominant force was L.F. Giblin, another Tasmanian. Giblin took an egalitarian view of the CGC's mandate in the face of objections from those who believed that this was to expand the CGC's role beyond its statutory duty to report on claims by States in difficulty. The two conceptions of the CGC's role both appeared in early statements.

The CGC's First Report stated that 'It seems, therefore, to be unavoidable to use as some measure of disability the financial position of a State'. Successive statisticians, notably Giblin and R. L. Mathews, who became a Commissioner in 1972, elaborated formulae for evaluating 'disabilities'. By Mathews' time it had become explicit that a State suffered a disability (which could be negative) if its revenue capacity differed from the mean revenue. It also suffered a disability (again, possibly negative) if the cost of delivering services differed from the mean, for reasons such as remoteness, congestion, or differential prices of wages or supplies. This approach implied that revenue and expenditure relativities must be measured across all States.

The more limited conception of the CGC's role was embodied in its Second Report, which stated that 'the only ground for … assistance is the inability to carry on without it…. Some States are certainly in serious financial difficulties. It must be made possible for them to function as States of the Commonwealth at some minimum standard of efficiency' (quoted in CGC 1983, p. 36). On this conception the CGC should enquire explicitly only into conditions in claimant States, although implicitly even this necessarily involves comparison with the rest; and any special grant available only to claimants means by definition less grant available to non-claimants.

Over the history of the CGC, the Giblin/Mathews interpretation has prevailed. This has led the CGC to adopt egalitarian statements of the principle of HFE. The most recent version runs:

> State governments should receive funding from the pool of goods and services tax revenue such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency. (Productivity Commission 2017, p.7)

VFI and HFE in Australia

From the outset, Australia has had substantial VFI. The States have always had more line responsibilities than the Commonwealth, but the Commonwealth has always controlled more of the tax base. In the beginning, the States handed control of customs and excise, then the principal tax base, to the Commonwealth. This followed from the framers' conception of Australia as an internal free trade area surrounded by a common external tariff. Hence the Commonwealth must be the taxing authority. However, the States did not concede to the Commonwealth the domestic policy areas that they had already, as colonies, been running for decades. The Australian Constitution is difficult to amend, requiring high multiple thresholds. The financial clauses have never been amended, and therefore they remain the framework for all VFI and HFE arrangements.

Transfers of tax receipts from Commonwealth to states were systematised by the creation of the CGC. Although the CGC (and its critics) have always seen its role as one of securing a greater or lesser degree of HFE, the purchase for that role, and the need for some body such as the Commission, both arose from VFI. Wherever VFI exists, there must be a body or mechanism to make the required vertical transfers. That body may or may not also attempt to achieve horizontal equalisation. VFI, measured as the States' ratio of Commonwealth grant revenue to total revenue, was just below 0.4 at Federation. It declined to a little above 0.1 in 1939, soared during the Second World War and the foundation of the welfare state, peaking at 0.6 in 1959.

The Commonwealth took over income tax from the States in 1942. The switch was supposed to be for the duration of the war only, but it has proved permanent. In the bipartisan welfarist climate of the 1950s and 1960s, nobody except the State governments opposed the income tax power staying at Commonwealth level. When States tried to reassert their power to tax, the Commonwealth legislated to reduce its grants dollar for dollar to any State that did so. The High Court upheld the constitutionality of the de facto Commonwealth monopoly of the income tax base. (Details of this history before 1983 are in CGC 1983; subsequent details are in Productivity Commission 2017).

The Commonwealth introduced a goods and services tax (GST, functionally equivalent to a Value Added Tax) in 1999. This had been extremely controversial, and Australia was one of the last mature democracies to introduce a broad-based expenditure tax. As a side-payment to the States, the Commonwealth agreed that the whole proceeds of GST, net of the cost of collection, would be remitted to the States. This probably depoliticised the CGC operation somewhat, as there was no further argument as to how much in aggregate would be transferred. Also, GST is a robust and growing tax base.

