The subvention matters

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The Subvention matters: A Response to John Doyle "Why the 'Subvention" does not matter"

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Abstract

Previous articles and papers by Professors John Doyle (2021), John FitzGerald and Edgar Morgenroth (2019 and 2020) consider how far the Northern Ireland subvention, the extent to which public expenditure exceeds regional tax revenue, would translate into a regional fiscal deficit following Irish unity.

We consider whether the subvention has, as Doyle argues, dominated public debate about the economics of Irish unity. We review his approach to the definition and relevance of the subvention. We then respond to Doyle's argument by up-dating the data through to 2022 as well as showing how it developed over the period 2000-22. We review Doyle's method regarding the reduction of the subvention from £9.4bn to a deficit of £2.4bn (in 2018-19).

Doyle characterised the subvention as a "…symptom of [this] weakness…". We outline how it could have potentially positive effects (sustaining aggregate demand and employment) as well as negative impacts (harmful effect on quality of decision making) on the regional economy. The broader question of the economic and welfare effects of Northern Ireland's membership of a relatively larger fiscal union (i.e. the UK) as opposed to the impact of being part of a relatively smaller fiscal union (united Ireland) is considered.

The subvention should be considered as one aspect of Northern Ireland's often fraught long run funding relationship with the UK Treasury and Government. Given that experience we outline the case (moral hazard) why a system of fiscal transfers *within* the island of Ireland might be especially problematic.

Finally, we critically assess Doyle's claim that a united Ireland would produce an upsurge in economic performance.

In considering Doyle's approach some of our method is similar to that previously adopted by FitzGerald and Morgenroth but our data is more up-to-date. We provide a more detailed consideration of the potential increase in defence spending in Ireland. Additionally, the Northern Ireland subvention is compared to that of the other 11 major UK regions.

There can be no certainty as to the precise scale of any fiscal transfer required by Northern Ireland post-united Ireland, but we can be reasonably confident it will be considerably larger than the figure of £2.4bn proposed by Doyle. There are three main reasons for this:

(1.) the most recent ONS data for 2019 revise upwards the size of the subvention,

(2.) some of Doyle's assumptions were overly optimistic and,

(3.) spending relative to revenues increased massively during 2019-20 to 2021-22, given Covid, and there is likely to be a ratchet effect. It will take many years (if ever) to return to pre-crisis levels.

Doyle estimated a deficit/subvention of £2.4bn in 2018-19. It is more likely to have been in the range £3.6bn to £8.8bn. In 2021-22 replication of Doyle's method implied a deficit/subvention of £6.8bn but when some of his assumptions are relaxed that increases to £12.6bn. Given such figures it is highly likely that the subvention continues to matter. This is especially so because we cannot be confident that unification *per se* would produce an immediate upsurge in economic growth which would render such a deficit irrelevant.

Introduction

Professor John Doyle[1] argues that the subvention has "dominated" public debate about the economics of a united Ireland, presumably in terms of claims that it would be a major barrier to such unity.[2] When Doyle says the "subvention does not matter" what he means is that it does not represent such a barrier. Partly this is because it is "…a UK accounting exercise". As such it would not equate to the fiscal transfer which might be necessary as part of a united Ireland. Doyle presents arguments to show how it is highly likely that the post-united Ireland transfer would be much smaller than the subvention: £2.4bn rather than £9.4bn. Doyle further claims a united Ireland would very directly lead to such an upsurge in economic performance in both Northern Ireland and the Republic of Ireland that any concerns relating to paying for unity would become "…irrelevant".

In responding to Doyle we first consider whether the subvention has dominated the debate and then we review his approach to the definition and relevance of the subvention. We then respond to Doyle's argument by up-dating the data through to 2022[3] and by showing how it developed over the period 2000-22. We also review Doyle's method regarding the reduction of the subvention. In practice, much would depend on the negotiating positions adopted by the two Governments, UK and Irish. Whilst there can be no certainty about these, the former is likely to be much exercised by any precedents which could be set for the terms of Scottish independence.

Whereas Doyle characterised the subvention as a "…symptom of [this] weakness…", this article outlines how it could have potentially positive effects (sustaining aggregate demand and employment) as well as negative impacts (harmful effect on quality of decision making) on a regional economy. The broader question of the economic and welfare effects of Northern Ireland's membership of a relatively larger fiscal union (i.e. the UK) as opposed to the impact of being part of a relatively smaller fiscal union (united Ireland) is also considered.

The subvention can be considered as one part of Northern Ireland's long run often fraught funding relationship with the UK Treasury and Government. Given that experience, and assuming some decentralisation continues to the six Northern counties, it is worth speculating how well a system of fiscal transfers *within* the island of Ireland might operate.

Finally, we assess Doyle's claim that a united Ireland would produce an upsurge in economic performance.

In considering Doyle's approach some of our method is similar to that previously adopted by Professors John FitzGerald and Edgar Morgenroth.[4] Our data is more up-to-date. We also provide a

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[1] John Doyle, "Why the "Subvention" does not matter: Northern Ireland and the All-Ireland economy", *Irish Studies in International Affairs* 32 (2), 314-334.

[2] For convenience we follow Doyle in using the term "subvention". In recent years the official data sources have used other terms such as net fiscal balance or fiscal transfer.

[3] To the end of financial year 2021-22, the most up-to-date data available at the time of writing (August 2023).

[4] John FitzGerald and Edgar Morgenroth, *The Northern Ireland Economy: Problems and Prospects,* (Dublin: Trinity Economic Paper 0619, 2019). Accessed 20 July 2023. https://www.tcd.ie/Economics/TEP/2019/tep0619.pdf. John FitzGerald, "Northern Ireland Subvention", (Publisher unknown, 2020). Accessed 20 July 2023. https://cdn.thejournal.ie/media/2021/03/northernirelandsubvention_201129-docx.pdf
That Note was part of John FitzGerald and Edgar Morgenroth, "(Evidence to) Oireachtas Committee on the Implementation of the Good Friday Agreement", (Dublin, 8 December 2023). Accessed 20 July 2023. https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_the_implementation_of_the

more detailed consideration of the potential increase in defence spending in Ireland. Additionally, the Northern Ireland subvention is compared to that of the other 11 major UK regions.

The subvention in public debate and issues of measurement and relevance

Doyle is right to say the subvention has figured in the debate about the economics of Irish unity.[5] This is certainly so in terms of those who have sought to show that the subvention is not an insurmountable obstacle. Over the years there have been attempts coming from a broadly nationalist perspective to outline how any problem relating to paying for the subvention could be dealt with in the context of a united Ireland.[6] More recent considerations, coming from a variety of perspectives, include Frank Connolly, Professor Mary Murphy and Professor Brendan O'Leary.[7]

Interestingly, unionists have tended to be rather reticent in their use of the subvention as an argument to buttress the constitutional *status quo*. Since 2005 the Democratic Unionist Party (DUP) have been the largest unionist party. Traditionally, that party's economic policies have combined support for high profile and sizeable spending schemes alongside a low level of taxation in the region.[8] Such a combination of fiscal dove-ishness and hawk-ishness would seem to imply a larger subvention but the DUP have been rather more ready to trumpet the potential benefits paid for through that subvention, notably the free at the point of use health service (NHS) in Northern Ireland, rather than the subvention *per se*.

The extent to which Doyle is right to characterise the subvention as a symptom of weakness is considered below. At this stage it is worth noting that we accept Doyle's point that the subvention as measured by the UK's Office for National Statistics (ONS) reflects in part particular accounting conventions. As such, the numbers produced do not necessarily reflect what the required transfer payment would be post-united Ireland. Nevertheless, and contrary to Doyle, it is possible to argue that the most plausible adjustments of the ONS measure imply a transfer which would still be of considerable scale.

_good_friday_agreement/submissions/2020/2020-12-08_opening-statement-prof-john-fitzgerald-adjunct-professor-department-of-economics-tcd-and-prof-edgar-morgenroth-professor-of-economics-dcu-business-school_en.pdf

[5] Doyle's more recently has said it is "…not the biggest issue…": John Doyle, in, "(Evidence to) Finance and economics: Discussion", (Dublin: Joint Committee on the Implementation of the Good Friday Agreement Debate- Thursday 13 July 2023, 13 July 2023).Accessed 20 July 2023. https://www.oireachtas.ie/en/committees/33/committee-on-the-implementation-of-the-good-friday-agreement/

[6] Garret FitzGerald, *Towards a New Ireland*, (Dublin, 1972). A Study for the New Ireland Forum by Davy Kelleher McCarthy Ltd Consultants and Commentary on that Study by Professor Norman Gibson and Professor Dermot McAleese, *The Macroeconomic Consequences of Integrated Economic Policy, Planning and Co-ordination in Ireland,* (Dublin: Report to the New Ireland Forum, *Official Publications* 2359, 1984). Accessed 20 July 2023. http://opac.oireachtas.ie/AWData/Library3/Library2/DL035369.pdf

[7] Frank Connolly, *United Nation: The Case for Integrating Ireland*, (Dublin, 2022). Mary Murphy, "Re-shaping UK/Ireland Relations: Brexit, cross-border and bilateral impact", *Oxford Review of Economic Policy* 38 (2022), 1, pp. 205-16. Accessed 30 August 2023. https://ideas.repec.org/a/oup/oxford/v38y2022i1p205-216..html Brendan O'Leary, *Making Sense of a United Ireland*, (London, 2022).

