



**Northern Ireland's
Income and Expenditure
in a
Reunification scenario**

Research by

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During German reunification

&

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For the

Joint Committee on the Implementation of the Good Friday Agreement

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Summary

The first ever report to look at the issues, policies and planning required for the peaceful unity of Ireland and her people by a committee of the Dáil or Seanad was written by Senator Mark Daly and adopted unanimously in 2017 by the Joint Oireachtas Committee on the Implementation of the Good Friday Agreement. This report was entitled 'Brexit & the Future of Ireland Uniting Ireland & its People in Peace & Prosperity'.

One of the key recommendations of that report was to ascertain the true level of the income and expenditure for Northern Ireland.

There are few economists in the world with first-hand knowledge and experience of Re-unification. Gunther Thumann is one such individual; he worked as a senior economist at the German desk of the International Monetary Fund at the time of German reunification. This provided him with the analytical understanding of the complex economic developments as they happened. In the second half of the 1990s, he had several opportunities to talk privately with Chancellor Helmut Kohl about his assessment of the politics of German Re-Unification.

On the 14th of June 2018 Senator Mark Daly proposed to a meeting of the Joint Committee on the implementation of the Good Friday Agreement that he and Gunther Thumann compile a report on the true income and expenditure of Northern Ireland in a reunification situation. They have compiled this research which also analyses Ireland's place in the world in various global indexes and its performance since independence.

Senator Mark Daly worked with Gunther Thumann and together they have examined the information available. This information shows that, in fact, the current reported deficit for the Northern Ireland budget could come close to a balanced budget in a re-unification scenario. Today, people take German Unification for granted but, as Thumann observes, at the time in 1989/90 it was far from certain as to what the outcome would be as a result of the falling of the Berlin Wall.

"I am amazed how many Germans these days seem to take Re-Unification for granted. We should not forget that the developments that started in 1989 could have turned out very differently: Russian tanks might have intervened in October-November 1989; the German political leadership might have pursued a less rigorous solution; the Allied Powers might have opposed Re-Unification; frustration among east Germans ("progress too slow") or west Germans ("costs too high") might have gained the upper hand. But perhaps we should look at it differently: The fact that people take Re-Unification for granted reflects its success."

For the purpose of this research, Thumann has given a brief which has been included in full at the end of this research as to the timeline of events in German Re-Unification. The outline

of what could have happened and his conclusions and the lessons for Ireland in its unification process are also set out. (See 'Timeline of events in German Re-Unification')

The core lesson for Ireland in its re-unification process is that the outcome is something that can only be achieved by hard work, careful planning and implementation. As John Bradley in his paper 'Towards an All Island Economy' presented at Queens University Belfast pointed out

"The extreme importance of strategic economic planning.....policy errors or policy neglect seldom goes unpunished".

Congressman Brendan Boyle commissioned the United States Congressional Research Service to look at the income and expenditure for Northern Ireland. They produced a report entitled 'Northern Ireland Budgetary Issues'.

The United States Congressional Research Service report breaks down Northern Ireland's expenditure into identifiable expenditure, non-identifiable expenditure and accounting adjustment.

Thumann and Daly have looked at the Congressional research report and make the point that included in identifiable expenditure in Northern Ireland 2012-13 Social Protection budget is pensions accounting for £2.8 billion. These would initially be the responsibility of the British Government as the pension liability was accrued while Northern Ireland was part of the United Kingdom.

Congressman Boyle's report explains, non-identifiable expenditure of £2.9billion includes Defence Expenditure and UK Debt Interest. These would not be a liability of a new unified Ireland. Thumann explains that not all the accounting adjustments figure of £1.1billion would be applicable in a reunification scenario. Also the convergence of the public service numbers between the north and the south would bring a saving of £1.7billion per annum in the current budget expenditure of Northern Ireland.

Taking the above adjustments and savings into account the cumulative figure is £8.5 billion. With the reported deficit for Northern Ireland is at £9.2 billion therefore the current income and expenditure figure for Northern Ireland comes near a balanced budget in a reunification scenario. This is of course before taking into account the likely potential for growth in Northern Ireland following unification as happened in East Germany following its reunification and to eastern European countries on their accession to the EU.

Gunther Thumann Report

Income & Expenditure for Northern Ireland

For the purpose of the analysis of the income and expenditure of Northern Ireland I reviewed the report Congressman Brendan Boyle commissioned from the United States Congressional Research Service entitled 'Northern Ireland Budgetary Issues'. Congressman Boyle's report was included in Senator Mark Daly's report for the Oireachtas Joint Committee on the Implementation of the Good Friday Agreement, entitled 'Brexit & the Future of Ireland Uniting Ireland & its People in Peace & Prosperity'. I also reviewed 'Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14' published in October 2015.

Net Fiscal Balance Report 2012- 2013 and 2013-2014

Category	2012-2013 (£ billions)	2013-2014 (£ billions)
Total Managed Expenditure	24.3	24.1
<i>Identifiable</i>	19.8	20.1
<i>Non-identifiable</i>	2.9	2.9
<i>Accounting Adjustments</i>	1.6	1.1
Revenue	14.8	14.9
Deficit	9.5	9.2

For 2013-14 the Boyle report shows a 'fiscal deficit' of £9.2 billion reflecting expenditure of £24.1 billion and revenue of £14.9 billion. While this £9.2 billion figure is a statistical measure of the 2013-2014 fiscal situation in Northern Ireland (as part of the United Kingdom) it would not be an adequate measure for the fiscal balance of Northern Ireland under a unification scenario with the Republic of Ireland. First, the Boyle report data contain expenditure items which would not be present under a unification scenario. Second, the fiscal situation of Northern Ireland will depend on the economic situation and the tax and expenditure structure at the time of unification, which could be quite different from that in 2013/14. Third, the future fiscal situation of Northern Ireland will reflect policies adopted in the context of unification.

In the brief analysis presented here I can only focus on a few statistical adjustments deemed relevant under the first point raised above, including British military spending attributed by the UK Treasury to Northern Ireland as well as reduced public service and pension expenditure. These adjustments would move the 2013/14 Northern Ireland fiscal accounts substantially towards equilibrium. This *ceteris paribus* picture obviously does not take into

account the vast political, economic and fiscal challenges and opportunities that unification would provide.

Highlights from the Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14:

Revenue

Total (non-north Sea) public sector revenue collected in NI was estimated to be £14.8 billion in 2012-13 or 2.5 per cent of the UK total. Revenue collected grew slightly to £14.9 billion in 2013-14, or 2.5 per cent of the equivalent UK total.

Over the period 2009-10 to 2013-14 NI public sector revenue grew relatively significantly, showing an increase of 13.1 per cent. In comparison, UK revenue grew by 15.8 per cent over the same time period.

For the purposes of this report it is not possible to carry out a detailed analysis of the revenue differences that would be generated in a Republic of Ireland taxation and revenue generations economy compared to the current system for Northern Ireland.

Expenditure

In 2012-13, total public sector expenditure in NI was estimated to be £24.3 billion, or 3.4 per cent of the equivalent UK total. This figure decreased slightly to £24.1 billion in 2013-14, equivalent to 3.3 per cent of the UK total.¹

'Identifiable' public sector expenditure in NI was estimated to be £19.8 billion in 2012-13 or 3.6 per cent of the corresponding UK total. This increased slightly in 2013-14 to £20.1 billion, or 3.5 per cent of the UK total.

'Non-identifiable' expenditure was estimated at £2.9 billion in 2012-13 (2.8 per cent of the UK total). Accounting adjustments amounted to a further £1.6 billion or 2.7 per cent of the overall UK accounting adjustment. For 2013-14 non-identifiable expenditure was estimated at £2.9 billion or 2.8 per cent of the equivalent UK total. Accounting adjustments amounted to a further £1.1 billion or 2.5 per cent of the UK accounting adjustment figure.

Total public sector expenditure in NI grew slightly from 2009-10 to 2013-14, increasing by 5.7 per cent. A similar trend was recorded in the UK where total public sector expenditure grew by 5.8 per cent.

Overall Fiscal Balance

For 2012-13 the estimated fiscal balance in NI was a deficit of £9.5 billion (29.1 per cent of GVA). In 2013-14 the 'fiscal deficit' decreased to £9.2 billion (27.9 per cent of GVA).²

¹ Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14 published in October 2015

² Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14 published in October 2015

Some Adjustments

Non-identifiable expenditure

Let's have a closer look at those line items in the 2013-14 Northern Ireland budget that would not be present in an Irish reunification situation. First, the Non-Identifiable expenditure, which amounted to £ 2.9 billion in 2013-14, likely would not be part of a Northern Ireland budget. As Congressman Boyles report explains, Non-Identifiable expenditure includes Defence Expenditure and Debt Interest as the largest elements, accounting for 71.4%³ of the total. The 'Defence Expenditure' figure is for British global military spending including the cost of foreign military action, nuclear missiles, nuclear submarines etc. (Public Order and Safety is treated as a different line item in Northern Ireland's budget under 'Identifiable expenditure'.) Also included in the Non-Identifiable expenditure figure is 'international services and EU transactions'. The Irish state has its own international foreign services and the EU would, it is expected, assist in the process of Irish unification, the 'international services and EU transactions' expenditure would not be included in a Northern Ireland budget under unification.

Public sector employment

Second, the size of the public sector in Northern Ireland is much larger than that in the Republic and likely would align itself over time with the structure observed in the Republic of Ireland. This has been estimated to result in savings of £1.7 billion a year in pay costs and national insurance contributions. (Also pointing in the direction of shrinking public sector expenditure: Public sector expenditure in real terms has been declining as a percentage of the total employment in Northern Ireland since 2008.)⁴

There are around 403,000 public servants in the Republic of Ireland, 8.4% of the population. There are around 205,700 public servants in Northern Ireland, 11.4% of the population.⁵

Social protection

The total spent in Northern Ireland on Social Protection was £8.5bn of which pensions accounted for £2.8 billion in 2012-13 (see: Public Expenditure Statistical Analysis Table 10.4, 2015)⁶. Since Northern Ireland pension contributions have accrued to Britain it could be argued⁷ that Britain should be liable for pension payments at least for a certain period of time. In particular, to the extent that pension payments benefit British dependents living in Northern Ireland (e.g. security and other services personnel), the British Treasury could be expected to take care of them.

³ Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14 published in October 2015

⁴ These expenditure savings assume that the freed resources will find employment elsewhere.

⁵ The Economic Impact of an All Island Economy: Paul Gosling

⁶ HM Treasury, Public Expenditure Statistical Analyses, 11 March 2013

⁷ The nature of the pension system -- pay-as-you-go or funded -- would seem to play a role in the assessment of the responsibility for payment of the pensions.

The largest expenditure component was social protection, which accounted for 37.3 per cent of NI TES. Health and education were the next largest spending categories, accounting for respective TES shares of 17.0 per cent and 12.0 per cent.⁸

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Accounting adjustment

Fourth, the Accounting Adjustment is not a cash expenditure. It is applied to the Northern Ireland fiscal accounts to bring them into line with Total Managed Expenditure as used in the UK Public Finance Accounts. Included in the adjustment are items like Central Government Capital Consumption, VAT refunds, imputed subsidies and the Bank of England Asset Purchase Facility (see: Table 4.18: NI Accounting Adjustment in: Northern Ireland Net Fiscal Balance Report 2012-2013 and 2013-2014, p.40). For further details of the Accounting Adjustment see the table below. Excluding the Accounting Adjustment reduces the Expenditure figure by about £1 billion.⁹

⁸ Northern Ireland Net Fiscal Balance Report 2012-13 and 2013-14 published in October 2015

⁹ One might quibble whether all items under the Accounting Adjustment should be excluded.

Conclusion

While these adjustments are of a mainly statistical nature they suffice to show that the £9.2 billion Northern Ireland deficit figure is not a meaningful measure of the Northern Ireland fiscal situation under unification. A lot of research is necessary to come up with a meaningful measure for the Northern Ireland fiscal balance under a unification scenario.¹⁰

Depending on the specific assumptions made however, the pension adjustment could reduce Northern Ireland's fiscal balance under a reunification scenario to close to a balanced budget.

Northern Ireland's Adjusted Fiscal Balance

Category		2013-2014 (£ billions)
Total Managed Expenditure		24.1
<i>Of which: Identifiable</i>	20.1	
Deduct Reduction in Public Sector		<u>1.7</u>
		22.4
Deduct Pension liabilities assumed by Britain		<u>2.8</u>
		19.6
<i>Of which: Non-identifiable</i>		
Deduct Defence Expenditure, Debt Interest, international services & EU transactions		<u>2.9</u>
		16.7
<i>Accounting Adjustments</i>		
Deduction: Items not related to Northern Ireland ¹¹		<u>1.1</u>
Total Adjusted Expenditure		15.6
Revenue		14.9
Deficit		0.7

¹⁰ The struggle to find a measure for the fiscal balance of East Germany in the context of German Re-Unification is a reminder of how complex such an endeavour is.

¹¹ One might quibble whether all items under the Accounting Adjustment should be excluded.

The statistical adjustments made here are in no way sufficient to gain a picture of the Northern Ireland fiscal situation after unification, which will depend on a vast number of factors, including the economic situation and the fiscal structures observed at the time and the policies adopted by the governments involved.

Timeline of Events in German Re-Unification¹²

I. Intro

Not only was I afforded the privilege to be an eyewitness of German Re-Unification in 1989-90 but working as an economist at the German desk of the IMF at the time provided me with the analytical understanding of the complex economic developments as they happened.¹³ Moreover, in the second half of the 1990s I had several opportunities to talk privately to Chancellor Helmut Kohl about his assessment of the politics of German Re-Unification.

In this short paper I want to highlight five points:

- The coming down of the Wall in 1989 and German Re-Unification in 1990 came as a huge surprise to practically all decision-makers and observers.
- BRD¹⁴ and DDR¹⁵ were vastly different political and economic systems.
- The productivity of the DDR economy was substantially lower than that of the BRD. A key economic policy question at the time was how the massive productivity gap could be bridged over time.
- A related important question was how much it would cost financially – in cash terms -- to narrow/eliminate these differences and who would pay for it.
- What has been achieved? Do we have an answer more than a quarter of a century later?

¹² I am using the term *Re-Unification* for the political coming together of West and East Germany in 1990. The term *German Unification* is traditionally used to refer to the formation of the German Reich under Bismark in 1871. But usage is not particularly strict, and in the literature Unification and Re-Unification are sometimes used interchangeably.

German Re-Unification is a complex subject, and since 1990 voluminous books and many learned papers and popular articles have been written. In this short paper I have picked a small number of issues, which reflect selected personal impressions.

¹³ I was part of a team of economists at the IMF who published in December 1990 a series of papers analysing the main economic dimensions of German Unification. See: Leslie Lipschitz and Donogh McDonald, "German Unification, Economic Issues", IMF Occasional Paper 75, Washington D.C. December 1990. (Abbreviated here as "IMF Occasional Paper 75")

¹⁴ Bundesrepublik Deutschland = Federal Republic of Germany (FRG)

¹⁵ Deutsche Demokratische Republik = German Democratic Republic (GDR)

II. The Surprise of 1989/90

As far as I can remember German Re-Unification had been talked about as a long-term political goal shared by a vast majority of West Germans and their political representatives in the Bundestag in Bonn. However, prior to 1989/90, I believe, it would have been difficult to find anybody who would have predicted Unification to actually happen during his/her lifetime.

The table below summarizes some of the key events of 1989-1990:¹⁶

- Sep 4 1989: Weekly 'Monday Demonstrations' begin in the East German city of Leipzig.
- Sep 11 1989: Hungary opened its border to Austria, allowing citizens of the GDR to escape via the Hungarian border. More than 13000 GDR citizens left via that route.
- Oct 7 1989: 40th anniversary of the founding of the DDR. Soviet President Michael Gorbachev visited East Berlin and famously said: "life punishes those who come too late." Gorbachev gave no support to Honecker's hard-line course.
- Oct 9 1989, 70000 people took part in a candle light procession in Leipzig. It later emerged that Gorbachev had given orders for the Soviet troops stationed in the GDR to stay in their barracks during the anniversary celebrations.¹⁷
- Oct 16 1989: About 100000 people gathered for an unauthorized demonstration in Leipzig.
- Oct 18 1989: Egon Krenz replaced Erich Honecker as Secretary General of the SED.
- Nov 7 1989: The Council of Ministers of the DDR resigned.
- Nov 9 1989: GDR government spokesman Guenter Schabowski announced a series of new travel arrangements under which East Germans were to be allowed to travel to the West, saying they are to come into effect "immediately". East Germans started crossing the border. The Berlin Wall came down.
- In November-December 1989 177000 GDR citizens migrated to West Germany, bringing the total number for the year to 344000. Emigration from East to West Germany was accelerating.
- Nov 13 Hans Modrow was elected new Prime Minister of the DDR.
- Nov 18 1989: A new DDR government was sworn in.
- Nov 28 1989, West German Chancellor Helmut Kohl announced his 10 point plan for re-unification by federation.
- March 18 1990: Free elections were held in East Germany. The "Alliance for Germany" won 48% of the vote (East CDU (41%), Democratic Awakening (1%) and the German Social Union (6%)). The PDS (former SED) got 16.4%. The Liberals 5%)
- April 12 1990: Lothar de Maiziere (CDU) became Prime Minister of a grand coalition government (CDU, SPD, DSU, DA, and Liberals). This governments opted for economic, monetary and social union with the BRD by mid-1990, and political accession at a later date (under Article 23 of the BRD's Basic Law).

¹⁶ For a more comprehensive chronology see: Thomas Mayer and Gunther Thumann: "German Democratic Republic, Background and Plans for Reform", in IMF Occasional Paper 75, pp 50sq

¹⁷ See: "How 'Gorbi' Spoiled East Germany's 40th Birthday Party", Spiegel Online October 07, 2009.

- July 1 1990. Monetary, economic and social union came into force - the Deutschmark became sole means of payment in East Germany.
- July 15-16: Chancellor Kohl met President Gorbachev, who gave U.S.S.R. approval for German Re-Unification with the united Germany being part of NATO.
- August/September 1990: The Unification Treaty was agreed and then ratified by the parliaments of the BRD and the DDR.
- Sep 12 1990: 2+4 Treaty signed by the two Germanies and the four wartime Allies (USSR, US, UK and France). Germany was given back sovereignty.
- October 3 1990: Official celebrations for German Unity Day were held.
- December 2: 1990 The Germans elected a pan-German parliament.

Even this “shortened” table of events gives a good idea of the rapid sequence of events, democratic actions and political decisions, which had to be taken under immense time pressure. No blueprint existed and there was nobody with any practical experience of how to bring together two vastly different systems. When it happened, German Re-Unification came as a huge surprise.

III. BRD and GDR – two vastly different political and economic systems

Following the end of World War II and the collapse of Nazi Germany the division of the country led to the creation of the BRD as part of the western family of powers and the DDR as part of the soviet-communist block by the end of the 1940s.

Some key economic metrics:

With an area of 249k square kilometers, a population of 61.4 million and a 1989 GDP of DM2,200 billion¹⁸ the BRD was substantially bigger than the DDR (area 108k square kilometers; population 16.7 million; 1989 GDP DM216 billion¹⁹).

A derived economic metric – productivity²⁰ – put East Germany at an estimated 30% - 40% of the 1989 level of West Germany.²¹ This metric, although far from precise was of fundamental economic importance as it portrayed an idea of the order of magnitude of the resource transfer needed to establish living standards in East Germany comparable to those in West Germany.

¹⁸ See Thomas Mayer, Donogh McDonald, Garry J. Schinasi, and Gunther Thumann, “Economic Developments in the Federal Republic of Germany”, in: IMF Occasional Paper 75, p. 32

¹⁹ See Donogh McDonald and Gunther Thumann, “East Germany, The New Wirtschaftswunder?”, in: IMF Occasional Paper 75, p. 89

²⁰ Defined as GDP divided by the number of employees in employment

²¹ Statistical measures of output and employment in the GDR reflected the accounting system of a centrally planned economy and were of a political nature. It took some statistical “guesswork” to find measures comparable with West German measures, and, hence, a wide range of estimates for GDR productivity was used. See Donogh McDonogh and Gunther Thumann, “Investment Needs in East Germany”, in: IMF Occasional Paper 75, p. 74.

The huge productivity gap mainly reflected differences in the economic systems: a social market economy system in the BRD, based on private property, and a centrally planned economic system based on (mainly) state-owned means of production. The BRD economy was among the top performing economies in the West. The GDR economy was much less integrated into the world economy, suffered from major rigidities in the labor and product markets and relied on an investment policy which focused on a few state-picked technology-intensive show-case industries.

The differences in the economic systems were a reflection of different underlying political systems: a parliamentary democracy in the BRD based on the principle of separation of legislative, judicial and executive powers; a socialist state and people's republic with one-party rule in the DDR.

IV. Resource Needs to Narrow the DDR's Productivity Gap

In our 1990 analysis of the economic issues related to German Reunification we used a production function approach to think about what the real resource needs of rebuilding the East German economy might be under different assumptions.²² It was a sketch of a method of thinking about the issue rather than the attempt to come up with precise figures.

Our main result was: Assuming East German productivity of 30% of West German productivity in 1990, it would take net investment of DM 1100 billion (1990 prices) over the period 1991-2000 to reach a productivity level of 80% of the West German level by the year 2001. The DM 1100 billion translates into roughly 6% of West German Net National Product per annum.

Underlying these calculations are further critical assumptions including the production technology in West and East Germany, the rate of technical progress and the initial economic output conditions. We found – not surprisingly -- that varying these assumptions had major effects on the results. For instance, to reach equal productivity in East and West Germany by 2001 would require an additional net investment of about DM 600 billion over 1991-2000.