However, the CGC has remained vulnerable to criticisms that its transfers are unfair and/or inefficient. The complaints, naturally, come from states which get less per head from the GST distribution than their citizens have paid. One such round occurred in the early 2000s, when the then donor states of new South Wales, Victoria, and Western Australia commissioned a critical review of the system (Garnaut and FitzGerald 2001, 2002). They argued that the distribution was neither equitable nor efficient, and recommended that GST should be distributed on an equal per capita (EPC) basis to each of the states. This would be close to assigning its revenue to the states. Spend per head on goods and services covered by a tax like VAT (GST in Australia) varies somewhat with personal wealth. Depending on the breadth of the tax base, poor people may pay a higher proportion of their income in tax, but rich people (and hence rich states) probably pay absolutely more per head.

Since a change in the arrangements would have required unanimity among the states, and distribution is a zero-sum game, nothing came of the Garnaut-Fitzgerald recommendations.

The CGC: a regime under threat

However, a new wave of criticism of the CGC broke after 2010. The CGC distributes the proceeds of GST to the states by a system of what it calls 'relativities'. Here (Table 2) is the latest available set.

Table 2. Relativities, shares and illustrative GST distribution, Australia, 2016-17 and 2017-18

	Relativities		GST shares		GST distribution	
	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
			%	%	$m	$m
New South Wales	0.90464	0.87672	29.1	28.2	17 369	17 680
Victoria	0.90967	0.93239	23.0	23.6	13 717	14 829
Queensland	1.17109	1.18769	23.6	23.8	14 075	14 963
Western Australia	0.30330	0.34434	3.3	3.8	1 976	2 354
South Australia	1.41695	1.43997	10.0	10.1	6 000	6 360
Tasmania	1.77693	1.80477	3.8	3.8	2 278	2 403
Australian Capital Territory	1.15648	1.19496	1.9	2.0	1 136	1 230
Northern Territory	5.28450	4.66024	5.3	4.7	3 190	2 921
Total	1.00000	1.00000	100.0	100.0	59 740	62 740

Source: Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2017 Update* Table 1. Our emphasis.

The relativities shown in Table 2 are single summary numbers, but a great deal of detailed calculation underlies them. The Commission assesses both the tax capacity and the expenditure need of each state. Tax capacity is assessed one tax base at a time: the material tax bases being payroll tax, land tax, stamp duty, insurance tax, motor taxes, and mining revenue. On the expenditure side, the material items are education, health, housing, roads, transport, welfare, justice, and community services. The Commission has elaborate methods aimed at preventing gaming by the states. The most obvious form of gaming is making claims to be relatively 'needy', something which Scotland and Northern Ireland have been doing for more than a century. The methods used by the Commission have been discussed elsewhere (McLean 2004, 2005) and are not repeated here.

The two lines highlighted in Table 2 show why the Commission's procedures have become more controversial. Western Australia has huge royalty income from iron ore mining, and therefore its relativity is only 0.34. This, recall, is the state that originally refused to join the federation and that voted to secede in 1933. Northern Territory has a very large positive relativity because of the expense of delivering services to its Indigenous, and remote, population. Note, however, that its relativity has gone sharply down – reflecting more buoyant tax receipts. The apparently anomalous position of ACT (Australian Capital Territory), a prosperous area with a relativity greater than 1, arises because the territory government cannot tax Commonwealth government employees, so its relative tax base is weaker than its relative prosperity.

Western Australia complains that its very low relativity discourages it from making as serious a tax effort as it otherwise would – repeating an argument made by its then Premier to the earlier round of criticism of CGC (Court 2002). However, unlike in 2002, the Commonwealth government responded by commissioning a second commission to look into the first commission: one arm's length public body (the Productivity Commission) was asked to investigate another (the Grants Commission).

The Productivity Commission (PC) is also a standing part of the Commonwealth government. It arose from an earlier corporatist Tariff, then Industry, Commission. It is an independent advisor on economic efficiency in, and of, government. Its enquiry into the CGC was commissioned by the Commonwealth government in response to complaints from WA about its unprecedentedly low share of redistribution. The PC produced an interim report (2017) and a somewhat delayed final report (2018a). It concluded:

> Overall, the current HFE system goes too far in the pursuit of equalisation and much beyond what other federations do. Arguably it also goes beyond what a unitary government would do, which is providing a level of services to all residents that is relatively consistent from one year to the next, and which is likely closer to the average across the nation. (Productivity Commission 2017, p. 16).