[8] Favoured spending projects included the now notorious Renewable Heating Incentive scheme and the proposal to build a fixed connection between Northern Ireland and Scotland. In terms of regional revenue raising the DUP have hitherto supported zero domestic water charges and relatively low levels of local government/regional property taxes (Rates). For the DUP stress on healthcare spending see DUP, *Let's Get Northern Ireland Moving Again- Our Plan* (Belfast, 2019).

Up-dating Doyle's data through to 2022

Doyle defines the subvention as the ONS measurement of the extent to which Northern Ireland public expenditure (including both spending in Northern Ireland and an allocation to Northern Ireland of a share of certain UK spending outside of Northern Ireland or of spending at the central UK level) exceeds the total amount of taxation and other revenues raised in Northern. The ONS approach also includes an accounting adjustment on both the expenditure and revenue sides (both of those adjustments include an allowance for depreciation). We follow both Doyle and FitzGerald and Morgenroth in assuming this adjustment is not relevant to considering how the deficit might change post-unity.

Table 1 Summary of Northern Ireland's fiscal position and hence the subvention, £m, 2018-19 and 2021-22*

	2018-19 (Doyle's article)	2018-19 (most recently published data)	2021-22
Tax and other revenue raised in Northern Ireland	16,183	15,875	18,233
Gross operating subsidy adjustment (including depreciation)	2,338	1,197	1064
Total published revenue	*18,521*	*17,072*	*19,297*
Current expenditure	25,233	24,773	30,492
Capital expenditure	2,655	2,484	2,746
The following sub-categories of expenditure			
Identifiable expenditure (i.e. spending in Northern Ireland)	21,807	21,779	26,761
Expenditure outside of the UK but apportioned to Northern Ireland (on basis of % share of UK population)	765	756	629
Non-identifiable expenditure (i.e. spending at the central UK level allocated to Northern Ireland on basis of % share of UK population)	2,105	2,652	3,874

Accounting adjustment (including depreciation)	3,211	2,070	1,974
Total published (managed) expenditure	27,888	27,257	33,238
Subvention or deficit	***9,367***	***10,185***	***13,941***

Note*: We follow Doyle's terminology regarding the sub-categories of revenue and expenditure. All values in the prices of the year in question.

Sources: Doyle, "Why the "Subvention" does not matter"; ONS 26 May 2023, "Country and regional public sector finances, UK: Financial year ending 2022", *Release*; ONS 26 May 2023, "Country and regional public sector finances expenditure tables", *Dataset;* ONS 26 May 2023, "Country and regional public sector finances revenue tables", *Dataset*.

When Doyle wrote his article in 2021 the data indicated a subvention of £9.4bn in 2018-19 (see Table 1). As Table 1 indicates the most up-to-date data for 2018-19 indicates the subvention in that year was the higher figure of £10.2bn. Table 1 also provides the data for 2021-22 (showing the consequences of Covid-19 but to a lesser extent than would have been the case in 2020-21). The subvention in 2021-22 was £13.9bn, down £3.4bn on its all-time high in the previous year but still considerable.

The fact that the revised and most up-to-date data suggests a substantially bigger subvention than that presented by Doyle may weaken his case that the subvention does not matter. It is still important to consider and evaluate how he adjusted the ONS data to indicate the required post-united Ireland transfer. We do that below but before doing so it is worth considering the trend in the subvention over time.

The subvention in a longer run perspective

After a brief summary of how the subvention developed during the period from Partition through to the Second World War,[9] His figure work shows that in real or constant price terms the size of the subvention roughly doubled during that 35 year period after 1974.

FitzGerald and Morgenroth illustrated the development of the subvention as a percentage of GDP over the long run: 1968-2016. It increased from a little above 5% in the late 1960s to about 20% in

[9] Doyle argues Northern Ireland did not always have a subvention. When the state was founded it was intended that Northern Ireland would make a net contribution to the UK exchequer. Hence, the payment of an Imperial Contribution. That Imperial Contribution continued as a notional payment for many decades but to a growing extent was "netted" against in-coming contributions from the UK Treasury which enabled the Northern Ireland Government to pay for a rising bill for unemployment relief and other welfare: Norman Gibson, "Northern Ireland and Westminster: Fiscal decentralisation: A public economics perspective", (Belfast: Northern Ireland Economic Council, *Northern Ireland Economic Council Report*, 1996). By implication, by the mid 1950s Northern Ireland may already have been a net recipient of Treasury funds: The Economist, "John Bull's Model Ireland" (*The Economist,* 6 October 1956*).* For a sceptical view about whether Northern Ireland was then a recipient of a net fiscal transfer see, Tom Wilson, *Ulster Under Home Rule,* (Oxford, 1955).

the mid 1980s.[10] After that it did decline for a while but started to increase after 2000, moving upwards from about 17% to 30% in 2008.

Table 2 uses ONS data to illustrate the trend in the constant prices Northern Ireland subvention during 2000-22:

Table 2 Northern Ireland subvention in 2021-22 constant price terms, £m. , 2000-22

Financial year	Size of the subvention	Subvention as a % of NI GDP level*
1999-2000	6,984	11.8
2000-2001	7,926	13.0
2001-2002	8,530	14.0
2002-2003	9,737	16.1
2003-2004	9,274	15.1
2004-2005	9,786	16.1
2005-2006	9,781	16.0
2006-2007	9,423	15.6
2007-2008	9,919	16.9
2008-2009	12,334	22.6
2009-10	13,406	25.7
2010-11	12,961	24.9
2011-12	12,744	24.3
2012-13	12,767	24.4
2013-14	12,000	23.1
2014-15	12,063	23.1
2015-16	11,375	21.5
2016-17	10,737	20.0
2017-18	10,003	20.2
2018-19	11,028	20.7
2019-20	11,273	22.2
2020-21	17,387	38.3
2021-22	13,941	28.0**

Note*: GDP in each financial year estimated using calendar year data.
**: Northern Ireland GDP in 2022 was estimated from the data for 2021 using the growth rate in 2022 (from the Northern Ireland Composite Economic Index) times the increase in the (UK) GDP deflator in 2022.
Source: ONS 25 April 2023, "Regional GDP: All ITL Regions", *Dataset.* ONS 26 May 2023, "Country and regional public sector financial net fiscal balance tables", *Dateset.* HM Treasury/Gov.uk 3 April 2023, "GDP deflators at market prices, and money GDP March 2023 (Quarterly GDP)", *Dataset*.

The data for the last 22 years confirms that the subvention has increased very substantially in real terms, roughly doubling comparing 1999-2000 to 2021-22. Treating the final two financial years shown as outliers (Covid-related spending), and comparing 2019-20 to 1999-2000 the volume increase in the subvention was still substantial: 61%.

[10] John FitzGerald and Edgar Morgenroth, *The Northern Ireland Economy: Problems and Prospects*.

Consideration of the data for the individual years provides hints of the processes causing the upwards movement in the subvention. The subvention grew rapidly during the first four financial years of the 2000s: probably the consequence at the Northern Ireland level of very rapid growth in public spending at the UK-wide level.[11] The real terms subvention remained fairly stable during the second half of the 2000s though to 2008. This was a time when the Northern Ireland economy was growing. Whilst government spending was increasing levels of tax revenues were probably increasing at a similar space which implied the subvention remained roughly constant.[12]

The banking crisis (2007-8) and the subsequent great recession (2008-10) were associated with a very substantial growth in the subvention from about £9.5bn to about £13.5bn (2021-22 prices).

Thereafter, during most of the 2010s the volume of the subvention decreased. This could have been partly because the Northern Ireland economy began to grow again and so demand for public expenditure decreased.[13] Additionally, there was the impact of much slower growth in UK public spending (the austerity period corresponding to the post-2010 Coalition or Conservative Governments). In any case, it took until 2017-18 for the subvention in real terms to return to the level it has been a decade earlier in 2007-8.

From 2019-20 onwards we observe the impact of Covid and the related recession.[14] A ratchet type effect is probable whereby increases once they occur are not readily reversed. Certainly, the experience of the aftermath of the banking crisis suggests any return to a "pre-crisis level" could take a long time. This will be especially so given the 2022-23 energy prices spike which was another positive shock to the demand for public spending. The "over-spend" of the Northern Ireland Departments in that year relative to Treasury limits testifies to how difficult the control of public spending has become. Further over-spend may occur in 2023-24. As Table 2 illustrates, in constant price terms, the subvention peaked at £17.4bn in 2020-21. Even with some decline in the next year, the level in 2021-22 was still £13.9bn. Much higher than any pre-Covid year.

Critique of Doyle's method: The post-united Ireland fiscal deficit could be much bigger than that which he estimated

Table 3 presents Doyle's results for 2018-19 and then our re-working of these using the most up-to-date data (third column), and then in the fourth column we re-do the figure work when some of his assumptions are relaxed. There are a number of caveats about the reliability of the data: the UK and Irish definitions of categories of spending do not always completely align. In some cases we are

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[11] Particularly in terms of spending on the NHS in Great Britain, under the Labour Administrations 1997-2010. During 1999-2000 to 2009-10 UK total managed (public) expenditure grew by 4.3% annually compared to the average for 1948-49 to 1999-2000 of 2.7%: IFS, "Total UK public spending" (Institute for Fiscal Studies website, undated), accessed 30 August 2023, https://ifs.org.uk/total-uk-public-spending . Northern Ireland receives its population share of such increases through the workings of the Barnett Formula. For the workings of the Barnett Formula, see, Northern Ireland Fiscal Council, "The Public Finances in Northern Ireland: A Comprehensive Guide", (Belfast: The Northern Ireland Fiscal Council, *Report*, 2021). Accessed 20 July 2023. https://www.nifiscalcouncil.org/publications/public-finances-ni-comprehensive-guide-november-2021

[12] Even when the regional economy was fairly buoyant the size of the subvention did not decrease. Possibly, there are ratchet effects. Once the subvention and associated spending levels reach a certain level it is difficult to come back down from those levels. On ratchet effects, see Alan T. Peacock and Jack Wiseman, *the Growth of Public Expenditure in the United Kingdom,* (Princeton, 1961).