V. The Financial Costs of German Re-Unification

Conceptually different from the real resource costs of unification, which were our focus as IMF economists, is the question of the cash or financial costs of unification, which became a focus of political debate early on in the process of German Re-Unification. Estimates varied tremendously. For instance, in 1990

²² See: Donogh McDonald and Gunther Thumann, "Investment Needs in East Germany", in: IMF, Occasional Paper 75, pp. 71-77

Chancellor Helmut Kohl thought that the costs of Re-Unification would be negligible,²³ while his CDU colleague Kurt Biedenkopf estimated²⁴ that the fiscal costs in 1991 and 1992 would amount to between DM80 and DM100 billion per annum. Oskar Lafontaine, one of the top politicians of the SPD at the time, thought Kohl's unification plans were unaffordable.²⁵

It is not surprising that ex ante estimates of the costs of unification at the time differed so widely. Given the complexity of the task and the limitations of economic forecasting in general it was practically impossible to come up with "precise" ex ante estimates. And, clearly, in 1989/1990 the "numbers game" was used for political reasons. Those who wanted a speedy and complete unification played down the cost aspects. Those, who favoured a "confederate model" or a "two state solution" blew them out of all proportion.

Perhaps more surprisingly estimates of the costs of unification continue to differ significantly even years after the event. For instance, data published by the IFO Dresden, the University of Halle and Klaus Schroeder FU Berlin 25 years after Re-Unification put net transfers per annum (over the period 1991 – 2014) at EUR68 billion (IFO), EUR54 billion (Halle) and EUR 83 billion (FU), respectively.²⁶

Interestingly, already in 1996 the Bundesbank noted in its October Monthly Report: "In the economic and fiscal policy discussion of the consequences of the German Re-Unification, the transfers of the public budgets to the new federal states are of particular interest. Different observers publish different figures, essentially a reflection of different questions asked and different methodologies used."²⁷ In the same article the Bundesbank published a net transfer amount of DM123 billion per annum (EUR70 billion), equivalent to 4 ¼% of West German GDP.

Costs of a similar order of magnitude were referred to by Theo Waigel, Federal Minister of Finance 1989 -1998, in late 2007. He put the actual costs of Re-Unification at 4 – 5% of GDP per annum, and said they were financed one third

²³ In a Bundestag debate in May 1990 Kohl said: "We see no reason for raising taxes to finance unification." And in a televised speech to celebrate the Economic, Monetary and Social Union on July1 1990 Kohl highlighted, the five new federal states would soon be transformed into blossoming landscapes, where it is worthwhile to live and work.

²⁴ In November 1990

²⁵ Wikipedia article "Oskar Lafontaine", section 2.4 "Haltung zur Wiedervereinigung im Herbst 1989"

²⁶ Axel Hansen, "Deutsche Einheit, Eine Zahl mit zwölf Nullen", Zeit Online, 23. Oktober 2014

²⁷ See: Monthly Report of the Deutsche Bundesbank, "Zur Diskussion über die öffentlichen Transfers im Gefolge der Wiedervereinigung", pp 17sq, Oktober 1996.

via cost savings and expenditure restructuring, one third via borrowing and one third via tax increases.²⁸

A word of wisdom: The size of the financial costs is one aspect of German Re-Unification and one can still debate about it today. But German Re-Unification is about much more than the costs attached. Nobody has in my view formulated this crucial thought more succinctly than Kurt Biedenkopf. He wrote in his “Diary”: “...the discussion about the costs of unification and their fiscal management misses the historical dimension of the process.”²⁹

VI. What has been achieved

In a balanced and broad political assessment on the occasion of 25 years of Re-Unification, German Federal President Joachim Gauck said on October 3 2015: “Notwithstanding disappointments here and there,...(t)he vast majority of Germans, no matter where their roots are, feel (they have) arrived and (are now) at home in this unified country. Differences have narrowed and especially among the younger generation have disappeared completely, Germany has found union in freedom – politically, socially, more slowly also economically and with understandable delay also mentally.”³⁰

The much narrower economic assessment depends on prior expectations. Those in the East who expected to see quickly the same standard of living as in the West were disappointed, and, likewise, those who expected a “super gau” were proven wrong.³¹

Some of the economic facts are: East German productivity rose rapidly in the first ten years of unification – from about 45% of the West German level in 1991 to about 75% in 2001. East German productivity was still a little below 80% of West German productivity in 2013.³² In 2013, disposable household income per capita in East Germany had reached EUR17614, equivalent to 83% of the West German level; the gap had narrowed considerable from the 61% figure measured in 1991. The labor market gives a comparable picture: the unemployment rate in East Germany is currently still 2.3% points higher than in West Germany, but convergence has made visible progress in recent years.

²⁸ Presentation by Dr. Theo Waigel, Deutsche Wiedervereinigung – Entscheidungen und Versäumnisse, Tagungsbericht, Hans Seidel Stiftung, 29. November 2007.

²⁹ Kurt Biedenkopf, Ein neues Land entsteht, p.16

³⁰ Spiegel Online, “Gaucks Rede im Wortlaut”, 3. Oktober 2015.

³¹ Gau = groesster anzunehmender Unfall (greatest accident that presumably can happen)

³² DIW Monatsbericht 40 2014, “25 Jahre Mauerfall”, p.943

I am amazed how many Germans these days seem to take Re-Unification for granted. We should not forget that the developments that started in 1989 could have turned out very differently: Russian tanks might have intervened in October-November 1989; the German political leadership might have pursued a less rigorous solution; the Allied Powers might have opposed Re-Unification; frustration among east Germans ("progress too slow") or west Germans ("costs too high") might have gained the upper hand. But perhaps we should look at it differently: The fact that people take Re-Unification for granted reflects its success.

Northern Ireland Economy: 100 years of Decline

Political and economic scientists rarely have an opportunity to study a real life longitudinal experiment. Ireland is such an experiment. The best political and economic scientists in the world on the date of partition on the 3rd of May 1921 could not have possibly foretold the future that was instore for 6 counties of Northern Ireland within the United Kingdom and as part of the largest empire the world had ever seen compared to that of an Independent Republic that the remaining 26 counties would become.

Like in any scientific experiment there is a 'control' where one of the elements has no change made to it. In this political and economic experiment Northern Ireland is the 'control', as it accepted Home rule with in the UK. The 'Test' in this experiment is the Southern 26 counties, where the added ingredient and element of change was the 1916 Rising , which ultimately led to the rejection of Home Rule with in the UK in favour of a future as a Republic with full independence. In essence Ireland was breaking away from the largest trading block in the world.

The only other major real life longitudinal study that comes anywhere near the same type of experiment is the partition of Germany. However, this was an entirely different political and economic experiment with the 'control' being West Germany with democratic institutions and capitalist economy versus the political and economic structure of communist East Germany. We are well aware how that experiment ended. The situation on the island of Ireland was different because the fundamentals of democracy were the political structures on both parts of the border, notwithstanding the sectarian nature of Northern Ireland and the power over policy and politics of the Catholic Church in the Republic for decades. The economies on both sides of the border were also structured on a capitalist basis with the North enjoying access to the empires markets and the south adopting a counter-productive protectionist economy for decades.

Up until 1914 and the outbreak of World War 1 the whole Island of Ireland was promised Home Rule and very limited self-government under Westminster, similar to what Scotland has today. Very possibly because of unionist opposition, the island would have ended up with two assemblies; one in the North and one in the South. With the growing concern of Ulster Unionists, using violence to ensure that Home Rule was not applied to the North, it was postponed until World War 1 was over. This political scenario and 'what if' scenario is one that the political scientists have yet to agree on and probably never will. The 1916 Rising changed the proposed political and economic experiment of Home Rule on this island and the trajectory of the 26 counties, no longer satisfied with Home Rule, the people of the south changed course. They sought an entirely different political and economic future based on the idea of an independent Republic, in which the south separated from the biggest empire the world had ever seen, an empire that controlled the lives of 1 in every 4 people on the planet and ruled 25% of the surface of the earth.

On the 3rd of May 1921 on the day of the partition of the island by the British Government, the 26 counties was largely an agricultural, 'beer and biscuits' economy as described by economist David McWilliams comprising of likes of Guinness brewery and Jacobs Biscuits factory. On the other hand, the new 6 counties state was a 'ships and shirts' economy at the very forefront of the industrial age. 3 of those 6 counties in the North accounted for 80% of the industrial output of the entire 32 counties on the island. Belfast, according to the 1911 census, was the largest city on the island with a population of 400,000 and had been the most rapidly growing city for the half a century before partition.

The Solemn league and Covenant of 1912 was signed by nearly 500,000 unionist men and women who believed that

'Home Rule would be disastrous to the material well-being of Ulster'

However many feel it is the Union with Britain that has in fact been economically disastrous for Northern Ireland and most of its people with the exception of the elite affluent few who continue to grow richer. The majority in both communities have been made poorer by the Norths continued membership of the United Kingdom.

The Republic has made progress and achieved a prosperity that would have been beyond the foresight of even the most wildly optimistic of any economist or political scientist in 1916. An outline of Irelands progress since independence is provided by O'Rourke in his 2016 University of Oxford paper; 'Discussion Papers in Economic and Social History: Independent Ireland in Comparative Perspective'. This paper makes the point that we should not compare ourselves to the UK as 'The UK performed poorly relative to most European economies'. Nor should we compare the Republic of Ireland to Wales, Scotland, or indeed Northern Ireland. Instead Ireland should be compared to other countries on the periphery of Europe, such as Greece, Portugal and Spain. O'Rourke argues that from 1926 until 2001, in the 75 years after 1926, Ireland economic performance was in line with others in the same position as those smaller nations on the edge of Europe.

Assessing Irish performance

In order to assess Ireland's economic performance, we need a benchmark. Because of our history, a natural tendency is to use the UK, but that is an important mistake. The UK performed poorly relative to most European economies: by using it as a benchmark, we are setting the bar much too low.

A second alternative is to compare Ireland with similar regions inside the UK – Northern Ireland most obviously, but perhaps also Scotland and Wales. As we will see, doing so provides us with several useful insights, but again, by comparing ourselves with regions located within the slowly growing UK economy, we are setting the bar too low.

A third alternative, which makes a lot more sense, is to compare ourselves with other relatively poor economies around the European periphery. Greece, Portugal and Spain were all as poor as Ireland at the start of the 20th century, if not poorer. They therefore faced many of the same obstacles that we did, but they also shared the same potential for rapid growth based on catching up on the industrial core. How did we do compared with these economies? Indeed, how did we do compared with European economies more generally?³³

Strikingly, Ireland's economic performance during the 75 years following 1926 was, from a comparative context, exactly what it should have been, given Ireland's initial income level. There was nothing unusual about Irish growth during this period. It was an entirely typical European economy.³⁴

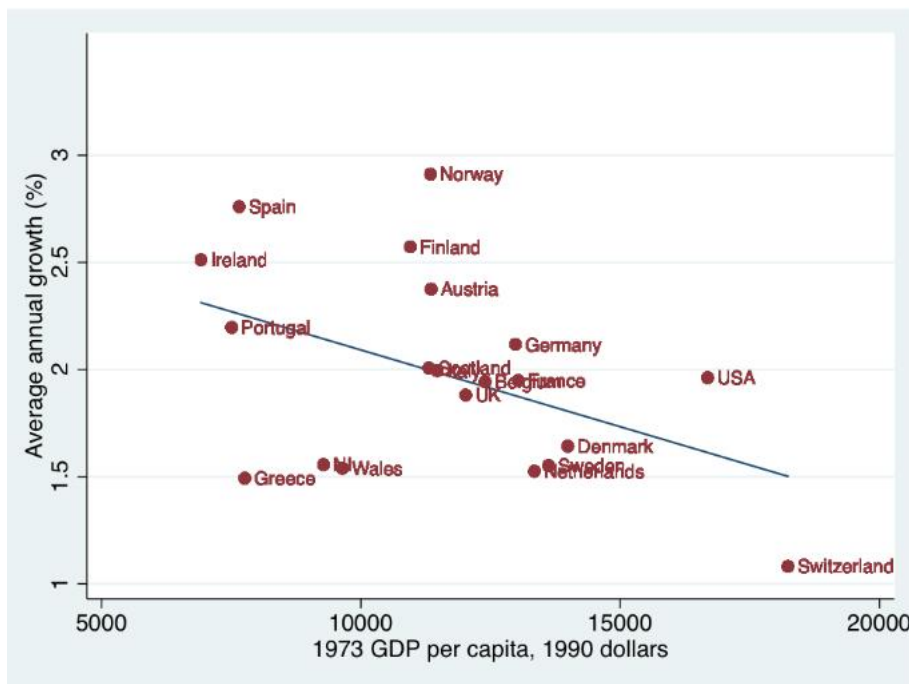
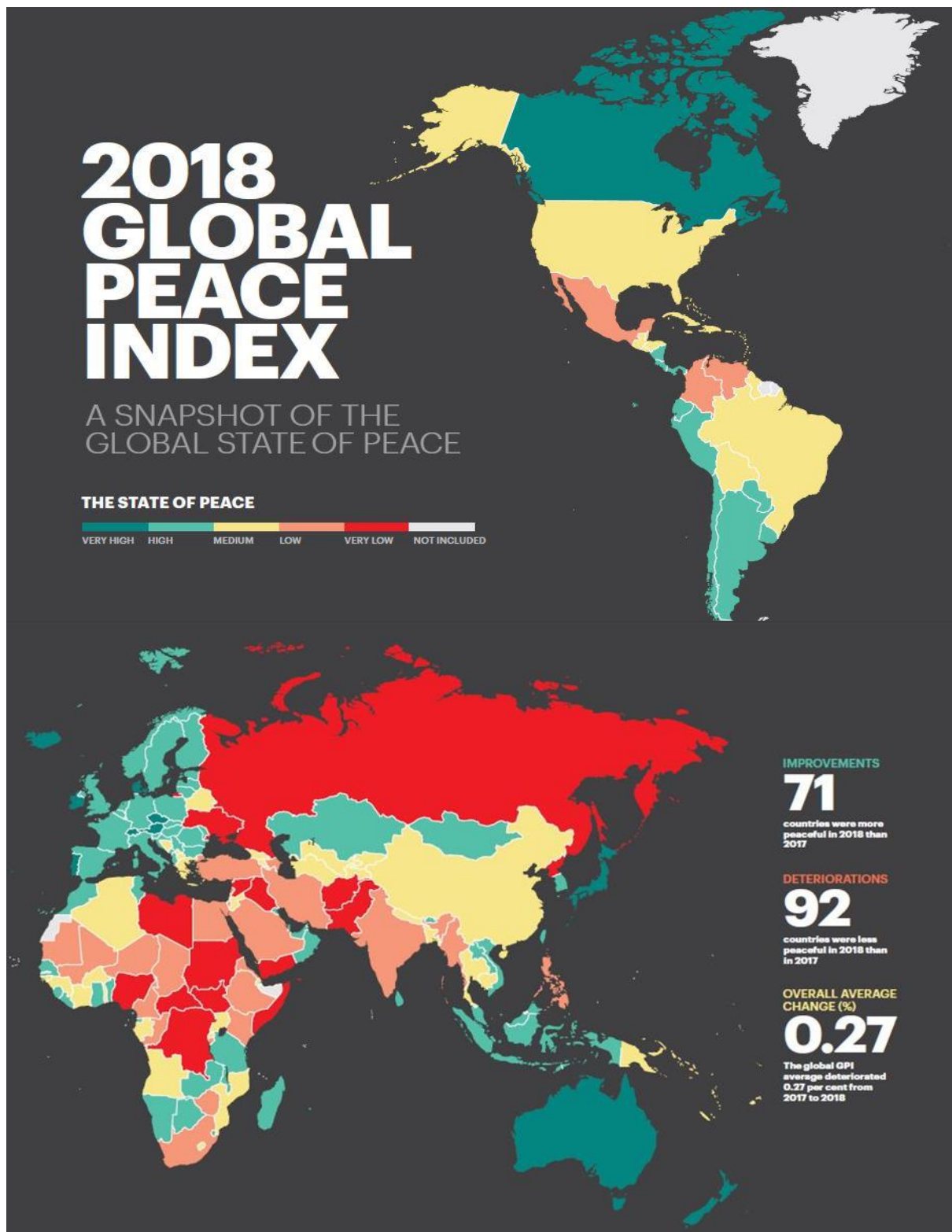


figure 11. Initial income and subsequent growth, 1973-1990

The prosperity myth put forward by those unionists who are actually affluent is in reality simply not true and has not been true since the 1990's. Few if any people in Northern Ireland have seen an economic peace dividend. Both working class catholic and working class protestants, who suffered the most during the Troubles and who had the greatest hope for a peace dividend since the guns were decommissioned, have seen the opposite. Relative to the south the north has fallen further and further behind. As a result of Brexit there is a high potential it will fall further still.

³³ O'Rourke in this 2016 University of Oxford 'Discussion Papers in Economic and Social History : Independent Ireland in Comparative Perspective' P.6

³⁴ O'Rourke in this 2016 University of Oxford 'Discussion Papers in Economic and Social History : Independent Ireland in Comparative Perspective' P.8



Northern Ireland's Income and Expenditure in a reunification scenario

RANK	COUNTRY	SCORE	CHANGE	RANK	COUNTRY	SCORE	CHANGE	RANK	COUNTRY	SCORE	CHANGE
1	Iceland	1.096	↔	29	Botswana	1.659	↓ 4	57	United Kingdom	1.876	↓ 6
2	New Zealand	1.192	↔	30	Spain	1.678	↓ 10	58	Montenegro	1.893	↑ 5
3	Austria	1.274	↑ 1	31	Latvia	1.689	↑ 1	59	Timor-Leste	1.895	↓ 5
4	Portugal	1.318	↓ 1	32	Poland	1.727	↑ 1	60	Vietnam	1.905	↔
5	Denmark	1.353	↔	33	Estonia	1.732	↑ 3	61	France	1.909	↓ 5
6	Canada	1.372	↔	34	Taiwan	1.736	↑ 3	62	Cyprus	1.913	↑ 3
7	Czech Republic	1.381	↔	35	Sierra Leone	1.74	↑ 5	63	Liberia	1.931	↑ 27
8	Singapore	1.382	↑ 3	36	Lithuania	1.749	↑ 2	64	Moldova	1.939	↔
9	Japan	1.391	↓ 1	37	Uruguay	1.761	↓ 2	65	Equatorial Guinea	1.946	↓ 7
10	Ireland	1.393	↑ 2	38	Italy	1.766	↑ 1	66	Argentina	1.947	↑ 8
11	Slovenia	1.396	↓ 1	38	Madagascar	1.766	↑ 4	67	Sri Lanka	1.954	↑ 5
12	Switzerland	1.407	↓ 3	40	Costa Rica	1.767	↓ 6	68	Nicaragua	1.96	↑ 7
13	Australia	1.435	↔	41	Ghana	1.772	↑ 6	69	Benin	1.973	↑ 12
14	Sweden	1.502	↔	42	Kuwait	1.799	↑ 5	70	Kazakhstan	1.974	↓ 2
15	Finland	1.506	↑ 3	43	Namibia	1.806	↑ 7	71	Morocco	1.979	↑ 4
16	Norway	1.519	↔	44	Malawi	1.811	↑ 8	72	Swaziland	1.98	↓ 2
17	Germany	1.531	↔	45	UAE	1.82	↑ 12	73	Oman	1.984	↓ 11
17	Hungary	1.531	↓ 2	46	Laos	1.821	↓ 2	74	Peru	1.986	↓ 1
19	Bhutan	1.545	↑ 5	46	Mongolia	1.821	↓ 1	75	Ecuador	1.987	↓ 8
20	Mauritius	1.548	↓ 1	48	Zambia	1.822	↓ 7	76	The Gambia	1.989	↑ 35
21	Belgium	1.56	↔	49	South Korea	1.823	↓ 6	77	Paraguay	1.997	↓ 8
22	Slovakia	1.568	↑ 3	50	Panama	1.826	↓ 4	78	Tunisia	1.998	↓ 7
23	Netherlands	1.574	↓ 1	51	Tanzania	1.837	↓ 2	79	Greece	2.02	↔
24	Romania	1.596	↑ 3	52	Albania	1.849	↑ 7	80	Burkina Faso	2.029	↑ 14
25	Malaysia	1.619	↑ 4	52	Senegal	1.849	↑ 9	81	Cuba	2.037	↑ 8
26	Bulgaria	1.635	↑ 2	54	Serbia	1.851	↑ 1	82	Guyana	2.043	↔
27	Croatia	1.639	↑ 4	55	Indonesia	1.853	↓ 2	83	Angola	2.048	↑ 9
28	Chile	1.649	↓ 5	56	Qatar	1.869	↓ 26	84	Nepal	2.053	↑ 4

RANK	COUNTRY	SCORE	CHANGE	RANK	COUNTRY	SCORE	CHANGE	RANK	COUNTRY	SCORE	CHANGE
84	Trinidad & Tobago	2.053	↑ 11	113	Thailand	2.259	↑ 7	141	Palestine	2.621	↑ 3
86	Mozambique	2.056	↓ 6	114	Tajikistan	2.266	↑ 3	142	Egypt	2.632	↓ 2
87	Macedonia (FYR)	2.058	↑ 16	115	Djibouti	2.269	↓ 5	143	Venezuela	2.642	↓ 2
88	Haiti	2.064	↓ 1	116	El Salvador	2.275	↑ 1	144	Mali	2.686	↓ 1
89	Bosnia & Herzegovina	2.065	↓ 3	116	Guinea-Bissau	2.275	↑ 5	145	Colombia	2.729	↑ 1
90	Jamaica	2.068	↑ 3	118	Honduras	2.282	↓ 10	146	Israel	2.764	↓ 1
91	Dominican Republic	2.073	↑ 9	119	Turkmenistan	2.283	↓ 3	147	Lebanon	2.778	↔
92	Kosovo	2.078	↓ 15	120	Armenia	2.287	↓ 7	148	Nigeria	2.873	↑ 1
93	Bangladesh	2.084	↓ 10	121	USA	2.3	↑ 1	149	Turkey	2.898	↓ 1
94	Bolivia	2.092	↓ 9	122	Myanmar	2.302	↓ 15	150	North Korea	2.95	↔
95	Gabon	2.099	↓ 12	123	Kenya	2.354	↑ 3	151	Pakistan	3.079	↑ 1
96	Cambodia	2.101	↓ 18	124	Zimbabwe	2.326	↓ 1	152	Ukraine	3.113	↑ 2
96	Guinea	2.101	↓ 1	125	South Africa	2.328	↓ 1	153	Sudan	3.155	↑ 2
98	Jordan	2.104	↑ 4	126	Rep of the Congo	2.343	↑ 2	154	Russia	3.16	↓ 1
98	Togo	2.104	↓ 32	127	Mauritania	2.355	↔	155	Central African Rep	3.236	↑ 1
100	Papua New Guinea	2.109	↓ 3	128	Niger	2.359	↓ 2	156	Dem. Rep Congo	3.251	↓ 5
101	Belarus	2.112	↓ 2	129	Saudi Arabia	2.417	↑ 1	157	Libya	3.262	↑ 1
102	Georgia	2.13	↓ 4	130	Bahrain	2.437	↑ 2	158	Yemen	3.305	↓ 1
103	Rwanda	2.14	↑ 1	131	Iran	2.439	↓ 2	159	Somalia	3.367	↔
104	Lesotho	2.144	↓ 13	132	Azerbaijan	2.454	↑ 2	160	Iraq	3.425	↑ 1
104	Uzbekistan	2.144	↓ 3	133	Cameroon	2.484	↓ 2	161	South Sudan	3.508	↓ 1
106	Brazil	2.16	↑ 1	134	Burundi	2.488	↑ 5	162	Afghanistan	3.585	↔
107	Uganda	2.168	↔	135	Chad	2.498	↑ 3	163	Syria	3.6	↔
108	Kyrgyz Republic	2.181	↑ 4	136	India	2.504	↑ 1				
109	Algeria	2.182	↓ 3	137	Philippines	2.512	↓ 1				
110	Cote d' Ivoire	2.207	↑ 9	138	Eritrea	2.522	↓ 3				
111	Guatemala	2.214	↑ 3	139	Ethiopia	2.524	↓ 6				
112	China	2.243	↑ 3	140	Mexico	2.583	↑ 2				

35

At partition the North was industrial and rich, the South agricultural and poor. Fast-forward to now, and the contrast couldn't be greater. The collapse of the Northern Ireland economy compared with that of the Republic has been unprecedented. East and West Germany come to mind.³⁶

The Souths 'Beer and Biscuits' economy as described by David McWilliams has been replaced by 'Google and Gigabits'. In contrast, over the last 100 years the North and the people living there have seen their once global economy and its majestic ship sail over the

³⁵ <http://visionofhumanity.org/app/uploads/2018/06/Global-Peace-Index-2018-2.pdf>

³⁶ David McWilliams Irish Times Dec 2nd 2017

horizon. The peace dividend has not benefited the north to the same way as the south. While at the time of partition the North had 80% of the economic output of the entire island, independence and the manoeuvrability on economic policy which it allows means the Republic output is now 10 times greater than Northern Ireland's.