In short, the Grants Commission takes equalisation so far that it damages incentives. There are strong academic arguments in support of this criticism (e.g., Shah 2017) and in favour of the Grants Commission (e.g. Eslake 2017). In its final report, the PC recommends:

> The Commonwealth Government should set a revised objective for HFE to provide States with the fiscal capacity to deliver a reasonable standard of services. Changing the objective is an essential precursor to further improvements to the HFE system….
>
> Amongst a number of options designed to equalise to a reasonable standard, equalisation to the average of all States (rather than to the strongest State) is judged to provide a better balance between fiscal equality, fairness and efficiency. (Productivity Commission 2018b)

Fiscal discipline and state formation: lessons from the US founding era

The tension between managing debt and local autonomy is not new. We have studied it in Australia and the UK. We conclude with a case study of how unmanageable debt was brought under control in the first years of the USA.

In two fundamental documents, *Federalist* no. 12 (1787) and what is now usually called the *First Report on Public Credit* (1790), Alexander Hamilton, almost single-handedly, founded fiscal federalism. *Federalist* #12 explains why the upper tier of government must control most taxation. The Report on Public Credit explains why only it can be responsible for public debt.

Hamilton was one of the most fervent advocates of a strong national government in the new United States. He made his case in a speech to the Constitutional Convention, lasting the whole of 18 June 1787, which convinced nobody. He then left the convention, returning only to cast the sole vote from New York State, in favour of the text (Madison 1787/1987, pp. 129-39, 656). That the US Constitution was ever ratified is one of the great mysteries of the history of federalism – one mystery being why few scholars have noticed how improbable it was. The document itself provided that at least nine of the thirteen states must ratify it for it to come into effect. That meant nine out of 12, because Rhode Island had boycotted the whole effort. Some states ratified it early and quickly, but the two swing states on which it would succeed or fail were James Madison's Virginia and Hamilton's New York (Riker 1996). Hamilton masterminded the *Federalist* papers to persuade the sceptical New York ratification convention to ratify the document. He enlisted John Jay and, later, Madison as his co-authors. Some of Madison's numbers (10, 45-51) and a few of Hamilton's (notably 78) have been intensely studied by political scientists. No. 12 has been undeservedly overlooked (but see Chernow 2004: 254).

Hamilton first notes that 'The ability of a country to pay taxes must always be proportioned, in a great degree, to the quantity of money in circulation, and to the celerity with which it circulates' (Hamilton 1787, at http://avalon.law.yale.edu/18th_century/fed12.asp, accessed 21.11.2018). The United States, unlike the states of Europe, was largely a non-cash economy, so the land taxes that formed the main European tax base could not be used. The only viable tax base, therefore, was customs and excise. And the only efficient taxing authority would be the national government:

> The relative situation of these States; the number of rivers with which they are intersected, and of bays that wash their shores; the facility of communication in every direction; the affinity of language and manners; the familiar habits of intercourse; --all these are circumstances that would conspire to render an illicit trade between them a matter of little difficulty, and would insure frequent evasions of the commercial regulations of each other. The separate States or confederacies would be necessitated by mutual jealousy to avoid the temptations to that kind of trade by the lowness of their duties. The temper of our governments, for a long time to come, would not permit those rigorous precautions by which the European nations guard the avenues into their respective countries, as well by land as by water; and which, even there, are found insufficient obstacles to the adventurous stratagems of avarice.
>
> In France, there is an army of patrols (as they are called) constantly employed to secure their fiscal regulations against the inroads of the dealers in contraband trade. Mr. Neckar [J.-L. Necker, the French finance minister] computes the number of these patrols at upwards of twenty thousand. This shows the immense difficulty in preventing that species of traffic, where there is an inland communication, and places in a strong light the disadvantages with which the collection of duties in this country would be encumbered, if by disunion the States should be placed in a situation, with respect to each other, resembling that of France with respect to her neighbors. The arbitrary and vexatious powers with which the patrols are necessarily armed, would be intolerable in a free country.
> If, on the contrary, there be but one government pervading all the States, there will be, as to the principal part of our commerce, but ONE SIDE to guard--the ATLANTIC COAST. Vessels arriving directly from foreign countries, laden with valuable cargoes, would rarely choose to hazard themselves to the complicated and critical perils which would attend attempts to unlade prior to their coming into port. (Hamilton 1787, at http://avalon.law.yale.edu/18th_century/fed12.asp, accessed 21.11.2018)