[13] At the same time tax revenues would have become more buoyant.

[14] The timing of the Russian invasion of the Ukraine implies the figures for 2021-22 were largely unaffected by that war.

mixing Northern Ireland data for the financial year 2018-19 with Irish data for the 2018 calendar year.

Table 3: Considering Doyle's method for adjusting(reducing) the post-united Ireland fiscal deficit, £m, 2018-19 (in 2018-19 prices)

	As in Doyle's article	Doyle's assumptions but most up-to-date data	Most up-to-date data but relax some of Doyle's assumptions	Assessment of Doyle's adjustments
ONS's published subvention	9,367	10,185	10,185	
Subvention reduced through:				
UK liable for state welfare pension and public sector occupational pension payments	3,438	3,504@	0	Doubtful
UK liable for Northern Ireland share of UK public debt interest repayment	1,600	1,469	0	Doubtful in any case. Especially if UK retains pensions liability. What *quid pro quo* could be given?
Reduction in Northern Ireland's (allocated) share of UK defence spending but assuming united Ireland defence spending increases by 20%	925	960.9 (20% increase in Irish defence spending)#	892.3 (27.7% increase in Irish defence spending, following FitzGerald and Morgenroth)##	Doubt if post-united Ireland increase could be limited to 20% or even the 27.7% implied by FitzGerald and Morgenroth.
Outside of UK expenditure and non identifiable expenditure allocated to Northern Ireland no longer relevant- little or no compensating increase in expenditure post-united Ireland	500	494.1 (i.e. 756 X 500 divided by 765)*	572.7.**Following FitzGerald and Morgenroth, assuming a 27.7% increase in two items of overseas/central services in Ireland i.e. Foreign Affairs (e.g. embassies) and International Co-operation (i.e. Irish aid). So, an increase in	Doubt if post-united Ireland would be able to service the new population of 7m (instead of 5m) with the existing international and central services.

			spending of £57.1 and £126.2 on those two areas. Implying a saving of 756-183.3=572.7**	
Change in NI net contribution to EU	0, i.e. no change, at least in the short term)	0	Following FitzGerald and Morgenroth, NI's actual contribution is compared to what it would be if 1% of GDP, i.e. "saving" is 253 – 475.8= - 222.8 (negative sign, subvention increased)***	Doubtful, under normal EU procedures the budget contribution of Ireland would increase post-unification. Of course, the EU *could* decide to waive/postpone that increase.
Reflect the likelihood that ONS has under-estimated some of the tax revenues in Northern Ireland, notably Corporation Tax[15]	500	167.1. Following FitzGerald and Morgenroth, give NI its share of total UK Corporation Tax revenue using NI's proportion of UK Gross Trading Profits****	167.1. Following FitzGerald and Morgenroth, give NI its share of total UK Corporation Tax revenue using NI's proportion of UK Gross Trading Profits****	Accept
The (post-united Ireland) subvention that remains	2,404	3,589.9	8,775.7	

Note@: HM Treasury, *Public Expenditure Statistical Analyses 2022,* (London, 2022). Table 10.4, Category 10.2 (Social Protection) old age.

#: Taking Irish defence spending in 2018 as euros 1007.2m: Department of Public Expenditure and Reform, *Spending Review 2021,* (Dublin, 2021). Converting that into £ at the average market exchange rate for 2018 of 1£=euros 1.1311 (Statista, "British Pounds Sterling to Euro exchange rate from January 1999- June 21, 2023 Statista.com/statistic_1034391_gdp-rate-up-until-jun-21-2023, accessed 17 July 2023). Irish defence spending in 2018 was £890.5m. A 20% increase in that level was equivalent to £178.1m. From HM Treasury, *Public Expenditure Statistical Analysis 2022,* (London, 2022) UK defence spending allocated to Northern Ireland in 2018-19 was £1139m. The implied "saving" would therefore be: 1139m – 178.1m= £960.9m.

##: As explained in the previous note, Irish defence spending in 2018 was £890.5m. FitzGerald and Morgenroth assume Irish defence spending would increase in the same proportion as NI GDP to the Republic of Ireland's GNI*: in 2018 27.7%. A 27.7% increase would be (890.5 X 0.277)= 246.7. From

[15] Doyle's article refers to this adjustment in context of VAT and Capital Gains Tax but the figure work in FitzGerald and Morgenroth relates to Corporation Tax

HM Treasury, *Public Expenditure Statistical Analysis 2022,* (London, 2022) UK defence spending allocated to Northern Ireland in 2018-19 was £1139m. The implied "saving" would therefore be: 1139m – 246.7m= £892.3m.

*: In Doyle's original estimation, he assumed that out of £765m of outside of the UK and non-identifiable (i.e. central) expenditure allocated to Northern Ireland, £500m would be saved. Given that the most up-to-date ONS data show a slightly lower figure for the total of the outside of the UK and non-identifiable expenditure (756m), we reduced this saving proportionally: 500m X 756m/765m= £494.1m.

**: Two major areas of "overseas/central" services would be spending on international representation (e.g. embassies) and international aid spending. We took the two Votes in the Irish public spending estimates for 2018 Foreign Affairs and International Co-operation, i.e. euros 233.093m and euros 515.476m. Converted at the average market exchange rate these were equivalent to £206.08m and £455.73m. Both were increased (as in FitzGerald and Morgenroth) by the NI/Republic of Ireland GDP/GNI* proportion in 2018, i.e. 27.7%. (In 2018 Republic of Ireland GNI* was euros 194bn and Northern Ireland Ireland GDP £47.578bn: CSO 15 July 2022, "GNI* and De-globalised results", ONS 25 April 2023, "Regional GDP: All ITL regions", *Dataset.*) Implied increases of £57.1m and £126.2m, or a sum of £183.3m. Hence, a saving of 756m-183.3m=572.7m. This almost certainly *over-estimates* the scale of the savings given that there could be other categories of overseas/central spending which might increase, e.g. the IDA network of overseas office but we could not find detailed data on this.

***: Following FitzGerald and Morgenroth, NI's (gross) contribution assumed to equal 1% of GDP.

****: Doyle used FitzGerald and Morgenroth's (2019) figure for 2016. Our calculation as follows: ONS estimated Northern Ireland Corporation Tax revenue as £905m in 2018-19 and UK Corporation Tax revenue of £54.98bn (ONS 26 May 2023, "Country and regional public sector finances revenue tables", *Dataset*). ONS records Northern Ireland's share of UK Gross Trading Profits[16] in 2018 as 1.95%. 1.95% of £54.98bn is £1072.1m (ONS 25 April 2023, "Regional Gross Value Added (Balanced) per head and income components", *Dataset*). The implied increase in revenues is £1072.1m - £905m= £167.1m.

Sources: Doyle, "Why the subvention "Subvention" does not matter", ONS 25 April 2023, "Regional Gross Value Added (Balanced) per head and income components", *Dataset,* ONS 26 May 2023, "Country and regional public sector finances expenditure tables", *Dataset*, HM Treasury, *Public Expenditure Statistical Analyses 2022,* (London, 2022). CSO 15 July 2022, "GNI* and De-globalised results", ONS 25 April 2023, "Regional GDP: All ITL regions", *Dataset.* ONS 26 May 2023, "Country and regional public sector finances revenue tables", *Dataset.*

Table 4 repeats the approach taken in Table 3 but considers the most recent year for which we have data, 2021-22:

[16] ONS provided Gross Trading Profits data for each year. The Northern Ireland Gross (National) Operating Surplus data, as used by FitzGerald and Morgenroth, was only available for some years (on an experimental basis).