That economic policy for the Republic is largely credited to the person voted by the people of Ireland 'Irish Man of the 20th Century', T.K. Whittaker. At 39 and born in the border county of Louth, he was the youngest ever Secretary of the Department of Finance and wrote the groundbreaking First Programme for Economic Expansion, in 1958.

It has produced the dividends that Whittaker predicted and the global island of Ireland that he desired. The presence of multinationals and the nearly 200,000 jobs they provide contributes hugely to the Irish economy. Notwithstanding this contribution, it is clear that the domestic industrial base south of the border has grown beyond all recognition since partition and particularly since the end of the Troubles. The fact that the Republic is exporting 17 times more than the north is a clear example of the benefits of Independence and the manoeuvrability it allows. The 26 counties economy is now 4 times the size of the 6 counties though the work force in the south is only 2 ½ time bigger.

Northern Ireland is 1 of the 9.

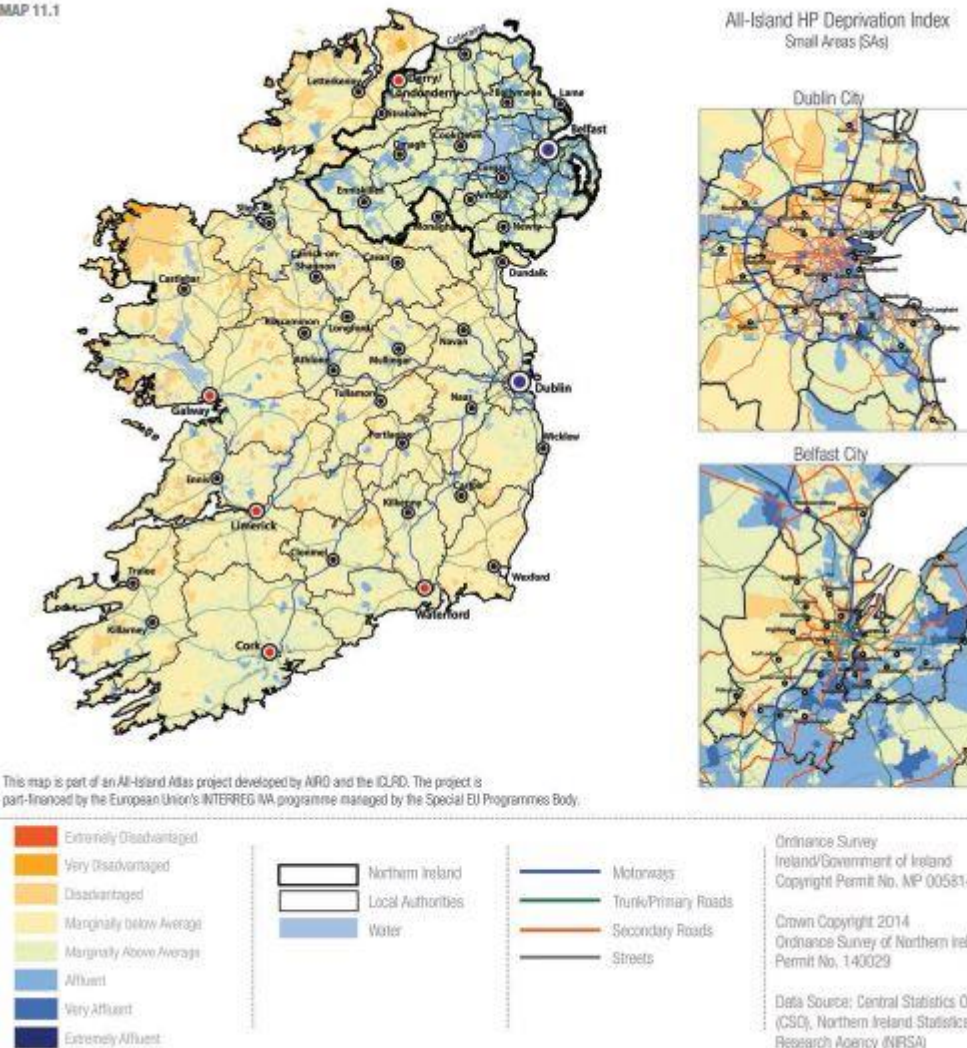


The Republic has expanded & grown on the world stage over the last 100 years ~~also~~. The Good Country Index which measures what each country contributes to the common good of humanity and what it takes from it, places Ireland 1st out of the 125 countries on the issue of Prosperity & Equality the UK is ranked 35th. Overall Ireland is ranked 7th and the UK is 8th. The index is a balance sheet of the nett credit and debit to the world and to humankind drawn from a range of sources such as the World Health Organisations, the World Bank, UN Peacekeeping, Charities Aid Foundation.

The Republic leads the way in third level degree attainment in the EU; just over half of all 30 to 34 year-olds in Ireland completed third-level education. Ireland ranked 10th in the world in the Global Peace Index the UK is 41st, Ireland is also ranked 6th in the Economist Intelligence Unit Democracy Index which ranks the effectiveness of the 167 democracies based on 60 indicators grouped in five different categories measuring pluralism, civil liberties and political culture. The UK is ranked 14th on the Democracy Index.

The republic is the 10th most reputable country in the world by the annual Country RepTrak which ranks the top 55 countries in the world by reputation. Ireland is ranked ahead of the UK which is on 18th. Of the 17 indicators the most important attribute in driving reputation is 'friendly and welcoming people' along with 'beautiful country' and 'safe environment'. When you consider that according to Maynooth University 2 ½ counties in Northern Ireland shows a large degree of affluence. It makes the gap within Northern Ireland between the haves and the have nots, all the more stark.

MAP 11.1



The Republic shares wealth and prosperity more fairly. In the same analysis done by Maynooth University, the 26 counties only have pockets of affluence in some parts of South Dublin and small areas of Wicklow the rest of the states is classified as having an even spread of national prosperity.

Ireland has a tax system that is hugely progressive.

Ireland's tax and welfare system combined; result in one of the highest redistributions of income among all OECD countries. In Ireland

- the top 1% of income earners pay 24% of total income tax and Universal Social Charge,
- the top 6% of income earners pay 49% of total income tax and USC and
- the top 26% of income earners pay 83% of all income tax and USC

It is right- economically and morally- that in Ireland we have a tax system where those on lower incomes pay less and those who earn more, pay more.

As most of the Indexes are only done on a National basis Northern Ireland does not feature in the tables of Global rankings. However the Oireachtas Library and Research Service of the Irish Parliament did analyse what Northern Ireland's position would be on the United Nations Human Development Index. This Index ranks a country based on health, education and income of its citizens and is included as part of those report.

The component parts of the index include 'life expectancy at birth' which shows those in the Republic live longer. Schooling is made up of 2 sets of figures, 'Expected years of Schooling' and 'Mean Years of Schooling' in these the Republic are way ahead of Northern Ireland. With a 'Expected years of Schooling' in the south of 16.2 years versus 14.8 years in the north. 'Mean Years of Schooling' shows the south at 12.3 years and the north 4 years behind the Republic at 8.3 years. In the UN report the Gross National Income (GNI) per capita is measured in \$, here again the gap is very stark. The income divide between the two jurisdictions is nearly \$7,000 per person, with the Republic showing an income of \$33,414 per capita compared to the figure of \$26,446 for Northern Ireland.

The Republic's economy is four times larger, generated by a work force that is only two and a half times bigger. The Republic's industrial output is today 10 times that of the North. Exports from the Republic are 17 times greater than those from Northern Ireland.

Immigration is a traditional indicator of economic vitality. In the Republic one in six people are immigrants, the corresponding figure for the North is one in a hundred.

David McWilliams Irish Times Dec 2nd 2017

Exports from the Republic are €89 billion while from the North, exports are a paltry €6 billion. This obviously reflects multinationals, but it also underscores just how far ahead the Republic's industrial base is.³⁷

The UN 2016 report ranks the Republic as 8th in the world alongside Canada, Germany and the United States. The UK is currently ranked at 16th. When the data of life expectancy at birth, GNI (Gross National Income) and expected years of schooling for Northern Ireland are put into the HDI formula the UN would rank it 44th in the World alongside the likes of Hungary and Montenegro. As a result of Brexit, and as the region of the UK that will likely suffer the most economically Northern Ireland could well slip below 50th joining the likes of Kazakhstan and Belarus countries who shortly will be celebrating the 30th anniversary of their independence from the USSR.

³⁷ David McWilliams Irish Independent 2017

MEMORANDUM

December 20, 2016

To: Rep. Brendan Boyle
Attention: Carly Frame

From: Kristin Archick, Specialist in European Affairs (x7-2668, karchick@crs.loc.gov)
Foreign Affairs, Defense, and Trade Division

Subject: Northern Ireland Budgetary Issues

This memorandum responds to your request for information on Northern Ireland budgetary issues. Material in this memorandum may be used in other CRS products. For additional background, see CRS Report RS21333, *Northern Ireland: The Peace Process*.

Background: Northern Ireland's Political and Economic Situation

Northern Ireland (along with England, Scotland, and Wales) is one of the four component “nations” that make up the United Kingdom (UK). Between 1969 and 1999, almost 3,500 people died as a result of political violence in Northern Ireland. The conflict, which has its origins in the 1921 division of Ireland and is often referred to as “the Troubles,” has reflected a struggle between different national, cultural, and religious identities. Protestants in Northern Ireland (48%) largely define themselves as British and support remaining part of the UK (*unionists*). Catholics in Northern Ireland (45%) consider themselves Irish, and many Catholics desire a united Ireland (*nationalists*).

Despite many ups and downs, Northern Ireland has made considerable political and economic progress since the 1998 peace agreement (the so-called Good Friday Agreement) providing for a devolved government in which unionist and nationalist parties share power. Nevertheless, challenges remain in Northern Ireland's search for peace and reconciliation. These include ongoing tensions and sectarian strife between the unionist and nationalist communities, lingering concerns about paramilitary and dissident activity, fully grappling with Northern Ireland's legacy of violence (often termed “dealing with the past”), and promoting further economic development.

Improving Northern Ireland's economic situation has long been viewed as crucial to underpinning the peace process. Northern Ireland's economy has made significant advances since the 1990s. Between 1997 and 2007, Northern Ireland's economy grew an average of 5.6% annually (marginally above the UK average of 5.4%). Unemployment decreased from over 17% in the late 1980s to 4.3% by 2007. Like elsewhere in the UK and Europe, however, Northern Ireland was negatively affected by the 2008-2009 global recession. Northern Ireland's economic recovery has been slow and growth has largely lagged behind that of the UK as a whole. In the four quarters ending June 2016, Northern Ireland's Gross Domestic Product (GDP) grew by approximately 1.3%, as compared to 1.9% for the UK as a whole.¹

¹ Northern Ireland Statistics and Research Agency, *Northern Ireland Composite Economic Index Quarter 2 2016*, October 2016, (continued...)

Unemployment in Northern Ireland is currently 5.7%, higher than in the UK (4.8%) but considerably lower than in the Republic of Ireland (7.9%) and the European Union (8.5%).²

Northern Ireland has also made strides in promoting equality in its workforce. The gap in economic activity rates between Protestants and Catholics has shrunk considerably since 1992 (when there was an 11 percentage point difference) and has largely converged in recent years (in 2014, the economic activity rates of Protestants and Catholics were 72% and 71% respectively). In addition, the percentage point gap in unemployment rates between the two communities has decreased from 9% in 1992 to 2% in 2014.³

At the same time, income levels and living standards in Northern Ireland remain below the UK average. Of the UK's 12 economic regions, Northern Ireland had the second-lowest Gross Value Added (GVA) per capita in 2015 (£18,584), considerably below the UK's average (£25,351).⁴ Northern Ireland also has both a high rate of economic inactivity (27%) and a high proportion of working-age individuals with no qualifications. Studies indicate that the historically poorest areas in Northern Ireland (many of which bore the brunt of "the Troubles") remain so, and that many of the areas considered to be the most deprived are predominantly Catholic.⁵

To improve Northern Ireland's economic recovery and strengthen its long-term performance, Northern Ireland leaders are seeking to promote export-led growth, decrease Northern Ireland's economic dependency on the public sector by growing the private sector, and attract more foreign direct investment. Reducing Northern Ireland's economic dependency on the public sector (which accounts for about 70% of the region's gross domestic product and employs roughly 30% of its workforce) and devolving powers over corporation tax from London to Belfast to help increase foreign investment were key issues addressed in wide-ranging cross-party negotiations in 2014 and 2015. The November 2015 Fresh Start Agreement sets April 2018 as the target date for introducing a devolved corporate tax rate of 12.5% in Northern Ireland (the same rate as in the Republic of Ireland).

Many analysts are concerned that the UK's June 2016 vote in favor of leaving the European Union (dubbed "Brexit") could have significant economic repercussions for Northern Ireland, given that it shares a land border with the Republic of Ireland and an interdependent economic relationship, with extensive cross-border trade, integrated labor markets, and many industries that operate on an all-island basis. According to a recent UK parliamentary report, Northern Ireland depends more on the EU market (and especially that of the Republic of Ireland) for its exports than the rest of the UK. Approximately 52% of Northern Ireland exports go to the EU, including 38% to the Republic of Ireland.⁶ Some experts also note that access to the EU single market has been one reason for Northern Ireland's success in attracting foreign direct investment, and they express concern that Brexit could deter future investment.

Prior to the UK referendum, projections estimated Northern Ireland's economy would grow by 1.7% in 2017; following the UK's decision to leave the EU, forecasts predict a slowdown in Northern Ireland's

(...continued)

p. 7, https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Ni-Composite-Economic-Index-Statistical-Bulletin-Q2-2016_0.pdf.

² Northern Ireland Statistics and Research Agency, *Northern Ireland Labour Market Report*, December 2016, <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/labour-market-report-december-2016.PDF>.

³ Office of the First Minister and Deputy First Minister, *Labour Force Survey Religion Report 2014*, February 2016.

⁴ GVA is similar, albeit not exactly equivalent, to Gross Domestic Product (GDP); the UK government uses GVA as the measure to compare regional economic performance. House of Commons Library Briefing Paper, *Regional and Local Economic Growth Statistics*, December 16, 2016, p. 7, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN05795>.

⁵ Northern Ireland Statistics and Research Agency, *Northern Ireland Multiple Deprivation Measure 2010 Report*, May 2010.

⁶ Report of the UK House of Lords European Union Committee, *Brexit: UK-Irish Relations*, December 2016, <http://www.parliament.uk/brexit-uk-irish-relations>.

economy, with one study suggesting that it could grow by only 0.2% in 2017 (primarily because of economic uncertainty and a decline in business investment).⁷ An Oxford Economics model of Brexit's potential impact predicts a net loss in economic output for Northern Ireland by 2030 in the range of 0.1% to 5.6% (depending on different scenarios for future UK-EU relations). Post-Brexit, Northern Ireland also stands to lose EU regional funding (roughly \$1.3 billion between 2014 and 2020) and agricultural aid (direct EU farm subsidies to Northern Ireland are nearly \$375 million annually).⁸

UK Secretary of State for Northern Ireland James Brokenshire asserts that the government is determined to safeguard the whole UK economy, including Northern Ireland, following the Brexit decision. UK officials hope to ensure that Brexit does not adversely affect the investment climate in Northern Ireland and note that the government has sought to engage with the business community there “to make a success of Brexit.”⁹ Some UK and Northern Ireland officials, including Northern Ireland First Minister Arlene Foster, maintain that despite Brexit, Northern Ireland will continue to trade with the EU (including Ireland). They also contend that Brexit offers new economic opportunities for Northern Ireland outside the EU. First Minister Foster recently asserted that “the economic and social benefits for us in Northern Ireland from the UK are far more important than our relationship with the EU,” and “we will work with whomever we need to for the best deal for Northern Ireland at home and abroad.”¹⁰

Northern Ireland Public Finances

Responsibility for fiscal policy, macroeconomic policy, and funding allocation across the United Kingdom remains with the UK Treasury. Spending by the UK's devolved governments (Scotland, Wales, and Northern Ireland) falls within a UK-wide system of public expenditure control and budgeting guidance. The devolved administration's budgets are normally determined within UK comprehensive spending reviews alongside the budgets for UK government departments. Each devolved administration has fiscal responsibilities and freedoms to match its executive and legislative powers within the terms of its individual devolution agreement.

Northern Ireland's Budget¹¹

The vast majority of funding available to Northern Ireland's devolved government comes from the UK government (from general taxation across the UK); a small portion of Northern Ireland funding comes from regional tax rates and borrowing. UK government funding falls into two broad categories:

- Block grant funding, also known as Departmental Expenditure Limits (DEL). The DELs are the amounts that government departments have been allocated to spend, usually in spending reviews, and are firm spending limits set for up to four years. DELs are spent on

⁷ Northern Ireland Department of Enterprise, Trade, and Investment, *Economic Commentary*, March 2016; John Campbell, “PwC Forecasts Slowdown in Northern Ireland Economy After Brexit Result,” BBC News, July 19, 2016.

⁸ House of Commons Library Briefing Paper, *Brexit: Impact Across Policy Areas*, August 26, 2016, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7213#fullreport>.

⁹ UK Government Press Release, “Brokenshire Holds Inaugural Meeting of Northern Ireland Business Advisory Group,” September 1, 2016.

¹⁰ Arlene Foster, “The UK Joined Europe as One Nation, and That's How We'll Leave,” *The Guardian*, October 28, 2016.

¹¹ Information in this section is drawn from: HM Treasury, *Statement of Funding Policy: Funding the Scottish Parliament, National Assembly for Wales and Northern Ireland Assembly*, November 2015, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/479717/statement_of_funding_2015_print.pdf; House of Commons Library Briefing Paper, *The Barnett Formula*, April 13, 2016, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7386>; and Northern Ireland Executive, *Budget 2016-2017*, January 2016, <https://www.northernireland.gov.uk/sites/default/files/publications/nigov/2016-17-budget-document.pdf>.

the running of services and the everyday costs of resources such as staff. In 2016-2017, Northern Ireland's DEL funding is £10.9 billion (\$13.6 billion).

- **Annually Managed Expenditure (AME) funding.** AME is spending on demand-led areas (such as welfare, tax credit, or public sector pensions) that is difficult to control and cannot be constrained within firm multi-year limits. In 2016-2017, Northern Ireland's AME funding is £8.8 billion (\$11 billion).

Changes in block grant DEL funding to the devolved administrations are generally calculated by applying the Barnett Formula, which seeks to ensure that when there is a change in funding levels for services in England, then there is the same pounds-per-person change in funding in Northern Ireland, Scotland, and Wales. For example, if the funding for education in England increases by the equivalent of £100 per person, the devolved administrations' block grants will increase by £100 per person.

Under the Barnett Formula, Northern Ireland receives a population-based proportion of changes in planned UK government spending on comparable services provided by the devolved administration:

$$\text{Change in a UK government department's budget} \quad \times \quad \text{Comparability percentage} \quad \times \quad \text{Appropriate population proportion}$$

For Northern Ireland, changes determined by the Barnett Formula are then reduced by 2.5% because Northern Ireland's devolved government does not require provision to meet value-added tax (VAT) expenditure; unlike in the rest of the UK, any VAT paid is refunded by HM Revenue and Customs.

Northern Ireland and the other devolved administrations can spend the Barnett Formula-determined DEL block grant as they wish. For example, if block grants increase because education spending has increased in England, the devolved governments do not necessarily have to spend the additional money on education. AME spending is largely outside of the control of the devolved governments.