In the first US federal administration, George Washington appointed Hamilton as Secretary of the Treasury, and Thomas Jefferson as Secretary of State. Meanwhile, James Madison was the floor leader in the House of Representatives for the amendments to the Constitution which were a precondition of some states' ratification. Hamilton immediately moved to consider the expenditure side of government, and in January 1790 sent a 40,000-word *Report Relative to a Provision for the Support of Public Credit* to a bemused House of Representatives (Hamilton 1790, at https://founders.archives.gov/documents/Hamilton/01-06-02-0076-0002-0001, accessed 21.11.2018)

The House had resolved 'That an *adequate* provision for the support of the Public Credit, is a matter of high importance to the honor and prosperity of the United States'. Very true. From 1776 to 1787, there had been no national treasury, nor national currency, nor national debt issue. The Continental Congress had been an extremely weak body, operating by unanimity, with one vote per state. Not surprisingly therefore, its attempts to tax were resisted and sometimes rejected outright. The states had to spend money they did not have to fight the Revolutionary war. Soldiers and government creditors were paid in worthless IOUs. State debt was issued but immediately traded at deep discounts because nobody thought it credible. A neuralgic problem was that many military veterans, who had been paid in state government paper in lieu of cash, had sold their holding for a few cents in the dollar of face value to buyers who hoped that a future government would redeem them at par.

Hamilton opens with some home truths:

> That exigencies are to be expected to occur, in the affairs of nations, in which there will be a necessity for borrowing.
> That loans in times of public danger, especially from foreign war, are found an indispensable resource, even to the wealthiest of them.
> And that in a country, which, like this, is possessed of little active wealth, or in other words, little monied capital, the necessity for that resource, must, in such emergencies, be proportionably urgent.
> And as on the one hand, the necessity for borrowing in particular emergencies cannot be doubted, so on the other, it is equally evident, that to be able to borrow upon good terms, it is essential that the credit of a nation should be well established….
> If the maintenance of public credit, then, be truly so important, the next enquiry which suggests itself is, by what means it is to be effected? The ready answer to which question is, by good faith, by a punctual performance of contracts.

Accordingly. Hamilton makes two startling proposals: that the federal government should assume the liabilities incurred by the states since 1776; and that debts be payable at par to the people currently holding them. It would be impossible to raise tax sufficiently to pay off these liabilities; rather, there should be a sinking fund to pay them off gradually (an idea also adopted by the UK government of William Pitt the Younger). Hamilton envisaged that making US debt repayment credible would reduce the burden of debt servicing:

> The Secretary conceives, that there is good reason to believe, if effectual measures are taken to establish public credit, that the government rate of interest in the United States, will, in a very short time, fall at least as low as five per cent. and that in a period not exceeding twenty years, it will sink still lower, probably to four.

As surprising as the ratification of the US Constitution is that Congress essentially accepted Hamilton's proposals, at the cost of a fatal split with his ally Madison and lifelong hostility from his fellow secretary Jefferson. These hostilities led to the first US party system; but they also put the federal government on a stable footing as the sovereign taxer, spender, and issuer of credible debt. There were later debt crises, one in the 1830s and another in the Civil War era, but it may be said that the Hamilton regime has protected the credibility of American government debt through two centuries, one civil war, and two world wars.