Table 4: Considering Doyle's method for adjusting(reducing) the post-united Ireland fiscal deficit, £m, 2021-22 (in 2021-22 prices)

	Using Doyle's assumptions	Relaxing some of Doyle's assumptions	Assessment of Doyle's adjustments
ONS's published subvention	13,941	13,941	
Subvention reduced through:			
UK liable for state welfare pension and public sector occupational pension payments	3,292@	0	Doubtful
UK liable for Northern Ireland share of UK public debt interest repayment	1,951	0	Doubtful in any case. Especially if UK retains pensions liability. What *quid pro quo* could be given?
Reduction in Northern Ireland's (allocated) share of UK defence spending but assuming united Ireland defence spending increases by 20%	1194.9 (20% increase in Irish defence spending)#	1142.6 (25.7% increase in Irish defence spending, following FitzGerald and Morgenroth)##	Doubt if post-united Ireland increase could be limited to 20% or even 25.7%.
Outside of UK expenditure and non identifiable expenditure allocated to Northern Ireland no longer relevant- little or no compensating increase in expenditure post-united Ireland	411.1 (i.e. 500 X 629/765)*	445.3.**Following FitzGerald and Morgenroth, assuming a 25.7% increase in two items of overseas/central services in Ireland i.e. Foreign Affairs (e.g. embassies) and International Co-operation (i.e. Irish aid). So, an increase in spending of £57.9 and £125.8 on those two areas. Implying a saving of 629-183.7=445.3**	Doubt if post-united Ireland would be able to service the new population of 7m (instead of 5m) with the existing international and central services.
Change in NI net contribution to EU	0, i.e. no change, at least in short run	Following FitzGerald and Morgenroth, NI's actual contribution is compared to what it would be if 1% of GDP, i.e. "saving" is 9 –	Doubtful, under normal EU procedures the budget contribution of Ireland would increase post-unification. Of course,

		517.2= - 508.2 (negative sign, subvention increased)***	the EU *could* decide to waive/postpone that increase.
Reflect the likelihood that ONS has under-estimated some of the tax revenues in Northern Ireland, notably Corporation Tax (Doyle's article refers to this adjustment relating to VAT and Capital Gains Tax but the figure work in FitzGerald and Morgenroth actually relates to Corporation Tax)	265.2. Following FitzGerald and Morgenroth, give NI its share of total UK Corporation Tax revenue using NI's proportion of UK Gross Trading Profits ****	265.2. Following FitzGerald and Morgenroth, give NI its share of total UK Corporation Tax revenue using NI's proportion of UK Gross Trading Profits ****	Accept
The (post-united Ireland) subvention that remains	6,826.8	12,596.1	

Note@: HM Treasury, *Public Expenditure Statistical Analyses 2022,* (London, 2022). Table 10.4, Category 10.2 (Social Protection) old age.

#: Taking Irish defence spending in 2021 as euros 1071.056m: Department of Public Expenditure and Reform, *Revised Estimates for Public Services,* (Dublin, 2022). Converting that into £ at the average market exchange rate for 2021 of 1£=euros 1.1633 (Statista, "British Pounds Sterling to Euro exchange rate from January 1999- June 21, 2023 Statista.com/statistic_1034391_gdp-rate-up-until-jun-21-2023, accessed 17 July 2023). Irish defence spending in 2021 was £920.7m. A 20% increase in that level was equivalent to £184.1m. From HM Treasury, *Public Expenditure Statistical Analysis 2022,* (London, 2022) UK defence spending allocated to Northern Ireland in 2021-22 was £1379m. The implied "saving" would therefore be: 1379m – 184.1m= £1194.9m.

##: As explained in the previous note, Irish defence spending in 2021 was £920.7m. A 25.7% increase in that level was equivalent to £236.6m. From HM Treasury, *Public Expenditure Statistical Analysis 2022,* (London, 2022) UK defence spending allocated to Northern Ireland in 2021-22 was £1379m. The implied "saving" would therefore be: 1379m – 236.6m= £1142.4m.

*: In Doyle's original estimation, he assumed that out of £629m of outside of the UK and non-identifiable expenditure allocated to Northern Ireland, £500m would be saved. Given that the most up-to-date ONS data show a slightly lower figure for the total of the outside of the UK and non-identifiable expenditure (756m), we reduced this saving proportionally: 500m X 629m/765m= £411.1m

**: Two major areas of "central/overseas" services would be spending on international representation (e.g. embassies) and international aid spending. We took the two Votes in the Irish public spending estimates for 2021 Foreign Affairs and International Co-operation, i.e. euros 262m and euros 569.514m. Converted at the average market exchange rate these were equivalent to £225.2m and £489.57m. Both were increased (as in FitzGerald and Morgenroth) by the NI/Republic of Ireland GDP/GNI* proportion in 2021, i.e. 25.7%. (Euros 233.9bn and £51.717bn, sources as in

Table 4). Implied increases of £57.9m and £125.8m, or a sum of £183.7m. Hence, a saving of 629m-183.7m=445.3m. This almost certainly *over-estimates* the scale of the savings given that there could be other categories of central/overseas spending which might increase, e.g. the IDA network of overseas office but we could not find detailed data on this.

***: Following FitzGerald and Morgenroth, NI's contribution assumed to equal 1% of GDP.

****: Using Doyle's method which in turn follows FitzGerald and Morgenroth. ONS estimated Northern Ireland Corporation Tax revenue in 2021-22 as £1182m and UK Corporation Tax revenue of £67.625bn. ONS also records Northern Ireland's share of UK Gross Trading Profits in 2018 as 2.14%. 2.14% of £67.625bn is £1,447.2m (ONS 25 April 2023, "Regional Gross Value Added (Balanced) per head and income components", *Dataset*). So, the implied increase in revenues is £1447.2m-1182m= £265.2m.

Sources: As in Table 3.

The crux of Doyle's argument is that by making plausible assumptions about the outcome of the negotiations which would accompany the achievement of a united Ireland, we can be very confident about a move from a large ONS figure for the subvention to a much smaller figure for the required transfer. We will now consider validity of his arguments:

Pension payments

Doyle is dealing mainly with the state (welfare) pension, more or less universal benefits,[17] and some occupational pensions of public sector employees. Doyle implies there is a strong case for the UK to retain its liability: that liability was built up during a period of time when Northern Ireland was part of the UK. Additionally, the UK Government does pay pensions for people originally from the UK who are now retired and living in other countries and as part of the Brexit divorce settlement a contribution to the pension liabilities of the EU.[18]

However, in the case of a united Ireland a majority of the residents of Northern Ireland would have voted to renounce a connection with the UK. This weakens the analogy with a UK pensioner now living in Spain or a British former European Commission worker. The state pension system is not in any case fully funded. It is, in effect, a pay-as-you-go charge on the taxpayers of today. The argument that the UK Government should pay people back for their previous contributions is weakened.

It is perilous to predict the outcome of inter-governmental negotiations. Barrett plausibly suggests that the UK Government is less likely to focus on the amount of each individual sub-category of spending but rather on the total: the combination of debt repayments on the public debt and pension liabilities.[19] In any case, fears of setting a precedent that could feed into any future referendum regarding Scottish independence will add to the caution of the UK Government. We conclude it is rather unlikely that the UK would retain the liability for pensions.

Interest payments on UK public debt

[17] And, additionally, the means tested Pension Credit.
[18] That cumulative liability regarding EU pensions could amount to £12bn: OBR, *Economic and Fiscal Outlook March 2021* (London: Office for Budget Responsibility, 2021).
[19] Alan Barrett, "Why the "Subvention" does not matter: A response", *Irish Studies in International Affairs* 32 (2) (2021), 335-337. FitzGerald, "Northern Ireland Subvention", plausibly suggests that the UK Government approach to negotiations might be to offer to pay either for pensions or the interest payments but *not both*.

In this case Doyle's assumption is again a strong one: the UK Government would retain 100% liability, none of this would pass to the Irish Government post-united Ireland. Admittedly, it can be argued that given that Ireland is already a sovereign state with a debt rating why would it take on a debt liability for which it has no legal responsibility (unless to gain something else which was on the negotiating table). Doyle's appeal to the precedent set in 1925 when the UK cancelled the liability of the Irish Free State for a proportional share of UK public debt (as had been established in Article 5 of the independence Treaty in 1921) is not entirely convincing. After all, in 1925 the UK government probably had a sense that it had to provide a *quid pro quo* to the Dublin Government. The Boundary Commission had just determined that the Northern Ireland-Irish Free State Border as established in 1921 was to remain more or less in its original position. The London government felt it had to "compensate" its Dublin counterpart for that disappointing outcome.[20] In the context of an agreement regarding a united Ireland it is much less clear that the Republic of Ireland would be able to offer the UK a sufficiently large *quid pro quo* to "pay for" the writing off the debt liability. One possibility is an agreement to join NATO or, at least, some sort of defence arrangement across the two islands including Ireland making some financial contribution. Defence is the subject of the next section. Alternatively, the Irish Government could accept liability for some or all of the pension payments (see previous section).[21] We conclude, and once again the possibility of setting a precedent for Scottish independence will weigh heavily on the UK negotiators, it is very unlikely the UK would retain the liability for the interest payments on Northern Ireland's share of UK public debt.

Defence

Doyle's argument here is that whereas as part of the UK Northern Ireland is apportioned a notional level of defence spending amounting to about £1bn annually, post-united Ireland there would be no real need for the Irish Government to increase its spending on defence by anywhere close to £1bn. An increase of £1bn would more than double the existing level of spending in Ireland. The most up-date ONS data shows that the level of defence spending allocated to Northern Ireland increased from £1.1bn in 2018-19 to £1.4bn in 2021-22.

Doyle does allow for the possibility that following a united Ireland some of the current UK armed forces personnel who are of Northern Ireland origin would re-locate to the Irish Defence Forces. Doyle therefore allows for a 20% increase in Irish defence spending post-united Ireland but, apart from this, the remainder of the defence spending formerly allocated to Northern Ireland is treated as saving from the subvention.

Our figure work using more up-to-date data largely confirms Doyle's estimation of the saving relating to defence spending assuming an increase of 20% in Irish defence spending. FitzGerald and

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[20] Eoin McLaughlin, "What were the economic consequences of Irish independence?", *Economics Observatory Blog,* (27 April 2021). Accessed 20 July 2023. *https://www.economicsobservatory.com/what-were-the-economic-consequences-of-irish-independence*

The sum of debt written off was equivalent to 80% of the GNP of the newly independent Ireland according to John Fitzgerald and Sean Kenny, ""Till debt do us part": Financial implications of the divorce of the Irish Free State from the UK, 1922-26", *European Review of Economic History* 24 (4) (2020), 818-42. Accessed 20 July 2023. https://academic.oup.com/ereh/article/24/4/818/5827947

[21] FitzGerald, "Northern Ireland Subvention", plausibly suggests that the UK Government approach to negotiations might be to offer to pay either for pensions or the interest payments but *not both*.