Northern Ireland's Fiscal Balance

In October 2015, Northern Ireland's Department of Finance released its *Net Fiscal Balance Report 2012-2013 and 2013-2014*, with estimates of Northern Ireland's public expenditure, revenue, and deficit.¹²

Category	2012-2013 (£ billions)	2013-2014 (£ billions)
Total Managed Expenditure	24.3	24.1
Identifiable	19.8	20.1
Non-identifiable	2.9	2.9
Accounting Adjustments	1.6	1.1
Revenue	14.8	14.9
Deficit	9.5	9.2

In 2012-2013, Total Managed Expenditure (TME)—or total public sector expenditure in Northern Ireland—was estimated to be 3.4% of the equivalent UK total; in 2013-2014, TME was roughly equivalent to 3.3% of the UK total. For both time periods, Northern Ireland's fiscal deficit per head and as a percentage of GVA was considerably higher than UK figures. In 2012-2013, Northern Ireland's fiscal deficit was equivalent to £5,187 per head, compared to the UK figure of £1,999; as a percentage of GVA, the fiscal deficit was 29.1%, higher than the UK equivalent of 8.7%. In 2013-2014, Northern Ireland's

¹² Available at: <https://www.finance-ni.gov.uk/publications/northern-ireland-net-fiscal-balance-report-2012-13-and-2013-14>.

deficit was equivalent to £5,006 per head, compared to the UK per head figure of £1,763, and was 27.1% of GVA, higher than the UK equivalent of 7.5%.

In accordance with UK budget guidance, public expenditure data for Northern Ireland is disaggregated into three components:

- Identifiable expenditure, which can be recognized as benefitting individuals, enterprises, or communities within particular regions. Examples include welfare payments and most health and education expenditures.
- Non-identifiable expenditure, which is incurred on behalf of the UK as a whole and cannot be attributed to an individual region. For the purposes of analysis, a share of UK expenditure is apportioned to Northern Ireland (either as a share of population or as a share of GVA). Defense expenditures and debt interest are the largest elements of non-identifiable expenditure, which also includes international services and EU transactions.
- An accounting adjustment allows for depreciation of public sector capital.

The Department of Finance's fiscal balance report also provides a hypothetical scenario that estimates Northern Ireland's fiscal deficit when non-identifiable spending and the accounting adjustment are excluded. Although hypothetical, this model suggests that if these categories were excluded, Northern Ireland's fiscal deficit would decrease significantly; for 2013-2014, Northern Ireland's fiscal deficit would shrink to £5.1 billion and be equivalent to 15.6% of GVA.

Ongoing Challenges

Experts note that Northern Ireland has run a fiscal deficit for decades, and many contend that much of Northern Ireland's economic and budgetary situation is a legacy of "the Troubles." Since the 1970s, the UK government has poured money into Northern Ireland in an effort to reduce the violence. Others point out that regional within-state transfers are not unusual in international terms and that Northern Ireland has limited discretion to raise additional revenue as the bulk of fiscal and tax powers remain with London. Some analysts suggest that Northern Ireland has a lower population density than the UK, which may partly explain the relative higher cost of providing a given level of public services, particularly in areas such as health and education.

Over the last few years, Northern Ireland has been challenged further by UK-wide austerity measures, with Northern Ireland's block grant reduced by 7% in real terms since 2010. In 2014 and 2015, intertwined issues of identity, history, and welfare reform imperiled budget negotiations in Northern Ireland and raised questions about the stability of the devolved government. In the years ahead, many experts contend that Northern Ireland will continue to face tough budgetary constraints, which could be compounded by Brexit. Although many in Northern Ireland pin great economic hopes on the promised reduction in the corporate tax rate, analysts contend that lowering it will result in some loss of revenue in the short term. Rebalancing the economy away from reliance on the public sector remains a key goal of Northern Ireland's devolved government.¹³

¹³ Tom Healy, "Things You Always Wanted to Know About Public Finances in Northern Ireland But Were Afraid to Ask," Nevin Economic Research Institute, November 15, 2014; "A New Kind of Trouble," *The Economist*, January 24, 2015; Dan O'Brien, "Northern Ireland May Be Normalizing, But Big Risks Remain," *Irish Independent*, May 8, 2016.



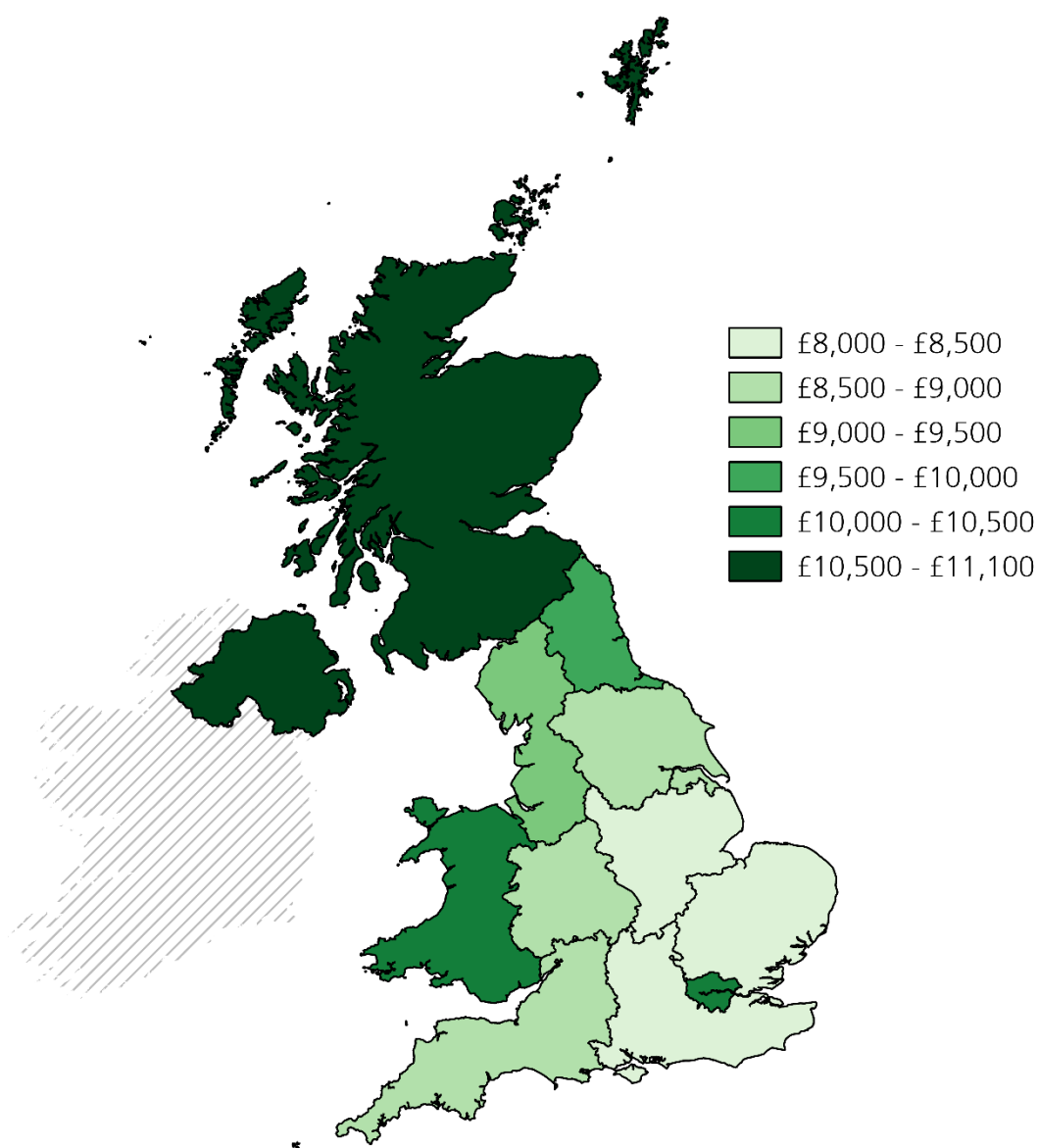
BRIEFING PAPER

Number 04033, 30 November 2017

Public expenditure by country and region

By Matthew Keep, Philip Brien

Spending per head, by country and region, 2016-17



© EuroGeographics for the administrative boundaries

Source: HM Treasury, Country and regional analysis 2017, 9 November 2017

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Summary

This note gives figures on the level of public expenditure in England, Scotland, Wales and Northern Ireland. It also gives figures for the English regions.

In 2016/17, public spending per head in the UK as a whole was £9,159. In England, it was £8,898 (3% below the UK average). This compares with:

- Scotland: £10,651 (16% above the UK average)
- Wales: £10,076 (10% above the UK average)
- Northern Ireland £11,042 (21% above the UK average).

Among the English regions, public spending per head was lowest in the South East at £8,111 (11% below the UK average) and highest in London at £10,192 (11% higher than the UK average).

The data shown are for public expenditure per head and are taken from HM Treasury's [Country and regional analysis: 2017](#), which contains more detailed information including spending by function (health, education etc).

1. Introduction: The data

For many types of spending, we have a good idea of how much goes to each region or nation within the UK. This “identifiable expenditure” covers around 88% of total public spending¹ and is the focus of this briefing.² The remaining 12% is regarded as benefiting the UK as a whole and therefore is not attributed to a particular region or nation – a classic example is spending on defence.

For Scotland, Wales and Northern Ireland, the data include expenditure by the devolved administrations but also spending in these countries by UK Government departments. For example, the Department for Work and Pensions is responsible for social security expenditure throughout Great Britain. So, for example, DWP expenditure on social security in Scotland is included under Scotland in the tables below.

2. Spending per head, 2016/17

Table 1 and the chart below show public expenditure per head for each country and region. The table shows considerable variation between the different parts of the UK. For example, public spending per head is £8,898 in England compared with £11,042 in Northern Ireland – a difference of around £2,100. Public expenditure per head in Northern Ireland is 21% higher than the UK average, in Scotland it is 16% higher and in Wales 10% higher. There are also differences in spending levels between the English regions where spending per head ranges from £8,111 in the South East to £10,192 in London.

In interpreting the data, it is necessary to bear two points in mind. First, the scope of the public sector varies between countries. For example, water supply is in the public sector in Scotland and Northern Ireland but in the private sector in England and Wales. Second, the figures are intended to give a broad overview and cannot be regarded as a precise measure. This is because it is not always easy to decide who benefits from particular expenditure and simplifying assumptions are made in compiling the data. Small differences in expenditure between regions should not, therefore, be regarded as significant.

¹ Public spending includes spending by central government, local government and public corporations.

² For further information on the classification see [paras 16-18](#) of HM Treasury’s Country and Regional Analysis – November 2017.

5 Public expenditure by country and region

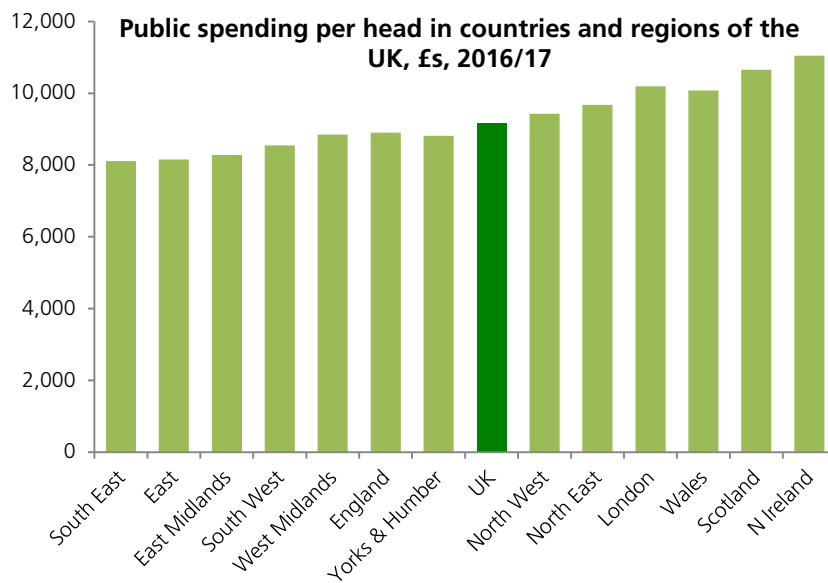


Table 1
Public spending per head by country and region, 2016/17

	£ per head	Index: UK identifiable expenditure = 100
North East	9,680	106
North West	9,429	103
Yorkshire and the Humber	8,810	96
East Midlands	8,282	90
West Midlands	8,846	97
East	8,155	89
London	10,192	111
South East	8,111	89
South West	8,549	93
England	8,898	97
Scotland	10,651	116
Wales	10,076	110
Northern Ireland	11,042	121
UK identifiable expenditure	9,159	100

Note: Includes only identifiable public spending on services.

Source: HM Treasury, *Country and Regional Analysis 2017*, 9 November 2017, Table A.2

3. Spending per head, 2012/13 to 2016/17

Tables 2 and 3 show public spending per head for each country and region of the UK since 2012/13.

Table 2
Public spending per head by country and region, 2012/13 to 2016/17
£ per head in real terms (2016/17 prices)

	2012/13	2013/14	2014/15	2015/16	2016/17
North East	9,861	9,793	9,729	9,801	9,680
North West	9,668	9,476	9,548	9,631	9,429
Yorkshire and the Humber	9,018	8,902	8,957	9,003	8,810
East Midlands	8,438	8,358	8,444	8,417	8,282
West Midlands	9,003	8,883	9,011	8,898	8,846
East	8,126	8,110	8,236	8,310	8,155
London	10,551	10,382	10,258	10,301	10,192
South East	8,000	8,017	8,005	8,091	8,111
South West	8,502	8,517	8,602	8,593	8,549
England	9,016	8,933	8,967	9,001	8,898
Scotland	10,787	10,620	10,611	10,714	10,651
Wales	10,212	10,203	10,200	10,220	10,076
Northern Ireland	11,443	11,405	11,373	11,168	11,042
UK identifiable expenditure	9,291	9,205	9,231	9,262	9,159

Note: Includes only identifiable public spending on services.

Sources: HC Library based on HM Treasury, *Country & Regional Analysis*, 9 November 2017, Table A.4

Table 3
Public spending per head by country and region, 2012/13 to 2016/17
Index UK = 100

	2012/13	2013/14	2014/15	2015/16	2016/17
North East	106	106	105	106	106
North West	104	103	103	104	103
Yorkshire and the Humber	97	97	97	97	96
East Midlands	91	91	91	91	90
West Midlands	97	97	98	96	97
East	87	88	89	90	89
London	114	113	111	111	111
South East	86	87	87	87	89
South West	92	93	93	93	93
England	97	97	97	97	97
Scotland	116	115	115	116	116
Wales	110	111	110	110	110
Northern Ireland	123	124	123	121	121
UK identifiable expenditure	100	100	100	100	100

Note: Includes only identifiable public spending on services

Sources: HC Library based on HM Treasury, *Country & Regional Analysis*, 9 November 2017, Table A.4

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UN Human Development Index

Research for Senator Mark Daly

Abstract

This brief note explains how the UN's Human Development Index ('**HDI**') is compiled and how the Republic of Ireland and the UK are ranked on this index.

A HDI value for Northern Ireland has been calculated for the purpose of this research note but the limitations of this calculation should be taken into account. This HDI value should be used as a general guide and should not be relied on for making strict / definitive territorial comparisons.

Date: Monday, 08 February 2016

Enquiry Number: 2016/201

Library & Research Service central enquiry desk: Tel – 01 618 4701

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Introduction

This research note discusses:

- What the Human Development Index ('HDI') is;
- How the Republic of Ireland and the UK perform on this measure; and
- A calculation of a HDI value for Northern Ireland.

The enquiry received by L&RS asked where Northern Ireland would be placed relative to the Republic of Ireland on the HDI by each category of the HDI, where Ireland was ranked in seventh place.

There are a number of issues to note in the context of this query.

1. The latest HDI, as published in the [2014 Human Development Report](#) ('HDR') relates to data for the year 2013. In this HDR Ireland ranks in 11th position based on its HDI value (0.899). Ireland previously ranked in seventh position in the HDR 2013 (which used 2012 data).

Therefore, in order to be reflective of the current position, this research note relates to the latest information available (i.e. 2013 data).

The UN's [Human Development Office](#) ('HDO') notes that it is misleading to compare values and rankings with those of previously published reports.

The HDO advises users of the HDR not to compare the results from different reports¹.

¹ The difference between values published in two different Reports is the combined effect of data revision, change in methodology, and the change in achievements in indicators.

2. Northern Ireland is not included in the list of countries included in the UN's HDI. The information used to devise the HDI is based on sources of international country data statistics which does not provide Northern Ireland information.
3. However, a HDI value for Northern Ireland has been calculated in this research note in order to provide an indication of where Northern Ireland would likely be placed relative to the Republic of Ireland and the UK.

However, the limitations of this approach should be noted. The calculation of a HDI value for Northern Ireland is not directly comparable with the country values reported in the HDR, as different sources of information were used to calculate Northern Ireland's HDI.

In this respect the HDO states that to include a country in the HDI

"We need recent, reliable and comparable data for all three dimensions of the Index. For a country to be included, statistics should ideally be available from the relevant international data agencies"².

It should also be noted that the UK is included in the HDI, and would likely incorporate Northern Ireland within its overall measure, but this information is not available on a dis-aggregated basis.

What is the Human Development Index ('HDI')?

The HDO states that the HDI was

"Created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone".

² The HDO says that the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics and the World Bank.

The 2014 HDR presents the HDI (values and ranks) for 187 countries and UN-recognized territories³.

The HDO says that the HDI is a summary measure for assessing long-term progress in three basic dimensions of human development.

- A long and healthy life (measured by life expectancy);
- Access to knowledge (measured by (i) mean years of education among the adult population⁴; and (ii) expected years of schooling for children of school-entry age⁵); and
- A decent standard of living (measured by Gross National Income⁶ (GNI) per capita).

The 2013 HDR covers 187 countries, the same number as in 2012 and 2011.

How is the Human Development Index Devised?

The HDI is a summary measure of achievements in key dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living⁷. See Figure 1 below.

³ The HDR also separately includes an inequality-adjusted HDI for 145 countries, a Gender Development Index for 148 countries, a Gender Inequality Index for 149 countries, and a Multidimensional Poverty Index for 91 countries. However, the HDI is the headline index reported, and is the main focus of the HDR report, and this research note.

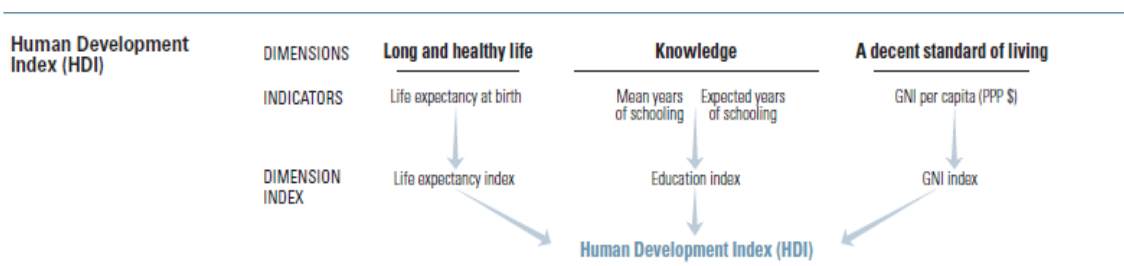
⁴ The average number of years of education received in a life-time by people aged 25 years and older.

⁵ The total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life.

⁶ The [World Bank](#) defines GNI as “*The sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad*”.

⁷ The HDI assigns equal weight to all three dimension indices; the two education sub-indices are also weighted equally.

Figure 1: Human Development Index



There are two steps to calculating the HDI.

1. Minimum and maximum values are set in order to transform the indicators expressed in different units into indices between 0 and 1.

Table 1: Dimensions of the HDI⁸

Dimension	Indicator	Min	Max
Health	Life expectancy (years)	20	85
Education	Expected years of schooling / mean years of schooling	0	18 / 15
Standard of living	Gross national income per capita \$	\$100	\$75,000

2. Having defined the minimum and maximum values, the dimension indices are calculated as:
 - Dimension index = $\frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$

The HDI is the geometric⁹ mean of the three dimensional indices¹⁰.

⁸ Data sources used: Life expectancy at birth: UNDESA (2013). Mean years of schooling: Barro and Lee (2013), UNESCO Institute for Statistics (2013) and Human Development Report Office updates based on UNESCO Institute for Statistics (2013). Expected years of schooling: UNESCO (2013). GNI per capita: World Bank (2014), IMF (2014), UNSD (2014) and UNDESA (2013).

⁹ The geometric mean is defined as the n th root of the product of n numbers. A geometric mean is often used when comparing different items. The use of a geometric mean "normalizes" the ranges being averaged, so that no range dominates the weighting, and a given percentage change in any of the properties has the same effect on the geometric mean.

Calculating a Northern Ireland HDI value

The enquiry received by L&RS asked for a comparison of Northern Ireland to the Republic of Ireland on the UN's HDI list of territories.

Northern Ireland is not included separately¹¹ in the UN's HDI list of territories.

Therefore, in this research note an attempt at calculating a HDI value for Northern Ireland has been made.

However, it is very important that the limitations of this calculation are taken into account.

1. The information used to calculate Northern Ireland's HDI is not strictly comparable with that used in the UN's HDR. As the international statistics underpinning the UN's HDR does not provide Northern Ireland data, other sources of information have been used.
 - Life expectancy data has been sourced from the [National Life Tables of Northern Ireland, 2011 – 2013](#).
 - GNI per capita has been calculated using [Northern Ireland Gross Value Added \('GVA'\)](#) from UK national accounts. This GVA per capita value has then been converted into dollars using the [OECD's 2011 purchasing price parities \('PPP'\)](#).

This value has also been calculated for the UK in order to compare it to the value reported in the UN's HDR. The percentage difference between the two values for the UK has then been applied to the Northern Ireland figure in an attempt to correct for differences in both approaches.

¹⁰ For the education dimension, the above equation is first applied to each of the two indicators, and then the arithmetic mean of the two resulting indices is taken. For income, the natural log of the actual, minimum and maximum values is used.

¹¹ But Northern Ireland is likely incorporated within the UK overall value.

2. Gathering data for the purpose of calculating Northern Ireland's (i) expected years of schooling and (ii) mean years of schooling is difficult. Information used to calculate expected years of schooling is based on enrolment information from the Northern Ireland Department of Education for the year 2013/14 together with population data from the Northern Ireland Statistics and Research agency for the year 2013. Mean years of schooling has been calculated based on data relating to highest level of qualifications received from the Northern Ireland data from the census 2011.

Various assumptions have been made to calculate both these measures owing to information/data gaps and therefore these should only be used as a general guide.