Fiscal rules and credible deficit control

How does a government make itself a credible lender? Saying it is credible is insufficient, as Hamilton pointed out with brutal clarity in 1787 and 1790. Some regimes have tried to bake their credibility into constitutional texts. For instance, most US states have incorporated balanced-budget amendments into their constitutions, as has the Federal Republic of Germany. Numerous attempts to add such an amendment to the Constitution of the USA have failed. One advocate, perhaps surprisingly, was Hamilton's bitter enemy Thomas Jefferson. In 1798, while out of office, he wrote

> I wish it were possible to obtain a single amendment to our constitution; I would be willing to depend on that alone for the reduction of the administration of our government to the genuine principles of its constitution; I mean an additional article taking from the federal government the power of borrowing.. (TJ to John Taylor of Caroline, 26/11/1798, at https://rotunda.upress.virginia.edu/founders/default.xqy?keys=TSJN-search-1-3&expandNote=on, accessed on 14/12/2018).

Neither the Australian Constitution, nor the UK, which has no codified constitutional document, contains a balanced-budget or any other guarantee of debt credibility. At sub-constitutional level, however, many OECD countries have set rules to bolster the credibility of debt and deficit levels. A notable example is furnished by the Maastricht convergence criteria demanded by the European Union for existing and would-be members (Table 3)

Table 3 The five EU convergence criteria.

What is measured:	Price stability	Sound public finances	Sustainable public finances	Durability of convergence	Exchange rate stability
How it is measured:	Consumer price inflation rate	Government deficit as % of GDP	Government debt as % of GDP	Long-term interest rate	Deviation from a central rate
Convergence criteria:	Not more than 1.5 percentage points above the rate of the three best performing Member States	Reference value: not more than 3%	Reference value: not more than 60%	Not more than 2 percentage points above the rate of the three best performing Member States in terms of price stability	Participation in ERM II for at least 2 years without severe tensions

Source: European Commission, *Convergence criteria for joining*, at https://ec.europa.eu/info/business-economy-euro/euro-area/enlargement-euro-area/convergence-criteria-joining_en

The UK has experimented with various fiscal rules. In particular, the Labour governments of 1997 to 2008 introduced a 'golden rule' and a 'sustainable investment rule'. The former stated that the UK government should incur new debt only for capital, not current, expenditure. The latter committed it to maintain public sector net debt as a proportion of gross domestic product (GDP) at no more than 40%. Both rules were to be applied 'over the economic cycle, not in every single year. Both were forcibly abandoned in the crisis of 2008-9.

However, not all OECD member states have formal rules. Australia is an exception. The following OECD table from 2007 shows the situation then:

Table 4 Fiscal Rules in the More Effective Governments [2007] (source: OECD, in Andrews 2008 Table 1)

Table 1. Fiscal Rules in the More Effective Governments

Country	Fiscal Rule	Expenditure rule	Limits for spending requests
Australia	No Rules		No
Belgium	Budget Balance Rule		For some types of expenditure at a chapter level
Canada	Expenditure, Budget Balance, Debt Rules	Targets nominal growth rate, covering central government only, dependent on political commitment of government	For all expenditure at chapter level
Denmark	Expenditure, Revenue, Budget Balance Rules	Targets real growth rate, covering entire government sector, dependent on political commitment of government	For some types of expenditure at a chapter level
Germany	Debt Rule		For all expenditure at line item level
Netherlands	Expenditure, Revenue, Budget Balance Rules	Targets real expenditure ceiling, dependent on formal agreement of parties in government	For all expenditure at chapter level
Sweden	Expenditure, Budget Balance Rules	Targets nominal expenditure ceiling, covering central government only, based in legislation	Other
United Kingdom	Budget Balance, Debt Rule		No, but indicative limits
United States	No Rules		No, but indicative limits

Source: 2007 OECD Budget Practices and Procedures Database

In 2007 Australia had no debt- or deficit-limiting rules (Table 4). However, after the financial crisis, formal rules have changed in many countries. Table 5 shows the same table updated to represent the situation in 2012. The UK rules in place in 2007 were swept away by the following year's tsunami. Australia went from having no formal fiscal rules in 2007 to having Expenditure, Revenue, Budget Balance and Debt Rules. Moreover, as this paper has shown, both countiries have effective means of controlling subnational debt. In Australia, the highly egalitarian regime overseen by the CGCcompensates both for tax windfalls in rich states and lack of tax capacity in poor ones, while providing financial discpipline to states which overspend. In the UK, the highly centralised nature of fiscal control has meant that subnational governments do not threaten the national debt or deficit ceiling.