Morgenroth's approach gives broadly similar results to Doyle. They assume defence spending would increase in proportion to the size of the Northern Ireland economy (measured by GDP) compared to the Republic of Ireland (measured by GNI*)[22]: a 27.7% increase in 2018-19 and a 25.7% increase in 2021-22.

The limitation of any increase in defence spending to "only" about one-fifth/one-quarter may be too optimistic. There are two main reasons for this:

(1.) The creation of the united Ireland and its immediate aftermath could, sadly, be accompanied by an increase in "political" violence and/or serious criminality.[23] If that happened the Irish Defence Forces might struggle to cope given their current resources. Of course, the policy response could be in terms increasing spending not on the Irish Defence Forces but on policing and criminal justice systems in Northern Ireland but any response involving additional spending will likely add to the required fiscal deficit. As recently as the summer of 1997 the total deployment of British Army personnel in Northern Ireland combined with the number of police officers peaked at about 30,000.[24] The current (2023) number of Irish Defence Forces personnel combined with Garda and PSNI police officers totals only about 29,000.[25]

(2.) An explicit or implicit requirement of unity may be a substantial increase in Irish defence spending. The UK Government could try to make unity conditional on NATO membership. That perhaps is fanciful.[26] At the same time, a previous Defence Forces Minister (Simon Coveney, 2020-22) conceded that the existing defence establishment, "cannot protect Ireland from potential attack". If the Dublin Government assumed responsibility for the six northern counties that exposes the extent to which hitherto the defence of the sea and air approaches to the entire island have been largely dependent on the Royal Navy and Royal Air

[22] "GNI modified" or "GNI*/star" is an attempt by the Irish statistical authorities (CSO) to adjust the Irish national output data by excluding "output" which is more likely to reflect tax avoiding behaviour than "real" additions to value added.

[23] Either in terms of activity of the loyalist paramilitaries or organised crime gangs. Notwithstanding the 1998 Belfast/Good Friday Agreement, and the political/peace process since then, much of the organisational infrastructure of the various paramilitary organisations remains in place. One intelligence assessment is that the two largest loyalist organisations have a membership of about 12,000: Stephen Dempster, "Loyalist paramilitary groups in Northern Ireland have 12,500 members", (BBC, 2 December 2020). Accessed 20 July 2023. https://www.bbc.co.uk/news/uk-northern-ireland-55151249

[24] That being the highest level of security force and policing commitment since the early 1970s and largely explained by unrest associated with the parading issue. Wikipedia, "Operation Banner", (Wikipedia). Accessed 19 July 2023.https://en.wikipedia.org/wiki/Operation_Banner

[25] Total number of Irish Defence Forces personnel, including the Naval Service and Air Corps, at the end of January 2023: 7,987: Conor Lally, "Defence Forces crisis deepens as strength drops below 8,000", (*Irish Times*, 2 February 2023). Accessed 20 July 2023. https://www.irishtimes.com/ireland/2023/02/02/defence-forces-crisis-deepens-as-strength-drops-below-8000-personnel/

Total number of Garda officers (plus reservists) as of end 2021: 14,235+425: An Garda Síochána, *Annual Report 2021,* (Dublin, 2022). Accessed 20 July 2023.
https://www.garda.ie/en/about-us/publications/annual%20reports/an-garda-siochana-annual-reports/

Total number of PSNI (Police Service Northern Ireland) officers in mid 2023: 6,673: Mark Rainey, "Grave concern over police numbers but "high harm" crime still a priority PSNI", (*Newsletter*, 19 June 2023). Accessed 20 July 2023. https://www.newsletter.co.uk/news/crime/grave-concerns-over-police-numbers-but-high-harm-crime-still-a-priority-psni-4188242

[26] Also perhaps fanciful is the view that the long run game plan of US foreign policy is to use a united Ireland as the *quid pro quo* for the Republic relinquishing neutrality.

Force.[27] The Report of the Commission on the Defence Forces (February 2022), using comparisons with other small European countries, recommended that Irish defence spending triple from roughly euros 1bn to euros 3bn. The Government response was that a smaller increase of about 50% would occur.[28]

Given this context, the approaches taken by both Doyle and FitzGerald and Morgenroth probably exaggerate the scale to which there could be a saving with respect to the defence element of the subvention. Whilst FitzGerald and Morgenroth assumed an increase in Irish defence spending in proportion to the size of the Northern Ireland economy, a case could be made for adjustment in proportion to Northern Ireland's population as compared to that of the Republic of Ireland (the FitzGerald (2020) calculations did in fact use population): that would imply an increase in defence spending of 38.8% in 2018-19 and 38% in 2021-22.[29] By implication, the saving to the subvention would be smaller albeit the scale of the impact compared to the total subvention would be relatively small and some (moderate scale) increase in Irish defence spending is now likely to occur in any case in the mid 2020s.

Other spending outside of the UK and non-identifiable expenditure hitherto allocated to Northern Ireland

Doyle's approach was that the bulk of these could be treated as savings. In his view such items of expenditure do not represent a real pressing need for increased expenditure post-united Ireland or, at least, any decisions regarding spending could be treated as policy choices for the medium to longer term. They should not really be regarded as implying a need for fiscal transfer to Northern Ireland.

Doyle may also have been implying that various national central services such as overseas diplomatic representation and FDI[30] promotion should properly be considered as largely fixed costs. In other words, regardless of whether Ireland's population is 5m (the 26 counties) or 7m (the 32 counties) the same number of diplomats and embassies and IDA offices could service the country. This could be true to an extent: to the extent that post-unity either the productivity of such services rises[31] or

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[27] The Republic of Ireland already has 16% of the EU's territorial waters. Three-quarters of the Northern Hemisphere's telecommunications cables pass through or near the Exclusive Economic Zone. The Irish navy has 6 off-shore patrol vessels and 2 CASA CN-235 patrol aircraft: Eoin M.McNamara, "Ireland's defence deficit", (London: Royal United Service Institute website, *Commentary,* 21 December 2022). Accessed 3 July 2023. https://www.rusi.org/explore-our-research/publications/commentary/irelands-defence-deficit Economists characterise defence services as being a public good which creates the possibility that sometimes some may free ride on that provision: Mauro Mare, "Public goods, free riding and NATO defence sharing", *The International Spectator Italian Journal of International Affairs 23 (*1) (1988), 7-15. https://www.tandfonline.com/doi/abs/10.1080/03932728808456634?journalCode=rspe20

[28] The Commission on the Defence Forces, *Report of the Commission on the Defence Forces,* (Dublin, 2022). Accessed 3 July 2023. https://www.military.ie/en/public-information/publications/report-of-the-commission-on-defence-forces/

[29]NISRA, "2011-21 Rebased mid-year population estimates", (Belfast: Northern Ireland Statistics and Research Agency, 29June 2023). CSO, "Population and migration estimates, April 2022", (Dublin, Central Statistics Office, 24 April 2022).

[30] Foreign Direct Investment. What is in view here are the global offices of the IDA.

[31] More likely if there is currently some slack in the system. At the same time, Baumol and others have pointed to the difficulties of raising productivity in service sector activities. William J. Baumol and William G. Bowen, "On the performing arts: The anatomy of their economic problems", *American Economic Review* 55 (1) (1965), 495-502. Accessed 20 July 2023. https://www.jstor.org/stable/1816292

there is a willingness to accept that “output per head of the population” (perhaps in terms of quality) will actually drop.

Our approach here is cautious. We accept Doyle’s argument that there is some uncertainty about what these levels of spending would be post-united Ireland. That uncertainty exists partly because we cannot be certain what approach either the Irish or UK Government would take during any negotiations relating to a united Ireland or about the behaviour of the two Governments immediately post-united Ireland. That all said, our approach here is to:

(a.) First, use the most up-to-date data for 2018-19 whilst using Doyle’s method.
(b.) Then, use the most up-to-data for 2018-19 but using instead the method of FitzGerald and Morgenroth (the spending on certain major categories of overseas/central spending was increased in proportion to Northern Ireland’s GDP compared to the Republic of Ireland’s GNI*).
(c.) Then, consider the position in 2021-22 whilst using Doyle’s method.
(d.) And then use the data for 2021-22 but using instead the method of FitzGerald and Morgenroth.

Whereas Doyle has assumed a saving from the subvention of £500m our own estimations, using more up-to-date data and/or the method of FitzGerald and Morgenroth, for either 2018-19 or 2021-22 give a broadly similar result.

Allowing for the possible increase in Ireland’s budget contribution to the EU

One particular sub-category of spending outside of the UK about which there is uncertainty about how it might translate into Northern Ireland’s deficit post-united Ireland is the balance of transfers (both contribution to and funding from) to/from the EU: Irish unity would, obviously, represent a “re-joining” of the EU.[32] So, in addition to the uncertainty relating to negotiating behaviour and future decision making by both the national Governments (UK and Ireland) there is also the third party: the EU.