3. These values were then applied to the UN's approach to devising the HDI as previously outlined in this research note.

This means the HDI value for Northern Ireland is calculated as:

- **Life expectancy index** = $(80.15 - 20) / (85 - 20) = 0.925$
- **Income index** (PPP 2011\$ per capita) = $\text{Log}(26,446) - \text{Log}(100) / \text{Log}(75,000) - \text{Log}(100) = 0.834$
- **Education index** [Mean years of schooling = $(8.3 - 0) / (15 - 0) = 0.55$; Expected years of schooling = $(14.8 - 0) / (18 - 0) = 0.82$] = $(0.55 + 0.82) / 2 = 0.69$
- **HDI** = $(0.93 * 0.84 * 0.69)^{1/3} = 0.816$.

4. Given the limitations of the approach in this research note, Northern Ireland's HDI value should only be taken as a general guide when comparing this to the Republic of Ireland and the UK.

The Republic of Ireland, UK and Northern Ireland values

The Republic of Ireland's HDI value and ranking¹²

In the 2014 HDR, the Republic of Ireland's HDI value is 0.899, placing Ireland in the very high human development category¹³.

This means Ireland ranks 11 out of 187 countries.

Ireland's HDI of 0.899 is above the average of 0.890 for countries in the very high human development group, and above the average of 0.876 for countries in the OECD¹⁴.

Table 2 shows Ireland's result in each of the HDI indicators.

Table 2: Republic of Ireland's HDI Components

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value	HDI ranking
2013	80.7	18.6	11.6	33,414	0.899	11 th

¹² A country report for the Republic of Ireland can be found here:

http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/IRL.pdf

¹³ The very high human development category represents the top 49 territories ranked on the HDI.

¹⁴ The list of member countries in the OECD can be found here:

<http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm>

The UK's HDI value and ranking¹⁵

The UK's HDI value for 2013 is 0.892, placing the UK in the very high human development category.

This means that the UK ranks 14 out of 187 countries.

The UK's 2013 HDI of 0.892 is above the average of 0.890 for countries in the very high human development group, and above the average of 0.876 for countries in the OECD.

Table 3 shows the UK's result in each of the HDI indicators.

Table 3: UK's HDI Components

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value	HDI ranking
2013	80.5	16.2	12.3	35,002	0.892	14 th

Northern Ireland's HDI value and ranking

For the reasons previously stated in this research note, care needs to be taken in interpreting the HDI value for Northern Ireland.

The indicators used have different sources than those used in the HDR and assumptions have had to be made due to data gaps.

Therefore, Northern Ireland's HDI value should only be taken in the context of a general position relative to the Republic of Ireland and the UK.

Northern Ireland's HDI value (0.816) is below both the Republic of Ireland (0.899) and the UK (0.892).

¹⁵ A country report for the UK can be found here: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/GBR.pdf

Northern Ireland's HDI value is also below the average for the countries¹⁶ in the very high human development group (0.890).

Table 4 shows Northern Ireland's estimated result in each of the HDI indicators.

Table 4: Northern Ireland's HDI Components

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value	HDI ranking
2013	80.1	14.8	8.3	26,446	0.816	Below the Republic of Ireland and the UK (44 th)

¹⁶ Average of those countries included in the very high human development group in the 2014 HDR.

Addendum – Human Development Index 2014

The Human Development Index ('**HDI**') in the 2015 UN Human Development Report ('**HDR**') relates to data for the year 2014 (2014 HDI).

The 2014 HDI covers 188 countries, compared to 187 countries covered in the previous report (2013 HDI).

It is noted that in general rankings tend to change little between two successive years but there are several countries which did experience change in rankings between the 2013 HDI and the 2014 HDI.

There was no change in methodology for computation of the 2014 HDI compared to the 2013 HDI. Therefore, the approach highlighted above in this note remains applicable.

The value for Northern Ireland above was based on the information that was obtainable (from Northern Ireland statistical agencies) for the previous research note supplied in December 2015, and no further update is possible at this time.

The Republic of Ireland's HDI value and ranking

In the 2015 HDR, the Republic of Ireland's 2014 HDI value is 0.916, placing Ireland in the very high human development category¹⁷.

This means Ireland ranks joint 6th (with Germany) out of 188 countries.

Ireland's HDI of 0.916 is above the value of 0.896 for the countries in the very high human development group, and above the value of 0.880 for the group of countries in the OECD¹⁸.

¹⁷ The very high human development category represents the top 49 territories ranked on the HDI.

¹⁸ The list of member countries in the OECD can be found here:
<http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm>

Table 2 shows Ireland's result in each of the HDI indicators for the 2013 and 2014 HDI.

There were improvements in life expectancy, mean years of schooling and income per person which improved Ireland's HDI scoring, leading to an improvement in Ireland's ranking among the benchmarked countries.

Table 2: Republic of Ireland's HDI Components

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value	HDI ranking
2013	80.7	18.6	11.6	33,414	0.899	11 th
2014	80.9	18.6	12.2	39,568	0.916	Joint 6 th

The UK's HDI value and ranking

The UK's HDI value for 2014 is 0.907, placing the UK in the very high human development category.

This means that the UK ranks joint 14th (with Sweden) out of 188 countries.

The UK's 2014 HDI of 0.907 is above the average of 0.896 for countries in the very high human development group, and above the value of 0.880 for the group of countries in the OECD.

Table 3 shows the UK's result in each of the HDI indicators for the 2013 and 2014 HDI.

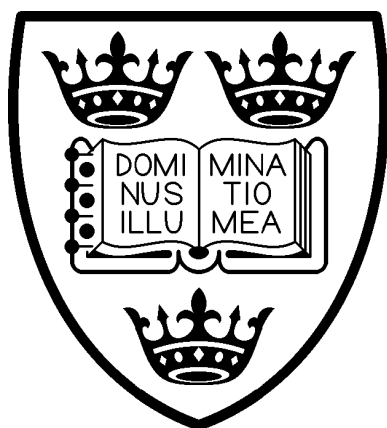
There were improvements in life expectancy, mean years of schooling and income per person which improved the UK's HDI scoring, but its relative ranking remained unchanged as other countries also showed improvement in their HDI scores.

Table 3: UK's HDI Components

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value	HDI ranking
2013	80.5	16.2	12.3	35,002	0.892	14 th
2014	80.7	16.2	13.1	39,267	0.907	Joint 14 th

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**INDEPENDENT IRELAND IN
COMPARATIVE PERSPECTIVE**

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Independent Ireland In Comparative Perspective

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Abstract

This paper surveys independent Ireland's economic policies and performance. It has three main messages. First, the economic history of post-independence Ireland was not particularly unusual. Very often, things that were happening in Ireland were happening elsewhere as well. Second, for a long time we were hampered by an excessive dependence on a poorly performing UK economy. And third, EC membership in 1973, and the Single Market programme of the late 1980s and early 1990s, were absolutely crucial for us. Irish independence and EU membership have complemented each other, rather than being in conflict: each was required to give full effect to the other. Irish independence would not have worked as well for us as it did without the EU; and the EU would not have worked as well for us as it did without political independence.

This is a revised version of a lecture delivered on November 11, 2016, at the NUIG National Conference entitled 1916-2016: The Promise and Challenge of National Sovereignty. I am extremely grateful to Nicholas Canny for having invited me; to everyone at NUIG for their hospitality; to John McHale for chairing the session so expertly, and to the discussants for their excellent comments. I am also grateful to Brian Ashcroft, Frank Barry, Jason Begley, George Boyer, Alan de Bromhead, Graham Brownlow, Diane Coyle, Richard Dorsett, Alan Fernihough, James Foreman-Peck, Frank Geary, Stefanie Haller, David Jordan, Aidan Kane, Michael Keating, Morgan Kelly, Dave Madden, Maurice Mulcahy, Cormac Ó Gráda, Eunan O'Halpin, Andy O'Rourke, Martin Sandbu, and Rebecca Stuart, for many helpful comments, advice, data, and technical assistance. The usual disclaimer applies.

1. Introduction

Somebody clever, I'm not sure who, is supposed to have once said that "he who only tries to understand Ireland will not even understand Ireland". There can at times be an attention-seeking particularism about Irish writing— look at us, we like to say, mostly to ourselves, but if possible to any foreigners who might be listening as well – look at us, and at how unique, and at how very interesting we are.

When I was a young boy in primary school, we were taught that post-independence Ireland was poor but uniquely virtuous. Today, we are taught that it was poor and uniquely wicked. Both positions are misguided: we were never as different as people have made out. Those traditional rural values that we once correctly celebrated can still be found in agricultural communities around the world; *meitheal* is not a uniquely Irish phenomenon. And the Magdalene Laundries that we now correctly condemn have their counterparts elsewhere as well.¹ The past, it turns out, is a foreign country everywhere.

And what is true of Irish social history turns out to be true of Irish economic history as well. Very often, the things that were happening in Ireland at a particular time were in fact part of a bigger, European, or even global story.

I used to think that the quotation with which I started this lecture was due to Nicholas Canny, whose own work has largely been concerned with placing the history of early modern Ireland into the context of the wider world – but he denies it.

On the other hand, I am quite certain that it was Rudyard Kipling who once asked "what do they know of England who only England know?" It seems as though the temptation to focus on one's own country, and to ignore what was going on around it, is not just an Irish phenomenon – which of course merely reinforces the point that we are not as unique as we sometimes think we are.

¹ On Denmark, see Adler-Olsen (2014).

My main purpose in this lecture is therefore to place Ireland's post-independence economic history into some sort of comparative context, and to try to convince you that in fact our economic history is in many respects not all that unusual.

The circumstances of our state's birth were of course dramatic, and for a while we held the world's attention; but then we settled down to become what we had chosen to become: a small, rather poor country on the periphery of Europe. In many ways, I'm going to argue, our subsequent economic history is precisely what you would have predicted, given the turn that 20th century European history was about to take. Our economic *policies* were not that unusual in the context of the time; and over the long run our economic *performance* was just about exactly what you would have predicted as well.

But this conference is of course taking place under the shadow of Brexit, and the question which arises is: will Boris and his merry band of Brexiteers succeed in finishing the job which was begun in 1916, and complete the economic and political separation between our island and Great Britain? Will their efforts lead to Ireland becoming more fully independent of Britain than it has been to date, and perhaps uncomfortably so? Will we have to stand more squarely on our own two feet than we might perhaps want?

And so a second major theme in my talk will be Ireland's economic relationships over the course of the last century with both Britain and continental Europe. If there is one way in which our post-independence economic history was indeed unusual for many decades, and unhelpfully so, it was our excessive dependence on a poorly performing British economy. Membership of the European Communities in 1973, and the European single market programme of the late 1980s and early 1990s, were absolutely crucial in transforming Irish fortunes.

2. The 19th century back story

It doesn't make sense to discuss Ireland's post-independence economic performance without spending at least some time on the colonial back story. Irish economic performance under British rule was disappointing, and occasionally tragic. The Famine of the 1840s was

genuinely unusual – the last mass subsistence crisis in peacetime Western Europe, with the exception of the Finnish famine of the 1860s. As we all know, it ushered in a wave of mass emigration which persisted into the 20th century, and which led to the quite unique spectacle of a continuously declining population throughout the late 19th century, a time when Europe as a whole was experiencing a population explosion.

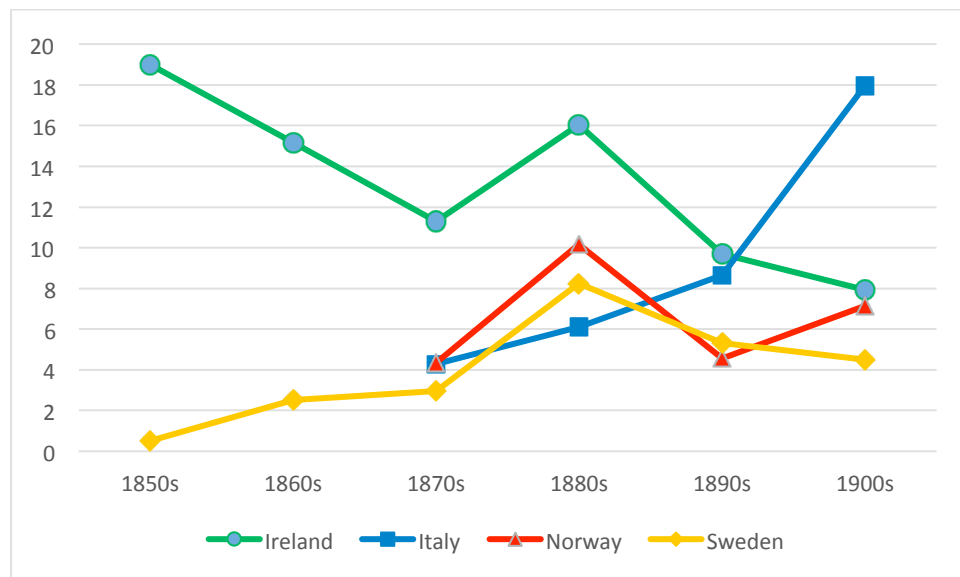


Figure 1. Gross decadal emigration rates, per 1000

Source: Hatton and Williamson (1994, p. 536).

Even here, however, we have to be careful not to overdo the peculiarity of the Irish experience. By the end of the period, Italy was experiencing emigration rates well in excess of our own, with Norway also experiencing heavy outflows (Figure 1). Furthermore, the same underlying forces were driving emigration throughout Europe during this period. Emigration rates were systematically higher in: countries with higher birth rates; countries that were poorer; and countries with a prior history of emigration (Hatton and Williamson, 1998). Ireland's marital fertility rate was high; the country was very poor; and the famine had resulted in an extremely high stock of Irish people living overseas, and particularly in North America. High emigration rates are exactly what you would have expected in the circumstances; there is no need to appeal to any supposed peculiarities of the Irish psyche in order to explain our high propensity to leave the country during the period.²

² Guinnane (1997) provides an excellent discussion of 19th century Irish demography.

This 19th century economic history had important consequences for the 20th century. I want to highlight three legacies in particular.

First: Since a history of previous emigration leads to a higher tendency to emigrate in the future, Irish people remained extremely mobile after independence. Indeed, the population of the 26 counties continued to decline until 1961. Emigration could be both beneficial and harmful to the economy, in ways that generations of Irish economists, politicians and historians have discussed over the years.

One consequence was that by lowering the domestic supply of labour, Irish emigration raised Irish wages, pulling them up towards the levels available on labour markets overseas. Something very similar happened in both Norway and Italy (O'Rourke and Williamson, 1999, Chapter 8). On the one hand, this helped sustain living standards that would otherwise not have been attainable; but on the other, it deprived the economy to at least some extent of one of the main advantages which poor countries generally possess, namely cheap labour.

On the eve of World War I, Ireland was still poor, but it was clearly much richer than it had been in the 1870s, let alone the 1840s. But growth in per capita living standards that was largely due to a declining population was hardly anything to shout about. Southern Ireland's prosperity in 1913, such as it was, was based on very different foundations than prosperity elsewhere. The key to economic growth during the late 19th century was typically industrialisation. And the key to industrialisation, in Germany, Italy, France, the United States, and elsewhere, was protectionism.

During the late 20th and early 21st centuries, globalisation and growth have gone hand in hand, but tariffs protecting industry were strongly and positively correlated with growth before the First World War (Lehmann and O'Rourke, 2010). As a region of the free trading United Kingdom, an independent tariff policy was obviously unavailable to Ireland. The data plotted in Figure 2 show that nationalists were not mad, in the context of the time, to believe that this was a serious handicap. And so a second legacy of the 19th century, which became important in the 20th, was an ideological commitment to protectionism among a certain stratum of Irish nationalist thinkers. Once again, there was nothing unusual about

this; it was rather the United Kingdom, with its strong commitment to more or less unilateral free-trade even as its rivals gained market share at its expense, which was the exception during this period.

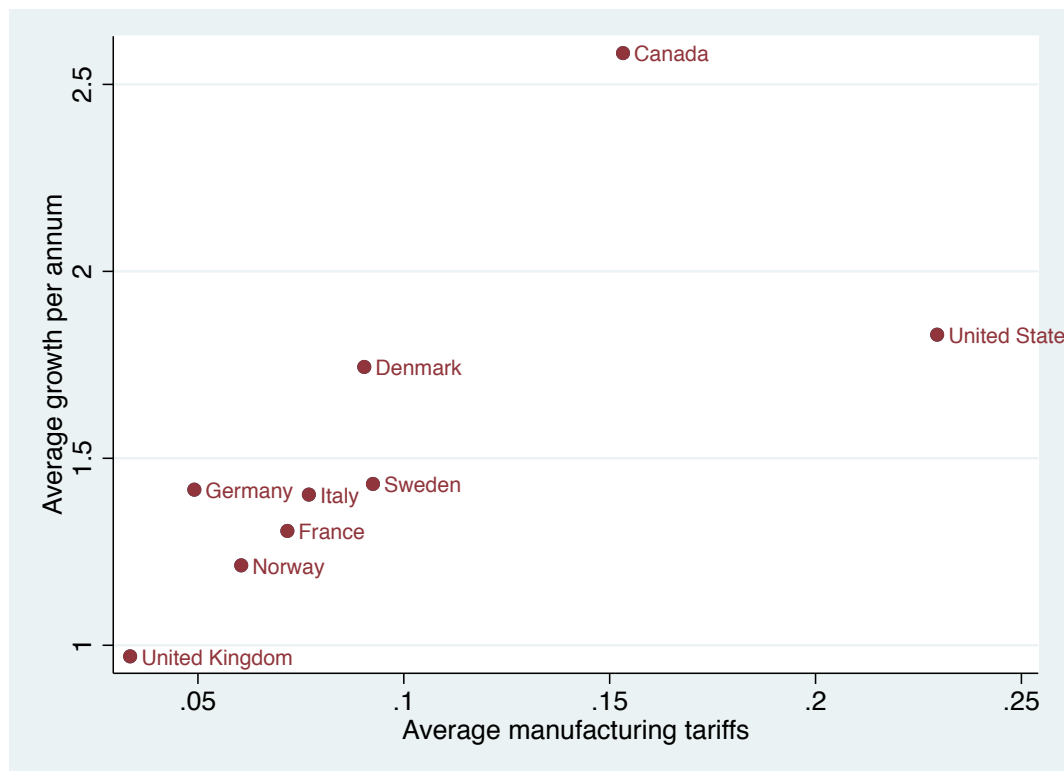


Figure 2. Manufacturing tariffs versus growth, 1875-1913

Source: based on data in Lehmann and O'Rourke (2010).

But this intellectual commitment to protectionism would eventually run up against a third legacy of Ireland's history, which was the extent to which the Irish and British economies were intertwined. The south of Ireland was overwhelmingly specialised in agricultural activities, and its agricultural exports went overwhelmingly to the United Kingdom. The Irish and British labour markets were very tightly integrated with each other. The Irish Free State, and later the Irish Republic, would share a common legal system with Britain, as well as a common currency, and many other institutions. For much of the 20th century it makes sense to regard Ireland as one small regional component of a broader British and Irish economy. And the problem was that this broader British and Irish economy, within which the British component was obviously overwhelmingly dominant, was a poor performer within the broader European context. Only when we emancipated ourselves from excessive reliance on

our nearest neighbour were we able to finally grow as rapidly as other poor countries around the European periphery.

3. Assessing Irish performance

In order to assess Ireland's economic performance, we need a benchmark.³ Because of our history, a natural tendency is to use the UK, but that is an important mistake. The UK performed poorly relative to most European economies: by using it as a benchmark, we are setting the bar much too low.

A second alternative is to compare Ireland with similar regions inside the UK – Northern Ireland most obviously, but perhaps also Scotland and Wales. As we will see, doing so provides us with several useful insights, but again, by comparing ourselves with regions located within the slowly growing UK economy, we are setting the bar too low.

A third alternative, which makes a lot more sense, is to compare ourselves with other relatively poor economies around the European periphery. Greece, Portugal and Spain were all as poor as Ireland at the start of the 20th century, if not poorer. They therefore faced many of the same obstacles that we did, but they also shared the same potential for rapid growth based on catching up on the industrial core. How did we do compared with these economies? Indeed, how did we do compared with European economies more generally?

³ For a similar discussion, see Ó Gráda (1997, pp. 2-4).

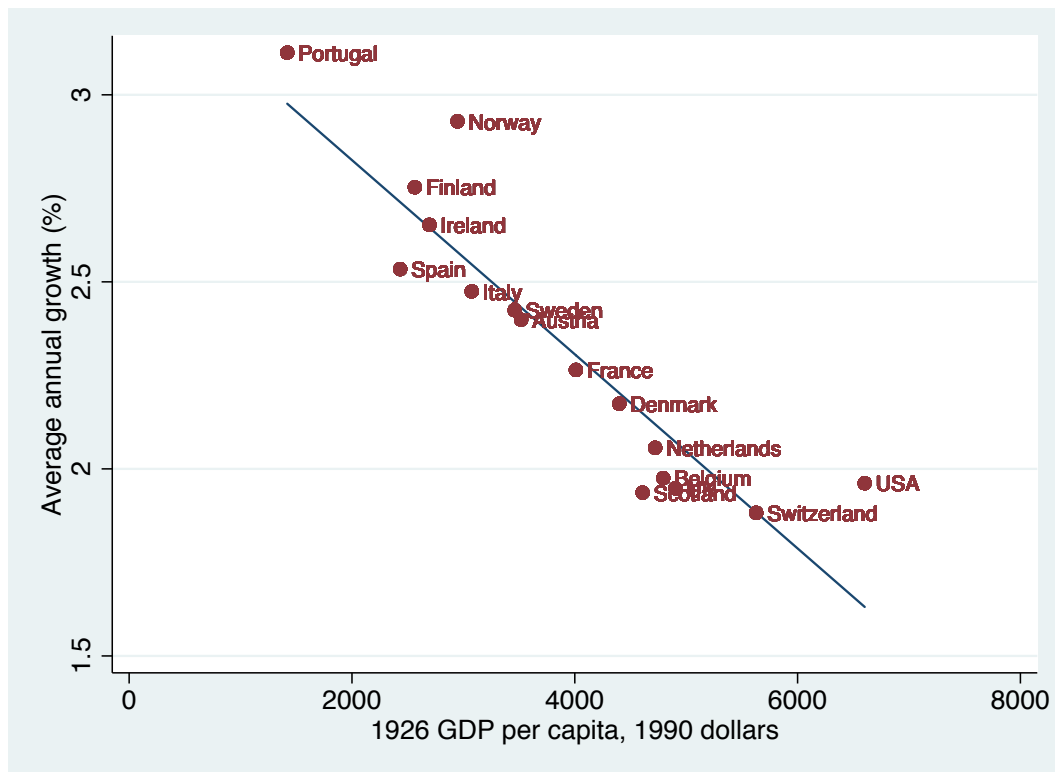


Figure 3. Initial income and subsequent growth, 1926-2001

Source: Broadberry and Klein (2012). GNP rather than GDP is used for Ireland, using adjustment ratios kindly provided by Rebecca Stuart. Her data go back to 1944 so I have simply assumed that GNP was the same proportion of GDP in previous years.