Table 5 Fiscal Rules in the More Effective Governments [2012]

Country	Fiscal Rule	Expenditure Rule	Limits for spending requests
Australia	Expenditure, Revenue, Budget Balance, Debt Rules	The rule targets a real expenditure growth rate	No
Belgium	Budget Balance, Debt Rule		For other aggregate levels (e.g by program or sector)
Canada	Budget Balance		No

Denmark	Expenditure, Budget Balance, Debt Rule	The rule targets a real expenditure ceiling	For total/overall expenditure of the line ministry and other aggregate levels (e.g by program or sector)
Germany	Budget Balance, Debt Rule		For total/overall expenditure of the line ministry and other aggregate levels (e.g by program or sector) and for agency level or other organisational level
Netherlands	Expenditure, Revenue, Budget Balance, Debt Rules	The rule targets a real expenditure ceiling	For total/overall expenditure of the line ministry
Sweden	Expenditure, Budget Balance, Debt Rules	The rule targets a nominal expenditure ceiling	For other aggregate levels (e.g by program or sector)
United Kingdom	Budget Balance, Debt Rule		For other aggregate levels (e.g by program or sector)
United States	Expenditure, Debt Rule	The rule targets a nominal expenditure ceiling	No

Source: 2012 OECD International Budget Practices and Procedures Database

Both countries are in transition, with the upcoming simplification of the CGC regime under the Prodcutivity Commission's recommendations, and the increased fiscal independence of Scotland under the Scotland Acts 2012 and 2016. Each, by a very different route, has come to the place Alexander Hamilton wished the USA to be in by the end of his term as Treasury Secretary.

Conclusions

To compare the UK and Australia on the criteria of this paper is to try to catch two moving targets at once. The UK is formally unitary, though becoming less so. Australia is a federation created by its constituent units. But the public expenditure control dilemmas are not so different. Both have elected governments at subnational level whose aims may differ from those of the national government. Indeed, that is the point of having subnational government. From the point of view of central government, the main fiscal risks are subnational deficits and subnational debt. Both the UK and Australia control these well, by international standards. The problems are not only caused by poor provinces. A different set of distortions may arise in rich ones.

In the UK, public expenditure in Scotland and Northern Ireland has never been as tightly controlled as the Treasury wished. In Northern Ireland, this dilemma has not been solved, but Northern Ireland is so small (less than 3% of the UK by population) that its effect on bursting fiscal envelopes is correspondingly small. In Scotland, it was solved by the rough justice of the Barnett Formula, which has ensured that whether or not public expenditure in Scotland is fair, it is certainly predictable. And, although all modern UK governments have talked about greater devolution within England, none has done anything fiscally material (Kenny, McLean, and Paun 2018). So the subnational government fiscal problem is tractable because only 15% of the population live under a serious subnational government; and within that 15%, the 2.8% represented by Northern Ireland have a very intermittent subnational government.

In Australia, the procedures of the CGC have worked very effectively to prevent the fiscal needs of poorer states from either bursting the Commonwealth budget or giving rise to competitive neediness. They, and the public spending envelope, are under more threat from the richest state than from the poor ones. But the same caveat applies: Western Australia accounts for about 10.5% of the population of Australia, so it may be an anomaly that Australians can live with.

What more general lessons can be learnt from Alexander Hamilton's challenge? Unfunded deficits lead to unfunded debt. Unfunded debt taxes future generations to the benefit of present generations. A currency that is not credible in international financial markets may harm the present generation, as in the USA from 1776 to 1790 and many other times and places.

Therefore institutions to combine controllable debt with subnational autonomy really matter. The experiences of the UK and Australia show that they are necessary, but may not be sufficient, for the credibility of government finance.

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