The subvention for 2018-19 and 2021-22, as calculated by ONS, reflects in part Northern Ireland’s share of the UK’s budget contribution to the EU (the UK continued to make a financial contribution to the EU post-Brexit given the “divorce settlement” with a proportion of such payments apportioned to Northern Ireland, continued EU spending within Northern Ireland acted in the opposite direction and reduced the measured subvention). At the same time, and acting to reduce the subvention, there was an in-flow of EU funds into Northern Ireland. Post-unification, the EU could decide that the Irish Government should make a larger budget contribution. We follow FitzGerald and Morgenroth in assuming a Northern Ireland addition to Ireland’s budget contribution equivalent to 1% of regional GDP. That 1% equivalent in both 2018-19 and 2021-22 would have been considerably larger than Northern Ireland’s actual (inputted by ONS) contribution which was the population share of the UK’s budget contribution.[33]In 2018-19 the implied addition to the subvention would have been about £200m and in 2021-22 it would have been about £500m. Importantly, the EU could decide to in effect reduce the scale of this effect by increasing its funding to spent within Northern Ireland.

[32] That statement subject to the qualification that under the terms of the Protocol and, now, the Windsor Framework, Northern Ireland has *de facto* remained a member of the Single Market (for goods) and the EU Customs Union.
[33] Given a rebate system, the UK’s budget contribution was actually less than 1% of UK GDP.

Adjusting for the extent to which the ONS may have under-estimated the tax revenues which should have been attributed to Northern Ireland[34]

Doyle's argument here is that often the measures of revenues and receipts received in Northern Ireland are not direct measures. Instead, sometimes ONS uses a share, e.g. share of population or share of GDP, of the measured value of revenues at a UK-wide level. He claims there is scope for error in such estimations. The adjustment he offers is based on FitzGerald and Morgenroth's (2019) re-estimate of Corporation Tax revenues in Northern Ireland whereby Northern Ireland's share of Gross National Operating Surplus (i.e. economy-wide profits) in the UK is used the imputed revenues rise by £500m. The argument being that published regional Corporation Tax revenues may be biased downwards by a "headquarters effect": multi-regional firms operate in Northern Ireland and given that the company HQ is rarely located in Northern Ireland, profits may have been attributed to the region where the HQ was.

Like Doyle, we apply Fitzgerald and Morgenroth's method to the 2018-19 data but use the most up-to-date ONS data. This implies an under-estimation of tax revenue of about £167.1m rather than £500m. When this method was used for the 2021-22 data the adjustment the under-estimation was £265.2m.

Over and above the question of whether measured tax revenues in region have been under-estimated there is the policy question whether post-unity tax revenues could be increased. Debates about tax devolution to Northern Ireland have usually focused on cutting tax rates, notably in terms of Corporation Tax.[35] The recent report of the Northern Ireland Fiscal Commission highlighted the difficulties surrounding increasing tax varying powers.[36]

Assessment of the overall impact of Doyle's method

When Doyle's method is retained but the most up-to-date data used there is a modest uplift in the subvention in 2018-19: £3.6bn instead of £2.4bn. When some of Doyle's assumptions are modified (the UK does not retain liability for the interest payments on state pensions and public debt, more modest savings relating to defence, overseas and central and non-identifiable expenditure, more modest gains to Corporation Tax revenues) the subvention/deficit which remains is a more substantial £8.8bn.

When Doyle's method is applied to the data for 2021-22 a deficit of £6.8bn is implied. If, instead, some of Doyle's assumptions are relaxed a deficit of £12.6bn is implied.

Positive and negative impacts of the subvention

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[34] We follow Doyle in not attempting to disentangle to what extent depreciation, which does appear on both the expenditure and revenue sides of Northern Ireland's public finance accounts is contributing to the subvention/deficit and hence, like Doyle, we do not consider whether a change in depreciation post-united Ireland could lead to a smaller or larger deficit.

[35] The Republic of Ireland experience exemplifies that low rates *can* be compatible with relatively high revenues. However, it cannot be assumed that if Northern Ireland copied the 12.5% Corporation Tax rate revenues would be as buoyant as in the (Southern) Irish experience.

[36] Admittedly, and obviously, this all relates to tax *devolution* within a UK context and not how tax harmonisation in a united Ireland might play out. Northern Ireland Fiscal Commission, "More fiscal devolution for Northern Ireland?", *Final Report* (Belfast, 2022). Accessed 30 August 2023. https://www.fiscalcommissionni.org/

Whereas Doyle characterised the subvention as "… a symptom of… weakness…", a more nuanced approach recognises it as both an economic blessing and a bane.

It is a good thing to the extent that it maintains levels of demand in the regional economy and hence levels of output and employment. Some indication of that aspect of the subvention is indicated when we consider the size of the subvention for each of the UK region,[37] see Table 5.

Table 5 How regional subventions per capita (2021-22) compare across the UK: The relationship to relative levels of GDP per capita (2021)#

Region	GDP per capita in 2021 as a % of the UK average (UK average=100)	Subvention per capita, £
London	177.4	-4,313*
South East England	107.2	-1,501*
Scotland	91.5	4,340
East of England	90.2	378
North West England	88.0	4,901
South West England	87.8	2,129
Yorkshire & the Humber	82.1	3,270
West Midlands	82.1	4,366
East Midlands	81.5	2,562
Northern Ireland	80.4	7,320
Wales	76.1	6,536
North East England	72.8	5,524

Note#: The revenues collected through North Sea oil and gas are allocated across the regions by notional (geographic) share of the North Sea area and hence of the revenues. This implies zero revenues for Northern Ireland.

*: - sign indicates that the region made a positive transfer into the UK exchequer, i.e. total expenditure was less than the revenue raised.

Source: ONS 25 April 2023,"Regional economic activity by GDP, UK: 1998 to 2021", *Release*. ONS 26 May 2023,"Country and regional public sector finances, UK: Financial year ending 2022" *Release*.

Table 5 indicates that the relationship between relative level of GDP per capita and the level of subvention is as would be expected. If having a relatively low level of GDP per capita suggests greater socio-economic need then richer regions should have smaller subventions. The two richest UK regions in 2021 were the only two regions were the subvention was negative, i.e. they were net contributors in fiscal terms. At the same time, the three poorest regions (North East England, Wales and then Northern Ireland) have by far the highest levels of subvention per capita. The relationship, however, is not straightforward. Scotland, for example, was considerably more prosperous than the West Midlands and yet these two regions had the same level of subvention in per capita terms.

[37] Doyle makes the interesting point that if Northern Ireland was like the Irish region "Cork-Kerry" there would be no subvention. This may well be the case but there are no official data regarding fiscal transfers between regions in the Republic of Ireland: Doyle, "(Evidence to) Finance and Economy: Discussion".

From a specifically Northern Ireland point of view what Table 5 is implying is that to some extent the high subvention (per capita) can be explained by Northern Ireland's relative need (proxied by relative GDP per head)[38]. However, comparison with, say, Wales and the North East of England implies the subvention is higher than might otherwise have been expected in terms of need. A gloomy assessment of the subvention's impact could be that it has contributed over the longer term to lowering the level of GDP per person compared to other regions. It is such potential negative effects of the subvention that we now consider, particularly in terms of any impact on the quality of decisions in both the public and private sectors.

In terms of the public sector, given that the subvention softens budget constraints it may reduce the quality of decisions made. At the very least, it is probable that the relative priority placed on maximising the fiscal transfer from GB to Northern Ireland in terms of the Block Grant payment from the UK exchequer reduced the attention given to gaining value for money or improving the quality of policy decisions.[39]

A large subvention may also have produced problems in terms of soft budget constraints, dependency, X-inefficiency and poorer quality of decision making in the Northern Ireland private sector. The impact would be indirect: a large subvention funded substantial subsidies to the private sector and those subsidy payments, in turn, impacted on decision making. Hitchens, Wagner and Birnie argued high subsidy rates to manufacturing during the 1970s and 1980s contributed to a persistent productivity gap between Northern Ireland and GB.[40] Crafts (1995) widened this argument by noting that it appeared Northern Ireland missed out on the "golden age" of post-War Western productivity growth in the 1950s through to the mid 1970s.[41] A high rate of public spending/subsidy[42] and the consequent impact on competitiveness may been part of the explanation. Various sectors in Northern Ireland, notably farming and manufacturing, continued to more heavily subsidised than their GB counterparts.[43]

It is too simplistic to characterise the subvention as a "…symptom of… weakness…". On the one hand it provides a short term boost to the economy in terms of demand effects but on the other hand it may interfere with the quality of decision making. To the extent that it does the latter it could be an explanation and not just an symptom of weakness.

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[38] For more refined measurement of Northern Ireland's relative need see Northern Ireland Fiscal Council, *Updated Estimate of the Relative Need for Public Expenditure in Northern Ireland,* (Belfast: Northern Ireland Fiscal Council, 2023). Accessed 20 July 2023.https://www.nifiscalcouncil.org/publications/updated-estimate-relative-need-public-spending-ni

[39] The public inquiry into the funding scandal relating to the Renewable Heating Incentive (RHI) did evidence a tendency amongst senior Northern Ireland civil servants to concentrate on maximising the Block Grant: Sam McBride, *Burned: The Inside Story of the "Cash-for-Ash" Scandal and Northern Ireland's Secretive New Elite* (Dublin, 2019).

[40] David, M.W.N. Hitchens, Karen Wagner and John Esmond Birnie, *Closing the Productivity Gap,* (Avebury, 1990).

[41] Nick F.R. Crafts, "The Golden Age of Economic Growth in Postwar Europe: Why did Northern Ireland miss out?", *Irish Economic and Social History* 22 (1995), 5-25. Accessed 20 July 2023. https://journals.sagepub.com/doi/abs/10.1177/033248939502200101

[42] Itself largely a reaction to the instability generated by the Troubles during 1969-mid 1990s.