It is a matter of statistical fact that within Western Europe, countries that were initially poorer have grown more rapidly than countries that were initially richer during the 20th century. In other words, poorer economies have tended to converge on richer ones, mostly as a result of importing best practice technologies already adopted elsewhere. We don't have reliable national income evidence for Ireland before 1926, so Figure 3 plots initial income levels, per capita, in 1926, against average growth per annum over the course of the subsequent 75 years. I have done this for the broadest available sample of European countries that managed to avoid becoming Communist later in the century, as well as the United States. As can be seen, there is a very clear negative relationship between these two variables. Initially poor countries, such as Portugal, grew much more rapidly than initially rich countries such as Switzerland. The average statistical relationship between these two variables (what economists call "the regression line") is given by the straight line in the figure. As can be seen, the "statistical fit" of this relationship is remarkably tight, in that countries are very closely clustered around this line.

Strikingly, Ireland's economic performance during the 75 years following 1926 was *exactly* what it should have been, given Ireland's initial income level. There was nothing unusual about Irish growth during this period. It was an entirely typical European economy.

4. The interwar period and World War II: 1922-1950

If there is one thing that is unusual about Irish economic policy-making after independence, it is that it took so long for the Irish Free State to move in a protectionist direction. The successor states of the Austro-Hungarian Empire, for example, immediately implemented a wide range of protectionist measures. By contrast, during the first 10 years of Irish independence our trade policy was, comparatively speaking, remarkably liberal.

As we all know, the election of Fianna Fáil in 1932 coincided with a dramatic shift towards protection. But there are three questions about this policy shift that we can usefully ask. First: are its causes really to be found in Irish party politics alone? Second, was Ireland unusually protectionist? And third, was Irish protectionism unusually costly?

Regarding the first question: it would be a mistake to view the switch to protection as having had causes that were fundamentally idiosyncratic and Irish. *Everybody* switched towards protection following the onset of the Great Depression in 1929. Even the traditionally free-trading British moved decisively towards protection in November 1931 and February 1932 – that is to say, before Ireland.

This common trend requires a common explanation, which is provided by the Great Depression. The Great Depression arose from a catastrophic macroeconomic policy failure, largely associated with the gold standard of the period. This ruled out the sorts of loose money policies that have been used in many economies during our own Great Recession, and was associated with an extremely conservative mindset when it came to fiscal policy as well. Governments thus found themselves unable to combat falling output and rising unemployment using the sorts of measures that Keynes was advocating at the time; with their hands thus tied behind their backs, they resorted to the only policy lever available to

them, namely protection (Eichengreen and Irwin, 2010). The hope was that this would create domestic jobs by shielding the local economy from import competition, and in fact in many cases, including our own, it did so. On average, higher tariffs were associated with better economic performance during the interwar period, other things being equal (Clemens and Williamson, 2004). From a collective point of view of course, it would have been far preferable for everyone to have adopted coordinated and expansionary macroeconomic policies, as was done in 2009, and for them to have maintained relatively free international trading conditions. But this is not what happened, and it would be wrong to single out Ireland for special criticism in this regard.

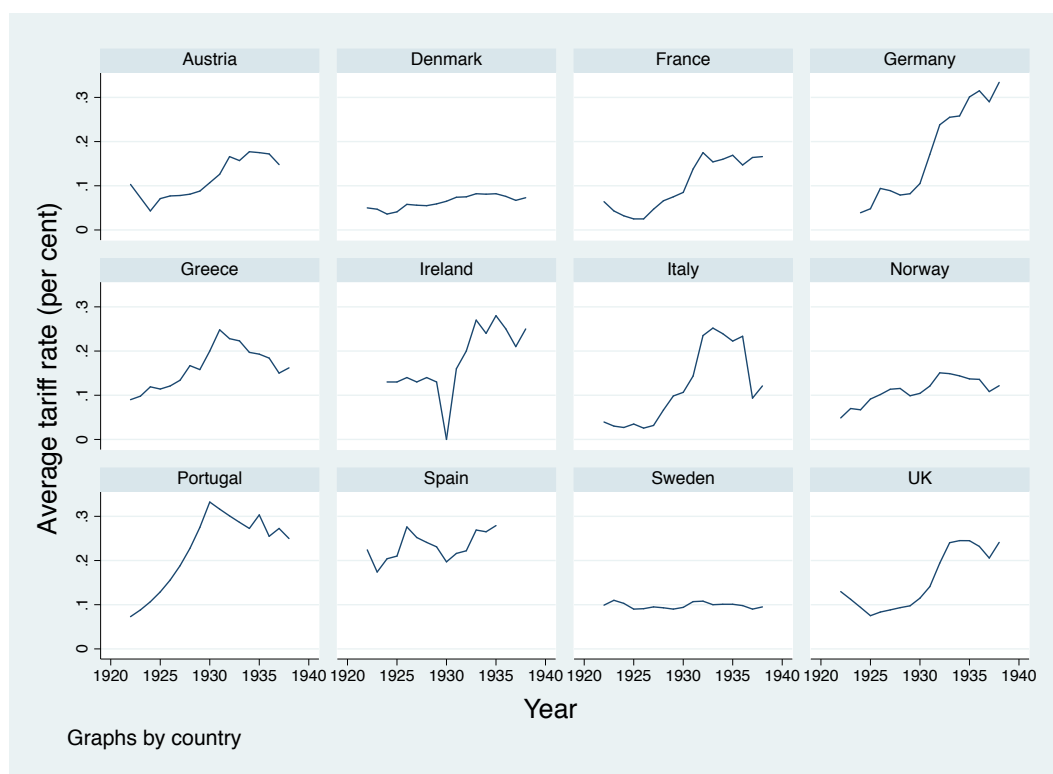


Figure 4. Was Ireland unusually protectionist? Average tariffs 1922-38

Source: Clemens and Williamson (2004) and www.duanaire.ie at NUI Galway.

Was Ireland unusually protectionist during the 1930s? The answer is no. Irish average tariffs were towards the higher end of the spectrum in the sample of European countries for which we have data, but they were similar to those in Germany, Italy, Portugal, Spain, and the UK (Figure 4). But focusing on tariffs alone is misleading, since these were not the real problem during the 1930s. Rather, countries during this period adopted a wide variety of quantitative restrictions on trade, up to and including exchange controls which in some cases effectively

nationalised the international trading activities of particular countries. Ireland didn't do anything nearly as drastic. And as can be seen from Figure 5, it was towards the more liberal end of the spectrum when it came to the adoption of quotas as well.

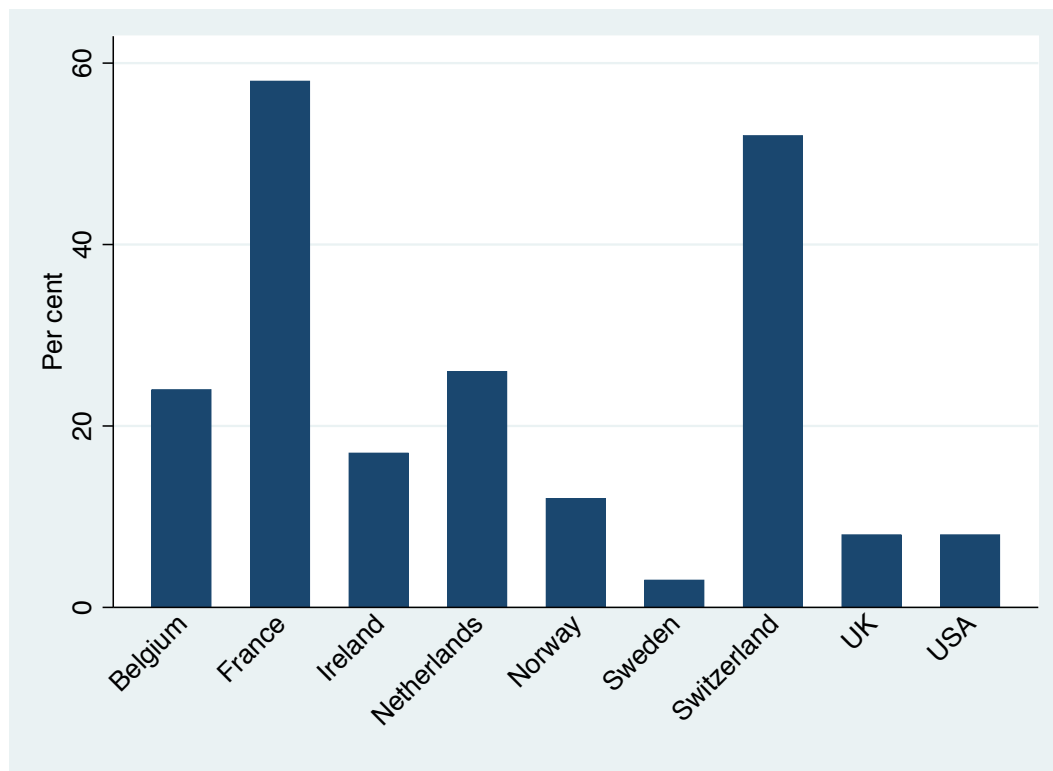


Figure 5. How unusual was Irish trade policy? Percentage of imports covered by quantitative restrictions, 1937

Source: League of Nations (1943), Whittlesey (1937).

Another well-known feature of Irish economic policy during this period was its attempts to restrict the foreign ownership of Irish-based firms. But the importance and uniqueness of the 1932 and 1934 Control of Manufacturers Acts can be overdone. First, as work by Mary Daly, Frank Barry and others has revealed, these formal restrictions were often evaded by means of fancy legal footwork, as indeed was the case in other countries during this period (Daly, 1984; Daly, 1992; Barry et al., 2016).⁴ Second, Ireland was by no means alone in

⁴ For example, the Italian tyre company Pirelli registered its foreign-owned operations as belonging to a legal entity based first in Belgium, and later in Switzerland, which would prove convenient when doing business with the Allies during World War II. Cf. Jones (2013, pp. 197-8).

adopting such restrictions. Spain restricted the foreign ownership and management of all firms to a maximum of 25% in 1939 (Lieberman, 2006, p. 131). In the same year, Finland tightened its existing restrictions on inward foreign investment, prohibiting the acquisition of real estate by foreign individuals, organisations, and Finnish companies which did not restrict foreign ownership to a maximum of 20% of the outstanding shares (Hjerpe, 2004, pp. 4-5). Portugal restricted inward investment in 1943 (das Neves, 1996, p. 331). Other examples could be found.

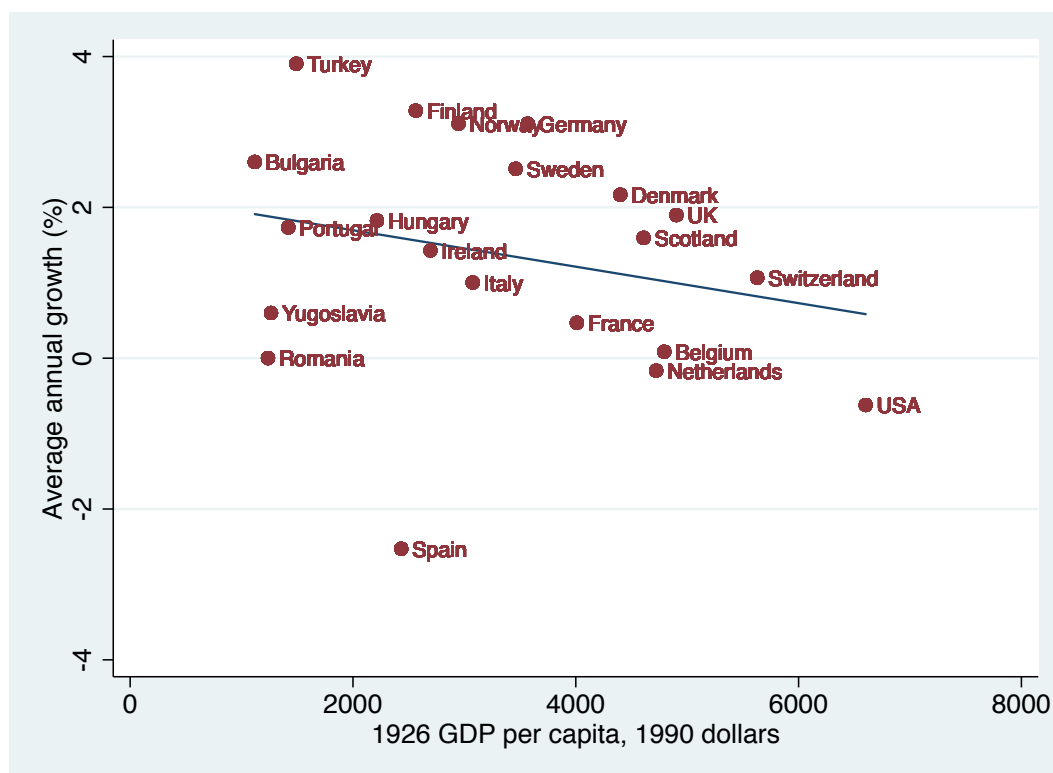


Figure 6. Initial income and subsequent growth, 1926-1938

Source: as for Figure 3.

Were the economic effects of protectionism uniquely destructive in Ireland? Again, the answer is no. As Figure 6 shows, not only were Ireland's economic *policies* typical during this period, so was its economic *performance*. Between 1926 and 1938, Ireland grew at *exactly* the rate that it should have done, given its initial starting point.

Importantly, protectionism probably helped maintain employment at a time when jobs were scarce everywhere. It is true that the economic war with Britain, which lasted from 1932 to 1938, was somewhat unusual – although Ireland was hardly alone in defaulting on its debts during this period. But it is also true that the dispute was settled on terms highly favourable to the Irish. A capitalised £100 million liability was settled with a £10 million lump sum payment, and Ireland gained the Treaty Ports into the bargain. This surely helped the country to remain neutral during World War II. Neutrality certainly saved many Irish lives, and it is entirely possible that it avoided much destruction to Irish property. Even taking the undoubted costs of the Economic War into account, it is entirely plausible that its net economic impact was actually beneficial (Neary and Ó Gráda, 1991; O'Rourke, 1991).

The war itself was a very difficult period for the Irish economy, even though we were spared the horrors of the fighting. Imports of energy and other essential requirements were very scarce; domestic industry suffered accordingly. As a predominantly agricultural economy, with no heavy industry to speak of, the Irish Free State did not benefit from the demand for war-related *matériel* in the way that Scotland or Northern Ireland did. Even worse, it found itself selling its agricultural output to a hard-pressed British customer, which quite understandably used its monopoly position to lower the prices it paid for Irish agricultural produce. Even still, Irish farmers were the only section of the community to see their living standards rise between 1939 and 1943 (Ó Gráda, 1997, pp. 7-21).

In common with almost all of Western Europe, Ireland experienced a strong boom between 1945 and 1950. In formerly belligerent powers, especially on the continent, the boom largely took the form of reconstruction. In the Irish case, it was far more consumption-driven, as consumers made up for lost time and bought American and other imported goods. Construction also boomed, as did industry (*ibid.*, pp. 21-25). Such a consumption-driven boom was probably less sustainable than the more investment-based booms experienced in continental Europe at the time. Nevertheless, the overall impression that one gets when placing Irish economic policies between 1922 and 1950 into a comparative perspective is that there was nothing unusually perverse or self-destructive about Irish policy choices during this period. Irish politicians were relatively liberal during the 1920s, and were protectionist like everybody else from 1932 onwards. They were hardly to blame

for the deprivations of World War II, nor could they be praised for the inevitable recovery which followed. And the country's economic performance during the first 30 years of independence was also pretty typical for the time.

5. Ireland falls behind: 1950-1973

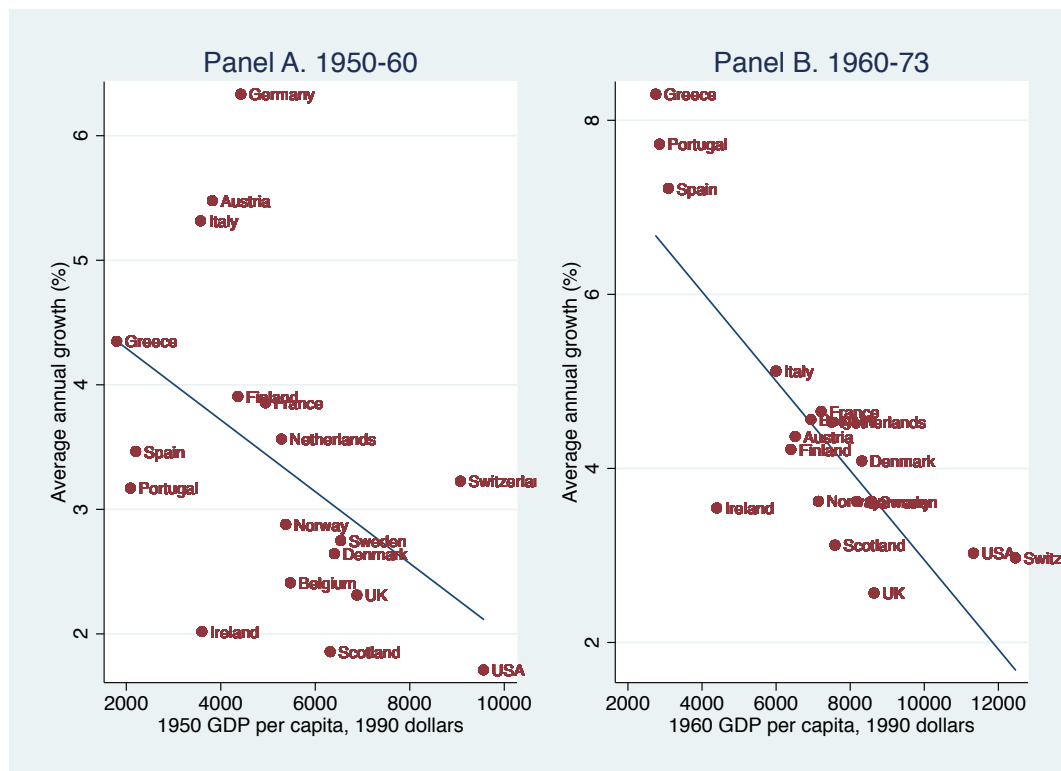


Figure 7. Initial income and subsequent growth, 1950-60 & 1960-73

Source: as for Figure 3.

In contrast, Ireland's performance during the subsequent 25 years was disappointing. Whereas Ireland had been an average performer during the dismal interwar period, it performed well below average during Europe's "Golden Age". The 1950s were as we all know particularly bad, and the GNP data plotted for Ireland in Panel A of Figure 7 understate the case, if it is the living standards of ordinary people that we are concerned with. Throughout post-war Europe, governments erected modern welfare states, but Ireland lagged far behind. If independent Ireland can be said to have "failed" during any period, it did so most obviously during this decade.

What may come as more of a surprise is the fact that Irish underperformance continued during the 1960s. As can be seen from Panel B of Figure 7, this was the decade during which Greece, Portugal, and Spain experienced their economic miracles. Ireland, by contrast, was still an underperformer. Importantly, a comparison with Britain alone would miss this: from 1960 onwards the Irish economy grew more rapidly than the British one. But growing more rapidly than an economy which was itself an underperformer was not enough to prevent Ireland from falling even further behind mainstream Europe.

Why was Ireland's performance so poor during these two crucial decades? I want to highlight three reasons. The first has to do with recurrent balance of payments crises; the second has to do with delayed liberalisation; and the third has to do with our excessive dependence on the poorly performing British economy.

The first feature of the Irish economy during the 1950s and early 1960s which was obvious to people at the time, but is less often commented upon today, was the succession of booms and busts.⁵ The post-war boom ended as a result of a balance of payments crisis which emerged in 1950, and got worse in 1951. This ultimately led to the highly deflationary budget of April 1952, which caused a deep recession. By 1955 the economy was recovering, consumption was booming, and imports were rising rapidly. Once again, the eventual response was not one, but two austerity budgets in 1956, leading to a deep recession lasting several years. 10 years later, a rising trade deficit in 1965 was followed by yet another deflationary budget in 1966. This succession of booms and busts was highly destructive. It also poses the question of whether Irish policymakers were uniquely incompetent.

As it happens, they were not. This sequence of loosening fiscal policy, leading to rising incomes, rising imports, balance of payments crises, and thence to tightening fiscal policy, falling incomes, falling imports, and improvements in the balance of payments, was well-known in the United Kingdom and other countries at this time. The UK, for example experienced major crises in 1957, 1961, and 1966. The term that we use to describe this sequence of events is "stop-go policies", and the fundamental reasons for such policies

⁵ Ó Gráda (1997) is one notable exception, and I draw extensively on him in the account below.

were analysed by an Australian economist, Trevor Swan, in a famous and influential contribution to the macroeconomic literature.⁶ The essential problem, Swan pointed out, was that governments of the time were trying to hit two targets simultaneously, a full employment target and a trade balance target. To hit two targets, you need at least two policy instruments; the problem was that during this period policymakers only had one, namely fiscal policy. The post-war Bretton Woods system was based on fixed exchange rates. These were supposed to be adjustable, and indeed they were occasionally adjusted, but to devalue your currency was seen as failure by politicians, and generally only happened under duress, in the context of major crises such as the one in 1967 which forced Harold Wilson to devalue the British, and thus the Irish, pound.