[43] Agricultural support spending per head of the population is about three/four times that in England. Unlike its counterpart in England, Northern Ireland manufacturing enjoys a 70% relief from property taxation (the Rates). Northern Ireland has a well funded regional development agency (Invest NI) whereas the English regions do not have such bodies. The relatively high rates of spending in Northern Ireland on enterprise and economic development and on agriculture, fishing and forestry in recent years are shown in HM Treasury, *Public Expenditure Statistical Analysis 2022,* (2022).

The UK fiscal union compared to the smaller united Ireland fiscal union: Questions such as pooling risk

The subvention is a consequence of Northern Ireland's membership of a larger fiscal union, the UK's fiscal union. Given that, alongside any questions about the current or future size of the subvention (or deficit) there be an equally important question of whether there are benefits (or costs) to being part of such a larger fiscal union and would such benefits (and costs) be different if Northern Ireland were part of a smaller fiscal union, i.e. a united Ireland? Doyle does not consider these questions. They are sufficiently important to merit a review.[44]

One theoretical benefit from membership of a wider fiscal union is that it could act an insurance against region-specific shocks.[45] If Northern Ireland suffers a demand or supply shock to a sector (say, farming) which is relatively large within the region the wider fiscal union will be able to provide extra support to the region. The likelihood is that such extra support would be manifested by an increase in the size of the subvention.[46] Given that over the years the structure of the Northern Ireland economy has become more similar to the UK average the likelihood of regionally specific shocks may have declined. That said, the Troubles during 1969-mid 1990s could be thought of as a regionally specific supply and demand shock. Of course, following unity the wider Irish fiscal union could attempt to take on the role of cushioning Northern Ireland against region specific shocks. The extent to which it would be able to do so really leads back to the question of the likely scale of the required transfer.

Some shocks are not region specific but more general. Three recent examples are the banking crisis in 2007-8, Covid in 2020 and the Ukraine War in 2022 and 2023. In such cases the questions are more those of which fiscal union, UK or a united Ireland, would be more prone to such shocks and more able to fund a cushion. The UK was better placed in 2007-8 to fund a bank bail-out[47] but both the UK and Republic of Ireland were liable to such a shock in the first place given that they had out-sized banking sectors.[48] In 2007 IMF data suggested bank assets were equivalent to 169% of GDP in the UK and 159% in the Republic of Ireland, the sixth and eighths most out-sized national banking sectors in the world at that time.[49] Both fiscal unions were able to fund fairly comprehensive employment support and energy price support packages during 2020-21 and 2022-23, respectively.

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[44] Particularly given that these issues have been raised in the debate about Scottish independence: Professor Jim D.Gallagher, "Pooling and sharing: The UK as a fiscal union", (Gwilym Gibbon Centre for Public Policy, Working Paper, 2019-04, 2019).

[45] For fiscal unions and asymmetric shocks see Emmanueal Farhi and Ivan Werning, "Fiscal unions", *American Economic Review* 107 (12), (2017), 3788-3834. Accessed 20 July 2023. https://www.aeaweb.org/articles?id=10.1257/aer.20130817

[46] Given that the UK exchequer would be supporting additional spending in the region, e.g. higher welfare payments or extra grant support to businesses, at a time when it is likely tax receipts would have declined.

[47] The UK did not have to use an EU/IMF bail-out. The Republic of Ireland took out a £3.23bn loan from the UK in 2010 (repaid by 2021). This compares to £19.25bn borrowed from the IMF and smaller loans from Sweden and Denmark. As of early 2021 £35bn of loans from the EU were still outstanding. BBC, "Irish make final repayment on UK emergency "bailout" loan", *BBC News website,* (26 March 2021). Accessed 10 July 2023.

[48] In terms of high bank lending or turnover compared to national GDP.

[49] "Bank assets to GDP- Country rankings", on the GlobalEconomy.com website. Accessed 4 July 2023.

How the Northern Ireland Government to UK Treasury relationship could indicate challenges facing a post-united Ireland system of fiscal transfers: Moral hazard writ large?

It is worth emphasising that the subvention *per se* is not a policy variable. It is more of a residual. Its size is not something that policy makers can manipulate directly. To reduce it the UK authorities would either have to adjust some of the accounting conventions or increase spending in Northern Ireland relative to the amount of tax revenues collected. That said, the two parties to the financial relationship between the Northern Ireland administration and the UK exchequer are aware of the existence of the subvention and its scale probably has coloured that relationship. That relationship has been a difficult one throughout most of the century since 1921.[50] An interesting question is whether the fiscal relationship between Northern Ireland and a post-united Ireland Irish Government would be any better? Might it be more troublesome?[51]

Northern Ireland's fiscal relationship to the UK exchequer in recent years has been liable to moral hazard.[52] There have been repeated near or actual breakdowns of the devolved government. This produces a cycle whereby breakdown is followed by a negotiated agreement. Each political agreement tends to be accompanied by a financial package. It is highly likely that the Northern Ireland political Parties know they now possess the mechanism of actual or threatened collapse of the institutions to leverage extra funding resources from the London Government.

Assume a fiscal transfer into Northern Ireland continues post-united Ireland but now funded by the Irish Government. Assume also that under the terms of unification some sort of devolved, regional government continues in Northern Ireland.[53] The "financial package/moral hazard problem" would probably continue under unification but would be worsened given the bargaining power of the two parties would now be much closer: a regional government representing 2m people confronts a national government of 7m, as compared to the situation in the UK of 2m versus 68m. Added to this the likelihood that in the years immediately following unification the Irish Government would surely feel itself constrained to ameliorate almost every grievance coming from its northern subsidiary. That political constraint is one reason why the Irish Government post-unity would find it difficult to implement certain policies in Northern Ireland which might reduce the scale of the subvention such

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[50] The historian Buckland notes that even before the foundation of the state of Northern Ireland in 1921 teams of civil servants were making repeated trips to London to negotiate with the Treasury: Patrick Buckland, *The Factory of Grievances Devolved Government in Northern Ireland 1921-1979,* (Dublin, 1979).

[51] My point here overlaps with Doyle's ("(Evidence to) Finance and Economics: Discussion") comment that whilst decentralisation in a united Ireland might appear attractive there is "… not a single example of a two-unit federal system in the 20th Century…". One was proposed for Cyprus in 2004 but voted down by the northern part of the island. Federal systems, the USA for most of the period since 1900 or Switzerland, may work relatively well when there is shifting pattern of geographical alliances but not when most political divides are reduced to the same geographical duality: USA North versus South during 1840-60 or Greek Cyprus versus Turkish Cyprus 1960-74.

[52] Northern Ireland Fiscal Council, *The Public Finances in Northern Ireland: A Comprehensive Guide*.

[53] A plausible situation given a desire to ensure as little as possible practical change in terms of political arrangements especially from the point of view of unionists and other non-nationalists in Northern Ireland.

as cutting back the size of the Northern Ireland public sector,[54] or reducing the scale of welfare benefit up-take,[55] or by raising taxes within Northern Ireland.[56]

How likely is Doyle's post-unity economic upsurge?

Doyle claims the immediate and direct effect of unity would be an upsurge in economic performance in both Northern Ireland and the Republic of Ireland. Admittedly such claims about hypotheticals are hard to assess given that unity would shift the entire policy context and policy mix. Doyle does claim that unity would lead to the Northern Ireland tourist product being increasingly jointly marketed with the 26 counties and hence better marketed. Similarly, foreign direct investment (FDI) into Northern Ireland would increase. However, Northern Ireland is already jointly marketed with the Republic of Ireland as destination by Tourism Ireland Limited (TIL).[57]

It is true that in recent decades rates of FDI going into the Republic of Ireland have been higher than those going into Northern Ireland. At the same time, Northern Ireland has out-performed the UK average and most parts of the Western world.[58] It is not clear how far bringing investment promotion in Northern Ireland under a single, all-Ireland body would improve outcomes. How would cases of competition between the two Irish economies be handled? In any case, over the last two decades Northern Ireland and the Republic of Ireland have rather different competitive advantages in terms of attracting FDI: the former in terms of services (particularly, back-office, legal and IT) and the latter in terms of data centres, manufacturing and technology. So, the gains from joint promotion become less obvious.

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[54] It has been suggested that following unity the proportional size of the Northern Ireland public sector (percentage of total employment) could be scaled back to be equivalent to the rate in what is now the Republic of Ireland: Paul Gosling, *A New Ireland A New Union A New Society: Ireland 2030 A Ten Year Plan Post Brexit Edition,* (Self-published, 2020).

[55] For the argument that the relative high rates of receiving certain benefit, especially for long term sickness and inactivity, are higher than can be explained by the relative position in terms of health and other socio-economic indicators: Graham Gudgin, "(Evidence to) Review of the operation of the Barnett Formula", (Belfast: Northern Ireland Assembly Department of Finance and Personnel Committee, 2015). Accessed 20 July 2023.https://aims.niassembly.gov.uk/officialreport/minutesofevidencereport.aspx?AgendaId=11739&eveID=6839

[56] Interestingly, FitzGerald's later estimates ("Northern Ireland Subvention") include allowance for a possible increase in public sector pay and welfare benefit rates up to the Republic of Ireland levels. This would imply a sizeable increase in the subvention.