This implied a major dilemma for countries whose currencies were overvalued. Since their goods were overpriced on international markets, they faced persistent balance of trade problems. These could be overcome by tightening fiscal policy, which would lower expenditure and hence imports, but that came at the cost of higher unemployment. When unemployment became too burdensome, fiscal policy could be loosened again, but this would imply rising trade deficits. The ultimate solution was to devalue the currency; until this happened, stop-go policies would be inevitable. And whereas devaluation was an option for the United Kingdom, it was not something that Irish policymakers could do unilaterally – so long as they were unwilling to break the Irish currency's link with sterling. Until then, booms and busts related to balance of payments crises were unsurprising – and indeed, British and Irish booms and busts were highly correlated with each other during this period.⁷

A second explanation for poor Irish performance during the European Golden Age, and particularly during the 1950s, is the delay in reversing interwar protectionist policies. I have argued that these policies were appropriate in the context of the 1930s, a time when everyone was protecting their domestic markets; when an export-oriented growth strategy was therefore not feasible; and when jobs were scarce everywhere. But by the 1950s

⁶ Arndt (1976) provides a detailed account of the genesis of the idea.

⁷ The correlation between business cycles in the two countries from 1950 to 1972 inclusive is 0.74, where the business cycle series are simply calculated as deviations from log trend.

protectionism was clearly no longer appropriate. At the urgent behest of the United States, European countries were gradually removing barriers to trade and integrating their economies with each other – first within the context of the OEEC, the forerunner of today's OECD, and later within the context of the EEC and EFTA. This meant that export-oriented growth strategies could now be, and were in fact, adopted throughout Western Europe, while the rapid growth of the period implied that protection was not needed in order to create jobs. There is no doubt that Ireland was slower to jump on the liberalisation bandwagon than many other countries, and that this was a costly mistake.

However, the traditional picture of an Ireland that was completely resistant to change before 1958 is over-simplistic. Ireland was a founder member of the OEEC and European Payments Union, the two organizations at the forefront of European trade liberalization during the early 1950s. When it came to quantitative barriers to trade such as quotas, which are more damaging than tariffs, Ireland was the second least protectionist economy in the OEEC in 1950, behind only Switzerland (Eichengreen, 1996, p. 59). It subsequently liberalized less rapidly than did other countries, but this was partly because it had less quota-related liberalization to do in the first place. Overall, Ireland emerges as an entirely average European country on this dimension of trade policy. It was however slower to lower its tariff barriers than core European economies. It behaved, rather, like other peripheral European economies, such as Finland, Greece, or Spain, and this relatively slow reduction in tariffs persisted into the 1960s, *after* the famous 1958 move towards greater openness (Figure 8).

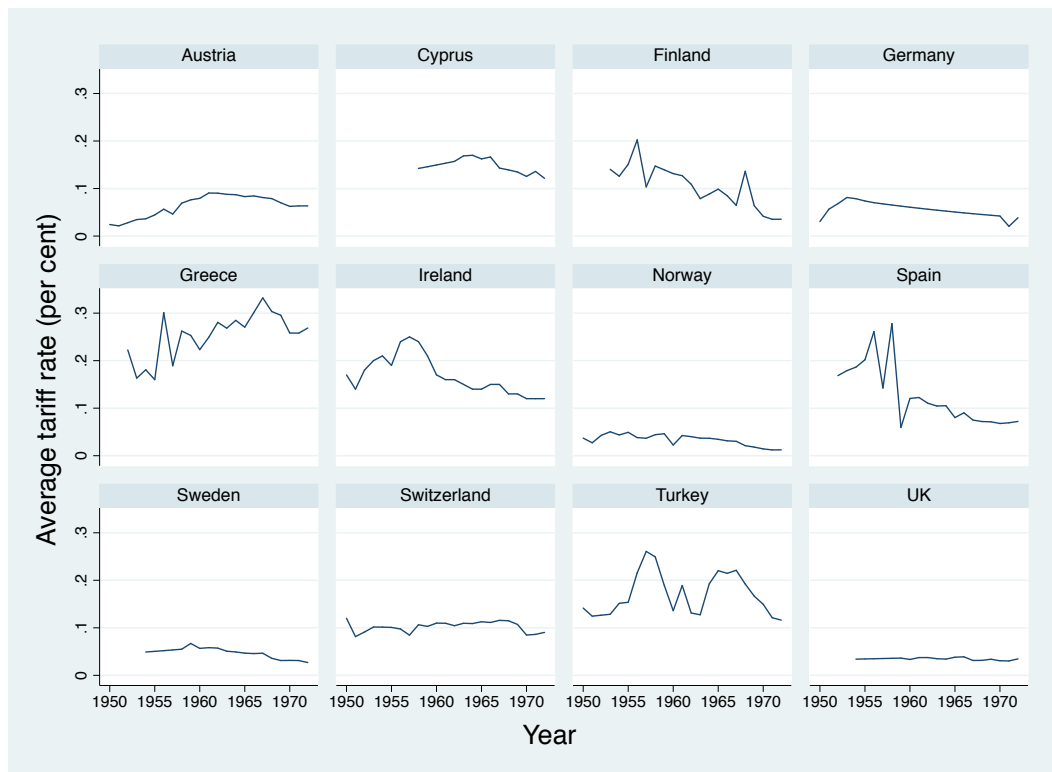


Figure 8. Was Ireland unusually protectionist? Average tariffs 1950-72

Source: as for Figure 4.

On the other hand, Ireland was relatively precocious in seeking to attract foreign direct investment. The Industrial Development Authority was established as early as 1949, and soon started trying to attract inward multinational investment. The Irish Export Board, soon rechristened C  oras Tr  achtala, was established in 1950. Tax relief on export profits was introduced in 1956.⁸

Ireland was therefore not as uniquely protectionist and inward-looking during the 1950s as is sometimes claimed. Neither was the timing of its liberalisation particularly unusual. It is true that the original six members of the EEC had begun their move towards greater

⁸ In light of recent controversies it is interesting to note that this soon appeared as a potential concern on the radar screens of foreign governments, appearing to be potentially in breach of the OEEC ban on artificial aids to exporters. The OEEC approved the initiative however, since it seemed to signal a growing outward orientation on the part of the Irish government (Barry and O'Mahony, 2016).

economic integration as early as 1950, with the foundation of the European Coal and Steel Community. They agreed in 1955 to draw up plans for a customs union, and the Treaty of Rome was signed in 1957.

But the timing of liberalisation elsewhere to a large extent reflected the impact of this initiative on other countries, and notably on the United Kingdom. The UK first tried to sabotage the EEC negotiations. When this failed, they attempted to negotiate an OEEC-wide industrial free trade area, but completely misjudged the interests of other European countries. When this attempt also failed, therefore, the British and six other countries signed the Stockholm Convention in 1960, establishing the European Free Trade Area. This aimed to establish an industrial free trade area between its member states, and ultimately to negotiate an agreement with the EEC as well. No Western European country, no matter how peripheral or economically backward, could avoid responding to this disruption of the prevailing European trade regime.

Spain abandoned its long-standing autarkic trade policy regime in 1959, joining the OEEC in that year and embarking on a process of trade liberalisation. In 1960 it abolished quantitative restrictions on 90% of its imports, tariffs were gradually reduced over the succeeding years, and the country opened itself up, at least to some extent, to inward foreign investment (de la Escosura and Sanz, 1996, pp. 369-70). Portugal became a founder member of the EFTA, although it managed to negotiate a transitional deal allowing it to delay tariff reductions on sectors representing about half of its imports (Costa et al., 2016, pp. 308-9). Finland started lowering tariffs from 1957 onwards, and signed a trade agreement with the EFTA in 1961 (Paavonen, 2004). Greece signed an Association Agreement with the EEC in 1961. This granted it a 22-year transitional period leading to eventual full membership; Greece was allowed to lower its tariffs vis à vis the EEC gradually, but benefited from an immediate reduction of EEC tariffs on Greek exports (Freris, 1986, pp. 201-2).

And so it is no surprise that Ireland also took the plunge, at more or less exactly the same time, and applied for EEC membership in 1961 along with Britain. Nor is it surprising that when that bid was vetoed by Charles de Gaulle in 1963 – something for which Irish policy

makers can hardly be blamed -- Ireland unilaterally cut its tariffs. It did so again in the following year, and in 1965 signed the Anglo Irish Free-Trade Agreement. At this stage Ireland was fully committed to eventual EEC membership, which was finally achieved in 1973.

What *was* unusual about Irish trade liberalisation was the extent to which it remained focused on the economic relationship with Britain. To be sure, the AIFTA was seen as a stepping stone towards eventual EEC membership, but despite this European motivation, the reality was that Ireland was not yet well integrated with the European economy as a whole. And this was a problem, since access to the British market alone was a far less appealing carrot to dangle in front of potential multinational investors than access to the much larger and more dynamic EEC market.

This leads us to the third explanation for Ireland's relatively poor performance during Europe's Golden Age. If the poor performance in the 1950s was due to protectionism, and if, as the conventional wisdom has it, Ireland liberalised in a rush from 1958 onwards, then why was its performance so disappointing between 1960 and 1973? The comparison with other peripheral European economies, in particular Greece and Portugal, is illuminating. As we have seen in Figure 7, Greece and Portugal grew extremely rapidly during this period, while Ireland remained an underperformer. And as we have also seen, in Figure 8, Greek tariffs were even higher than Irish ones during the 1960s. What can explain the superior performances of Greece and Portugal? Why did Ireland not keep pace?

A key factor in the Greek success story was the country's Association agreement with the EEC. Foreign investment had been encouraged since the early 1950s, when a series of FDI-friendly policies were introduced (Freris, 1986, pp. 171-2), but tariff-free access to EEC markets provided an essential additional stimulus to inward investment. Between 1962 and 1964, more than three fifths of all manufacturing investment was foreign; Kopsidis and Ivanov (2017, p. 108) argue that FDI during this period "diversified and modernised Greek industry". Continent-wide markets for cheap consumer goods produced in Greece also benefited traditional Greek light industry.

In Portugal too, EFTA membership is seen as having been crucial in promoting a more outward-looking and dynamic economy. According to one estimate, annual inflows of foreign direct investment were more than 30 times higher during the 1960s than they had been between 1943 and 1960 (Ferreira da Silva, 2016).⁹ Portuguese accession to the EEC in the 1980s would lead to a further step increase in inward foreign investment, as happened also in Spain (Barry and Bradley, 1997, p. 1809).

A key difference, therefore, between the Irish case, on the one hand, and the Portuguese and Greek cases on the other, was that Ireland had neither an Association agreement with the EEC, nor membership of the EFTA.¹⁰ We tend to assume that once Ireland had signed the AFTA, it was to all intents and purposes a free trader, and there is something to this. Local firms had to adjust to British competition, and this was good for efficiency. But there is a big difference between accepting free trade between oneself and just one country, and becoming part of a continent-wide customs union. Until EEC accession, the IDA had to try to sell Ireland as an export platform into the UK and Commonwealth, but this was never as effective a sales pitch as the one which we were able to make after 1973. From then on, Ireland was selling into the EEC as a whole, and that made all the difference.

One very striking feature of the data between 1954¹¹ and 1973 is that Ireland's growth performance was very similar to the growth performances of both Northern Ireland and Wales. All three economies seem to be underperforming in a very similar way, growing less rapidly than they should have been given their initial income levels (Figure 9). This suggests that all three economies were facing a common problem or set of problems. Some of these may have been institutional in nature, such as a fragmented trade union structure which made the corporatist arrangements then in vogue on the Continent difficult to achieve (Ó Gráda and O'Rourke, 1996). But an excessive reliance on the sluggish British economy is another plausible candidate.

⁹ According to the same author, the inflow in 1961 was as high as the total inflow experienced during the entire 1950s. das Neves (1996), on the other hand, downplays the role of FDI during the 1960s.

¹⁰ Recall that EFTA aimed not only to dismantle industrial tariffs between its own member states, but eventually to negotiate tariff reductions vis-à-vis the EEC as well.

¹¹ Which is when reliable GDP estimates for Wales and Northern Ireland become available.

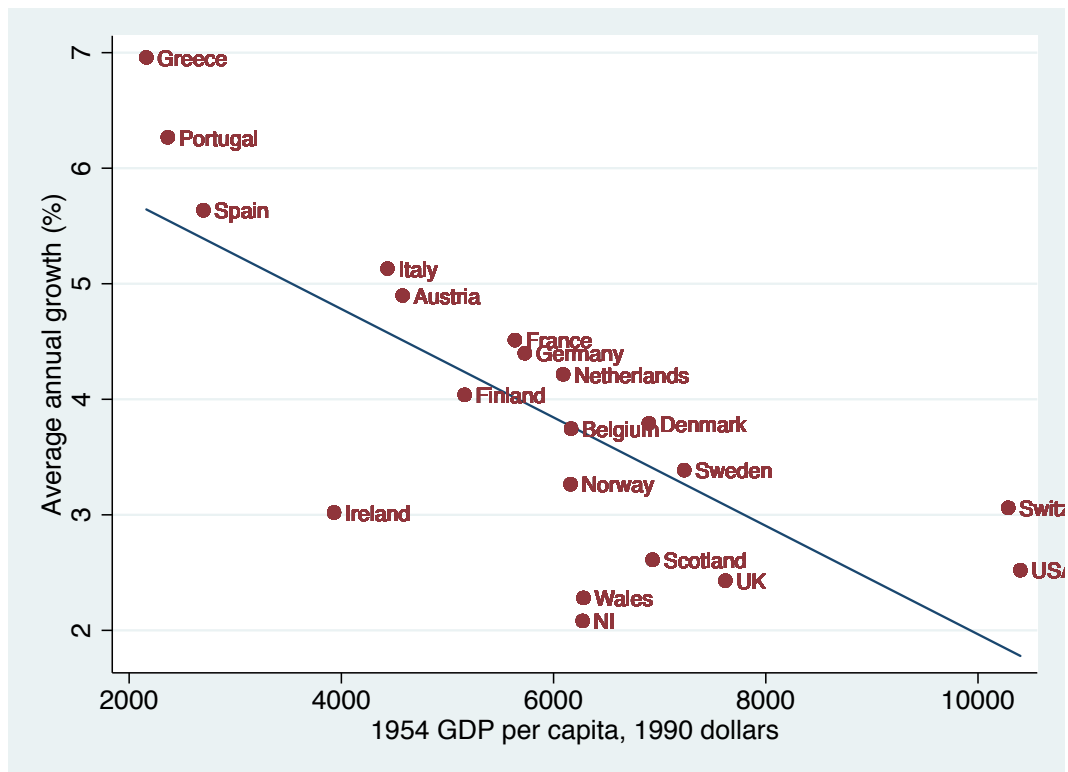


Figure 9. Initial income and subsequent growth, 1954-73

Source: as for Figure 3. Wales and Northern Ireland: data underlying Dorsett (2013), graciously provided by author. Scotland: data graciously provided by Brian Ashcroft.

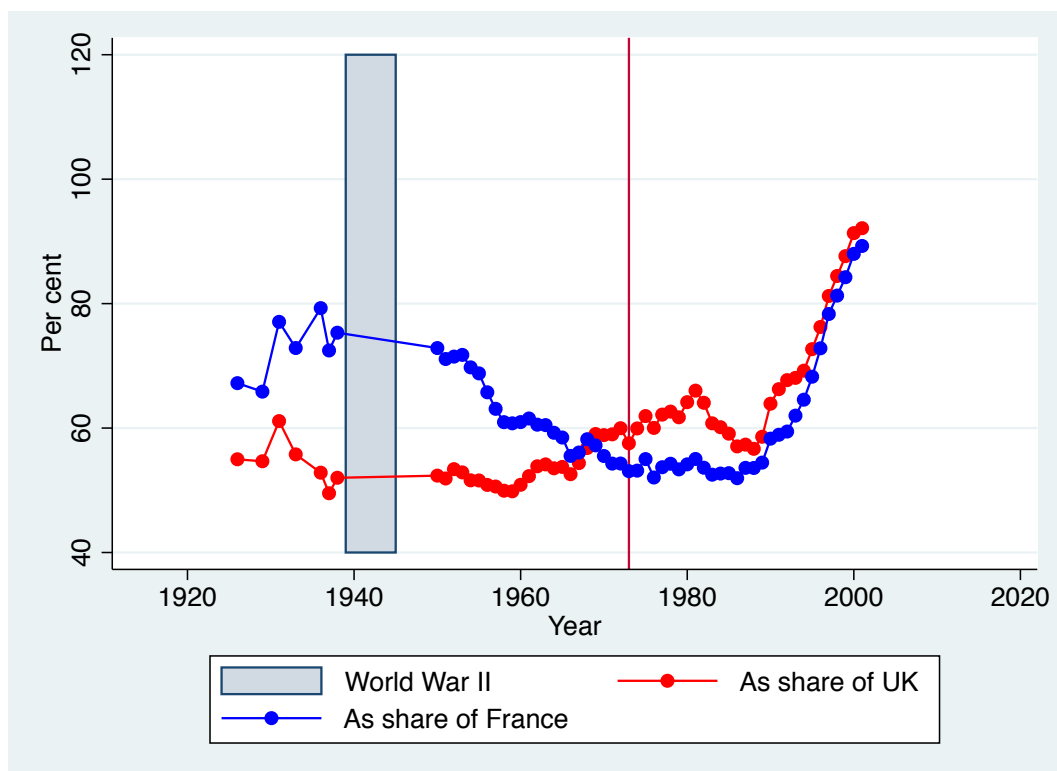


Figure 10. Irish GNP per capita as percentage of UK and French GDP per capita

Source: as for Figure 3. Note: the vertical line denotes 1973.

In consequence, while GDP per capita grew more rapidly in Ireland than in the UK during the 1960s (Figure 10), this was not sufficient to prevent Ireland falling even further behind a major continental economy like France. This would change in 1973.

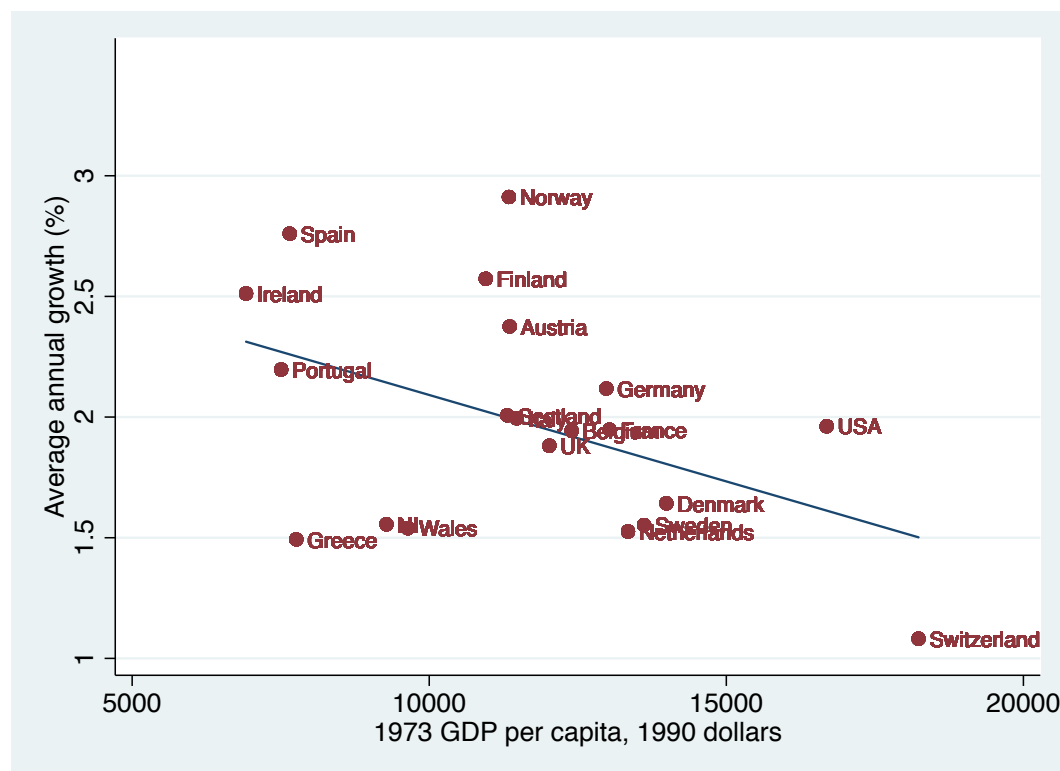


Figure 11. Initial income and subsequent growth, 1973-1990

Source: as for Figure 3.

6. Ireland in Europe

As Figure 10 shows, Ireland immediately stopped falling further behind France once it entered the EEC in 1973: Campos et al. (2014) estimate that membership boosted Ireland's per capita growth rate by almost 2 percentage points. Of course, many other events were shaking up the international economic landscape at this time, most obviously the oil crises of 1973 and 1979. These led to a decade or more of high unemployment, high inflation, and even higher unemployment as governments attempted to lower the inflation rate. All of these developments hurt Ireland. And yet, even before the Irish economic miracle of the 1990s, Ireland was once again growing just about as rapidly as would have been predicted within a convergence framework (Figure 11). Foreign direct investment, based on selling

into the EEC, was the major factor improving Irish performance from 1973 onwards, although the Common Agricultural Policy clearly also helped. We would certainly have done even better had it not been for the budgetary mistakes of the late 1970s, and their inevitable consequences in the succeeding decade.