[57] One of the seven North-South bodies established under the Strand 2 Arrangements of the 1998 Belfast Agreement. There has been a criticism that the joint marketing by TIL in the GB *actually reduces* the number of tourists coming to Northern Ireland: Rebecca Black, "Tourism Ireland chief "shocked" by airport director's criticism", (*Irish News,* 19 June 2023). Accessed 20 July 2023.
https://www.irishnews.com/news/northernirelandnews/2019/06/19/news/tourism-ireland-chief-shocked-by-airport-director-s-criticism-1645349/

The opportunity to market a distinctive six counties product as opposed to the 32/26 counties may have been reduced. Unity, *per se*, would not change the reality that most external visitors enter the island via Dublin Airport. It would, however, remove some potential visa-type requirement frictions at the land border (e.g. the Electronic Travel Authorisation).

[58] Thomas Byrne, "Trends in foreign direct investment from the US, 2003-2015", (Belfast: Department for the Economy: Fulbright Scholarship Report, 2017).Accessed 20 July 2023.
https://niopa.qub.ac.uk/bitstream/NIOPA/7387/1/Fulbright-Report-1-Trends-in-US-FDI.pdf

In addition to these arguments about possible improvements in terms of FDI and tourism, Doyle relies heavily on Hübner and his and KLC Consulting's use of a macroeconomic forecasting to consider the economic feasibility of a united Ireland and also to answer the question whether unity would be accompanied by an increase or decrease in prosperity in both economies.[59] The Appendix provides a more detailed asssessment but four assumptions used in their modelling were questionable:

(1.) Unity would be accompanied by a *de facto* currency devaluation in Northern Ireland. In fact, a sizeable devaluation occurred in 2016.
(2.) Removal of the Irish Border would lead to a major upsurge in North-South trade. In fact, no allowance was made for the likely reduction in trade Northern Ireland-Great Britain.
(3.) Unity would be followed immediately by an upsurge in Northern Ireland productivity growth. In fact, improving some of the main drivers of that comparative productivity performance may require at least a generation (25+ years).
(4.) Replacement of the subvention would be unproblematic. The 2015 modelling somewhat anticipates Doyle's argument. It remains unclear how Northern Ireland's deficit would be financed.

Conclusions

We agree with some parts of Doyle's argument. The question of the size and funding of the subvention has had *some* presence in Northern Ireland political debate. The definition used by the ONS would not read across in its entirety into a united Ireland.

However, we disagree with key elements of Doyle's argument:

- It is not plausible that the UK Government would retain 100% liability for *both* public pension payments and the interest payments on Northern Ireland's share of public debt.
- It is not likely that post-Irish unity the Irish Government would be able to sustain the current very low levels of spending on the Irish Defence Forces.
- Doyle has probably under-estimated the extent to which spending on various central and overseas services, particularly the contribution to the EU, would have to increase post-unification.
- There can be no certainty as to the precise scale of any fiscal transfer required post-united Ireland, but we can be confident it will be considerably larger than the £2.4bn proposed by Doyle. There are three main reasons: (1.) the most recent ONS data for 2019 revise upwards the size of the subvention, (2.) as indicated above, some of Doyle's assumptions were overly optimistic and (3.) spending relative to revenues increased massively given Covid (and now the War in the Ukraine) and there is likely to be a ratchet effect.

[59] Kurt Hübner and KLC Consulting, Modelling Irish Unification, (Vancouver, 2015). Accessed 19 July 2023. https://cain.ulster.ac.uk/issues/unification/hubner_2015-8.pdf. Hübner updated his modelling in 2018 but we have not been able to source this version: Kurt Hübner and Renger Herman van Nieuwkoop, "The costs of non-unification: Brexit and the unification of Ireland", (publisher unknown, 2018). See: Rebecca Black, "United Ireland "only winning scenario" after Brexit report finds", (*Irish News,* 7 November 2018). Accessed 20 July 2023. https://www.irishnews.com/news/brexit/2018/11/07/news/united-ireland-only-winning-scenario-after-brexit-report-finds-1479811/In that latter report Hübner remained very optimistic about the extent to which unity would provoke an upsurge in Northern Ireland productivity. He continues to assume no trade frictions would develop between Northern Ireland and Great Britain.

Doyle estimated a deficit/subvention of £2.4bn in 2018-19. We think it more likely to have been in the range £3.6bn to £8.8bn. In 2021-22 replication of Doyle's method implied a deficit/subvention of £6.8bn but when some of his assumptions are relaxed that increases to £12.6bn. Given such figures it is highly likely that the subvention continues to matter. We cannot be confident that unification *per se* would produce a direct upsurge in economic growth which would render such a deficit irrelevant.

When Doyle characterises the subvention as "… a symptom of… weakness…" this is partly true. However, at least in the short run, the subvention brings certain benefits to the economy. At the same time, especially over the longer run it is likely to do harm by reducing the quality of the decisions made by policy makers and private businesses.

An under-appreciated point in most of the burgeoning literature about the subvention/economics of a united Ireland is the tricky balance which policy makers will have to strike.[60] Under any set of constitutional arrangements they must try to increase the competitiveness of Northern Ireland and hence nudge the subvention back onto a downwards trajectory whilst avoiding the negative shock which would be the consequence of a sudden reduction in that subvention.

APPENDIX: ASSESSING THE HÜBNER-KLC (2015) MODELLING OF THE ECONOMIC GAINS FROM UNITY

This model forecast that incomes would rise in both Irish economies in the 5-10 years following unification. Hübner argued that it was possible to apply to Northern Ireland the type of economic modelling which had been used in the case of German unification after 1989. In practice, such forecasting models have often been a not very reliable way of predicting what could happen in the economy especially when there are very large structural changes. A united Ireland would certainly be a big structural change. Not only did almost no one foresee the timing of German unification in 1990 but there was very little appreciation in 1990 that West Germany was committing itself to at least three decades of very substantial annual subsidies to the former East Germany.[61]

Over and above such general grounds for caution, four assumptions used by Hübner and KLC were particularly problematic:

(1.) *That the exchange rate depreciates given Northern Ireland's adoption of the euro*- Given the devaluation of the pound which occurred in the summer of 2016, to a large extent that adjustment has already taken place without Northern Ireland leaving the UK.

(2.) *That there would be a big boost to trade*- Hübner and KLC took a lead from economic research which suggests that borders are bad for trade. What they did not allow for is the fact that Northern Ireland's "export" trade with Great Britain is about two and a half times times greater than that with the Republic of Ireland. If there was a border between Northern Ireland and Great Britain then surely, using their logic, that trade would be reduced? Indeed,

[60] FitzGerald and Morgenroth, *The Northern Ireland Economy: Problems and Prospects*, do recognise this when they recommend that rather than simply reduce public spending in Northern Ireland the challenge is to re-direct it away from short run subsidisation of consumption towards a longer term promotion of productive investment.

[61] Points made by the German economist Dr. Gunther Thumann, "Timeline of events in German unification", in Gunter Thumann and Senator Mark Daly, "Northern Ireland's income and expenditure in a reunification scenario", (Dublin: Research Paper for the Joint Oireachtas Committee on the Implementation of the Good Friday Agreement, 2018).

it is very likely the loss in terms of less trade with Great Britain would exceed the gain in terms of greater trade with the Republic of Ireland.[62] This assumption is probably wrong headed.[63]

(3.) *That there would be something approaching an economic miracle in terms of productivity growth in Northern Ireland*- Hübner and KLC assumed that the Northern Ireland economy would suddenly start to look like the Republic's in terms of the rate of Corporation Tax, the structure of industry and, very importantly, the level of productivity. For Northern Ireland to close its productivity gap with the Republic of Ireland over 15 years, as their report assumes, would require the sort of very rapid economic growth, perhaps of the order of 6% annually, which the local economy has never sustained over any period since the Second World War. This assumption is therefore highly unrealistic even given that the official statistics exaggerate the true volume of Irish productivity (once allowance is made for tax avoiding behaviour).[64] Northern Ireland could, of course, adopt policies to improve its productivity whilst remaining within the UK.[65]

(4.) *That the Republic of Ireland could without much cost to itself replace the fiscal transfer which the UK currently provides to Northern Ireland*- Hübner and KLC anticipate Doyle's argument but their answer to question of how the fiscal transfer would be dealt remains unclear.

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[62] In 2021 total sales from Northern Ireland to Great Britain were £12.8bn and sales to the Republic of Ireland £5.2bn: NISRA, *Northern Ireland Economic Trade Statistics,* (Belfast: Northern Ireland Statistics and Research Agency, 2022).

[63] Their debatable assumption of a net gain to trade overall anticipated some of the issues which have arisen since the start of 2021 given the operation of the Protocol and (now) the Windsor Framework. Considerable increases in Northern Ireland-Republic of Ireland trade may have been accompanied by trade diversion. It is much less clear there has been any net gain to the Northern Ireland economy: Geoffroy Duparc-Portier and Giole Figus, "The Impact of the New Northern Ireland Protocol: Can Northern Ireland enjoy the Best of Both Worlds?", *Regional Studies* 56 (2021), 1404-17.
"https://www.tandfonline.com/doi/abs/10.1080/00343404.2021.1994547

[64] Graham Gudgin, *The Island of Ireland Two Distinct Economies,* (London: Policy Exchange, 2022). Accessed 20 July 2023. https://policyexchange.org.uk/publication/the-island-of-ireland/

[65] Including policies as outlined in Hitchens, Wagner and Birnie, *Closing the Productivity Gap,* and Esmond Birnie, Richard Johnston, Laura Heery and Elaine Ramsey, "A critical review of competitiveness measurement in Northern Ireland", *Regional Studies* 53 (10) (2019), 1494-1504.