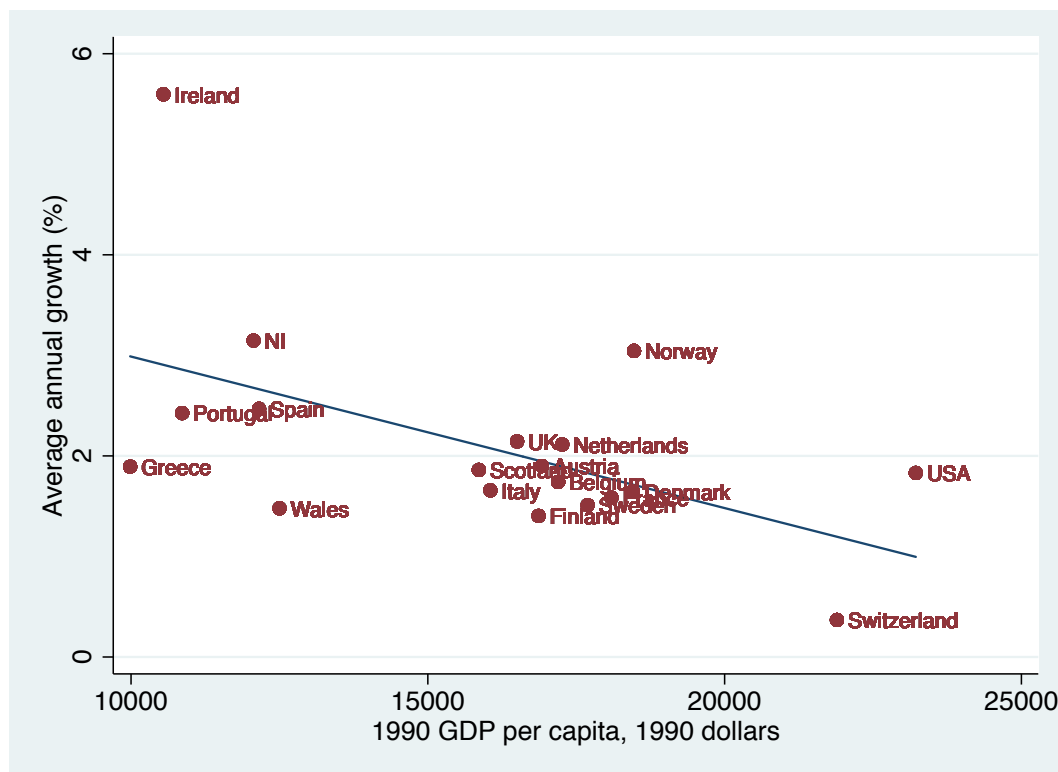


Figure 12. Initial income and subsequent growth, 1990-2001

Source: as for Figure 3.

The second major turning point in Ireland's economic fortunes was of course the short period between 1987 and 1990. During the 1990s, Ireland was, as we all know, an extraordinary over performer (Figure 12). A comparison between Ireland, on the one hand, and Northern Ireland, Scotland and Wales on the other, is informative (Figure 13). Ireland had been gaining ground on these UK regions from 1960 onwards, as we have already seen, which might represent a gradual process of convergence occurring within the British and Irish regional economy. The acceleration from 1990 onwards, however, represents something entirely different. It seems clear, not only that the European Union was fundamental in transforming the Irish economy, but that Irish independence was essential in exploiting the opportunities which the European Union afforded. As the figure suggests,

we would never have done anywhere near as well as we in fact did, had we remained a mere region of the United Kingdom.

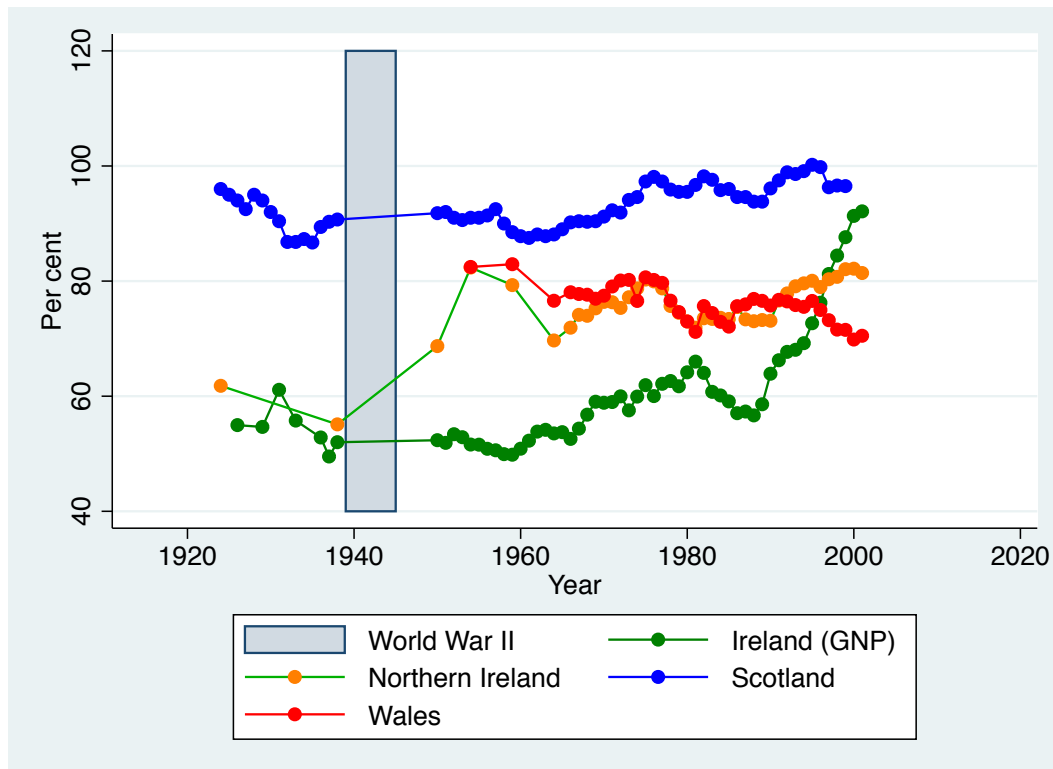


Figure 13. Incomes relative to UK, 1924-2001

Source: as for Figure 9.

Policy flexibility at a time of rapid change was essential, and that is what independence gave us. It's important to note that Ireland is not the only small European country to have performed well in the context of a globalising economy. There is a well-established political science literature that shows how other small European countries, in Scandinavia and elsewhere, have been able to respond nimbly and flexibly to changing international market conditions, in ways that larger countries have found more difficult (Katzenstein, 1985). But EU membership, and the single market programme of the late 1980s and early 1990s, were essential in allowing Ireland to finally reap the full economic rewards of its independence.

The policy mix that we adopted is well known: a low corporation tax and other incentives for inward investment, including investment in education and infrastructure. Cormac Ó Gráda and I have also argued that social partnership was important, moderating wage growth and providing a stable industrial relations environment (Ó Gráda and O'Rourke,

2000).¹² Underpinning everything was two crucial factors: our political independence, which allowed us to adopt a policy mix well suited to our own circumstances; and our membership of the European single market, without which none of this would have worked. Political independence and EU membership were never fundamentally at odds with each other in Ireland; both were required to give full effect to the other. Our independence would not have worked as well as it did without the EU; our EU membership would not have worked as well as it did without independence.

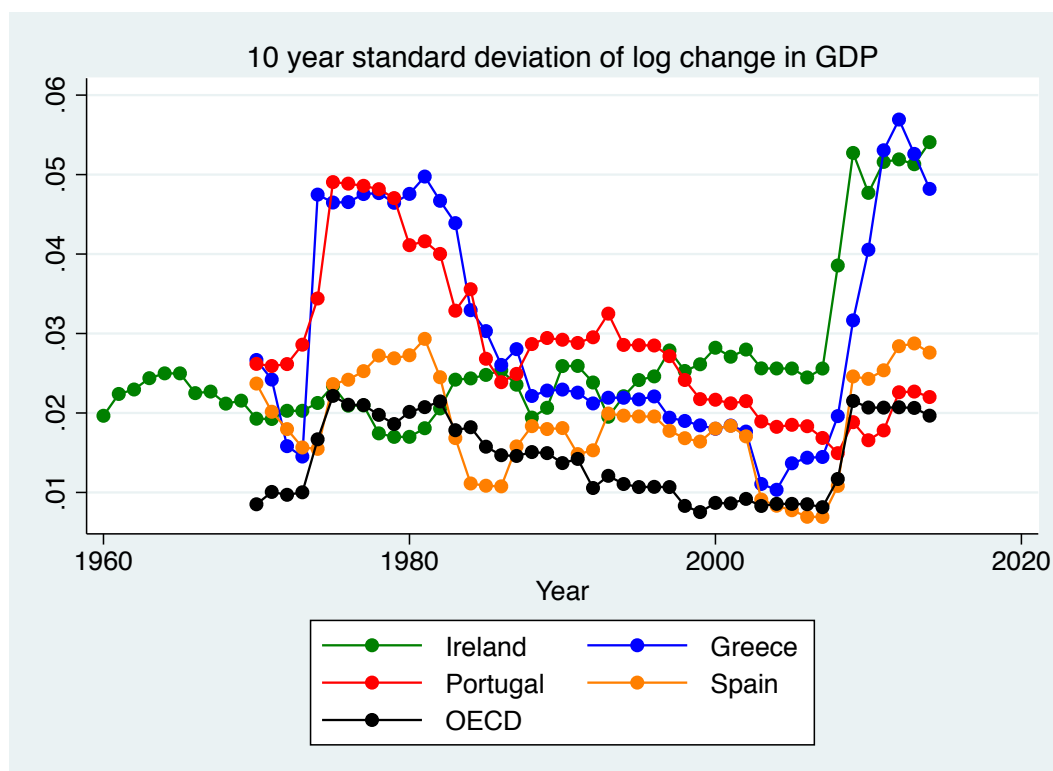


Figure 14. OECD and peripheral European GDP volatility, 1960-2014

Source: as for Figure 3.

Since 1973, and even more so since 1990, Ireland has become a hyper-globalized country whose subsequent economic history has mirrored the ebbs and flows of the global economy, in highly exaggerated fashion. The recession of the early 1980s, as inflation was squeezed out of the Western economic system; the Clinton/Greenspan IT boom of the 1990s; the credit and housing bubbles of the Great Moderation; the economic collapse of 2008, and the subsequent recovery: Ireland experienced all of them, in spades. This

¹² Just as it had done on the continent during the European Golden Age (Eichengreen, 1996).

heightened sensitivity to international economic conditions in part reflects the country's extraordinary openness, but it also reflects an Irish tendency to spend when times are good, and to borrow when they are not. In the OECD as a whole, GDP volatility declined after the turmoil of the 1970s; in Ireland, if anything it increased – even before the extraordinary bubble and bust of the early 21st century (Figure 14). It seems as though this volatility is to some extent a common feature of the peripheral European economies I have been comparing us to throughout this talk; but noting this does nothing to diminish the problem, and moderating this volatility needs to be a major policy priority for the country going forward.

7. The challenges of Brexit

The other major priority is adjusting to Brexit, and, perhaps, to the economic consequences of a Trump Presidency. Exactly what challenges Brexit will imply is unclear, and will remain so until the British government finally decides what it wants. There is no doubt but that a Hard Brexit would be damaging to Ireland. It would be an unfriendly act, not in the sense that the British would be trying to hurt Ireland -- of course they would not be -- but in the sense that the damage a Hard Brexit would cause us would be of no great concern to them either way. It was ever thus: England is a big country, and can't reasonably be expected to do anything other than to pursue its own best interest as it sees it, without taking too much account of the interests of the smaller countries on these islands. That is why in my view Irish independence was always both inevitable and desirable, but that is another matter.

Because a Hard Brexit would damage Irish interests, it's logical that we should desire that our nearest neighbours not proceed with it. But it's important that this desire not lead us to engage in wishful thinking. Once Britain has left the EU, the EU will be obliged under WTO rules to impose tariffs on imports coming from the UK. This is not something that the EU can avoid: if it were not to do this, it would be discriminating against its other trading partners, and that is illegal. The only circumstance in which the EU would be allowed to not impose tariffs on British goods is if there were a legally registered free trade agreement of one sort or another in place at the moment that Brexit occurs. And there are two major problems here. First, it is far from clear that it will be legally possible to negotiate a free trade

agreement with the UK while it remains a member of the EU. But even if it is legally possible, which seems doubtful, there is a second, practical consideration, which is that it takes years for trade deals to be negotiated and ratified. The chances of a comprehensive deal between the EU and UK being ironed out within two years are zero.

So if we are to avoid tariff barriers, either between the Republic of Ireland and the North, or, preferably, between Ireland and Britain, we are going to need a transitional arrangement of some sort that can be easily agreed within the two-year framework, without too much substantive negotiating being involved. A detailed bespoke transitional agreement seems impossible – it will be just as difficult to negotiate as a permanent agreement, in part because transitional agreements often last a very long time. And so it will have to be an off-the-shelf arrangement – temporary membership of the European Economic Area for example, or temporary membership of the EU customs union. If the British decide that they don't want either of these options, or some other easily available alternative, on even a transitional basis, then Hard Brexit will become inevitable. And it is important to be clear that it will be British choices, and not anyone else's, that will have caused this outcome.

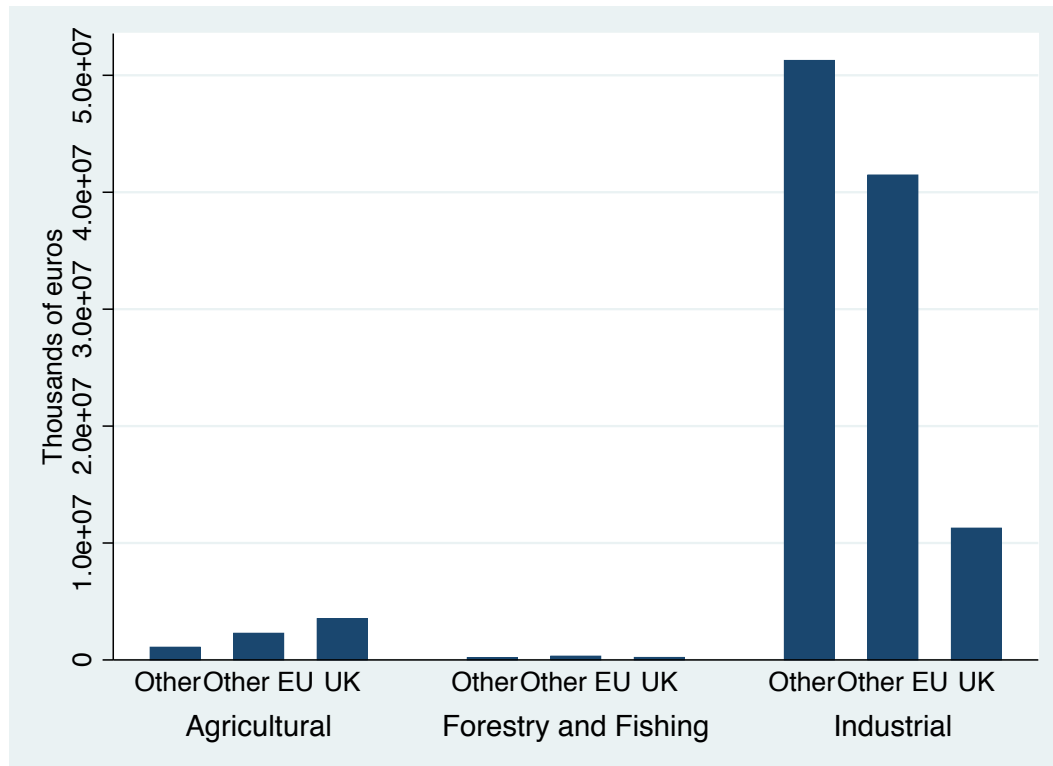


Figure 15. The destination of Irish exports, 2015

Source: CSO

The problem for Ireland is that, although our prosperity is based on our membership of the EU single market, a comparatively high share of Irish exports still goes to Britain. It's important to be clear: other European markets are far more important to us (Figure 15). They are, as I have emphasised, the basis of our prosperity. No sane Irish politician would choose the British market over the far larger European one. But Britain is still our major agricultural market, and many of our smaller, more labour-intensive indigenous industries still sell a lot there. This matters, since food and agricultural tariffs are particularly high, and since these sectors are more employment-intensive than some of the higher-profile multinational sectors.

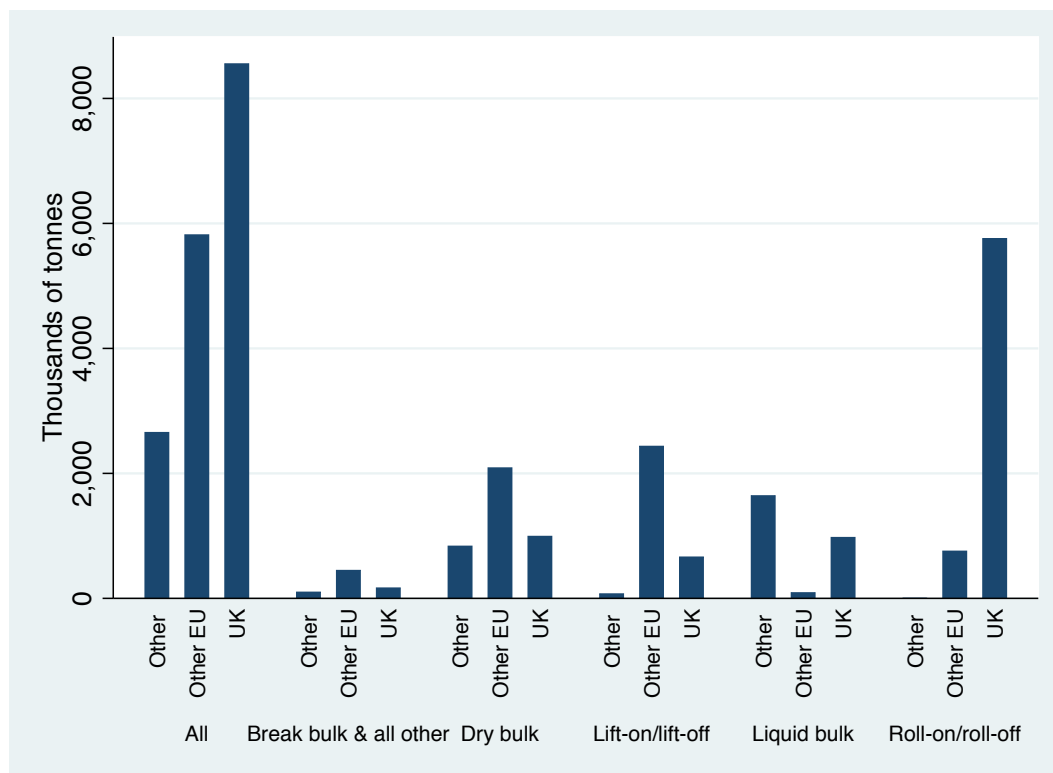


Figure 16. Merchandise trade, goods forwarded (absolute tonnage)

Source: CSO

Another potential concern is the very high share of Irish merchandise exports being shipped to, and in some cases through, the United Kingdom (Figure 16). Especially worrying is the large share of roll-on roll-off traffic going to the UK; it seems likely that those smaller, labour-intensive firms exporting food and other products, who risk losing sales to the UK, are predominantly exporting their products in this fashion. To what extent might customs

delays at Dover and Calais impose extra costs on them when they export to the Continent? We don't know yet, but it seems to me that this is also a potential concern.

What is clear is that Brexit is going to require that we adjust. How well we adjust will define our future prosperity over the course of the next couple of decades. But we're going to have to adjust anyway, probably, since the kind of hyper-globalization that we have been so good at exploiting is becoming politically unsustainable throughout the western world. We don't want to find ourselves on the wrong side of history.

We are hardly the first country to have faced this sort of external trade shock. Finland's problems in 1991, when it found itself having to cope with the consequences of the breakup of the Soviet Union, with whom a huge share of its trade had previously been conducted, were probably more serious than those that we are likely to face; its adjustment was exemplary. Late 19th century Denmark found itself facing higher tariff barriers in its traditional German market after 1879, as well as prohibitions on live cattle exports which lasted several years. It also successfully adjusted, switching into dairying and other activities targeting the British, rather than the German, market. Ireland itself had to adjust during the 1960s, as the manufacturing industries that had been built up during the protectionist era became exposed to international competition. We will have to do so again.

It is time to conclude. I have argued that Irish prosperity in recent decades has depended both on our membership of the European Union, and on our political independence which allowed us to make the most of that membership, by giving us the freedom to make policy choices that were suited to our own circumstances. Much the same has been true for several other small European countries: once again, our own national story is part of a larger picture. We are not so different as we sometimes think we are.

Of course we have made mistakes – it would have been odd had we not done so, especially in the context of the 20th century. But our mistakes were not particularly unusual, or especially egregious; and they were eventually remedied. And isn't it the case, whether we are dealing with individual human beings, or with entire nations, that having the freedom to

make your own mistakes, and learn from them, rather than being permanently subjected to the consequences of other peoples' mistakes, is what freedom is all about?

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NORTHERN IRELAND
NET FISCAL BALANCE REPORT
2012-13 AND 2013-14

October 2015

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EXECUTIVE SUMMARY

- This report provides an analysis of the public finances in Northern Ireland (NI), focusing on the expenditure and revenue generated within the region. The report includes data on 2012-13 and 2013-14 (the latest year for which data is available) for the first time and also updates estimates for earlier years (2009-10 to 2011-12).

Revenue

- Total (non-north Sea) public sector revenue collected in NI was estimated to be £14.8 billion in 2012-13 or 2.5 per cent of the UK total. Revenue collected grew slightly to £14.9 billion in 2013-14, or 2.5 per cent of the equivalent UK total
- Over the period 2009-10 to 2013-14 NI public sector revenue grew relatively significantly, showing an increase of 13.1 per cent. In comparison, UK revenue grew by 15.8 per cent over the same time period.

Expenditure

- In 2012-13, total public sector expenditure in NI was estimated to be £24.3 billion, or 3.4 per cent of the equivalent UK total. This figure decreased slightly to £24.1 billion in 2013-14, equivalent to 3.3 per cent of the UK total.
- 'Identifiable' public sector expenditure in NI was estimated to be £19.8 billion in 2012-13 or 3.6 per cent of the corresponding UK total. This increased slightly in 2013-14 to £20.1 billion, or 3.5 per cent of the UK total.
- 'Non-identifiable' expenditure was estimated at £2.9 billion in 2012-13 (2.8 per cent of the UK total). Accounting adjustments amounted to a further £1.6 billion or 2.7 per cent of the overall UK accounting adjustment. For 2013-14 non-identifiable expenditure was estimated at £2.9 billion or 2.8 per cent of the equivalent UK total. Accounting adjustments amounted to a further £1.1 billion or 2.5 per cent of the UK accounting adjustment figure.
- Total public sector expenditure in NI grew slightly from 2009-10 to 2013-14, increasing by 5.7 per cent. A similar trend was recorded in the UK where total public sector expenditure grew by 5.8 per cent.

Overall Fiscal Balance

- For 2012-13 the estimated fiscal balance in NI was a deficit of £9.5 billion (29.1 per cent of GVA). The 2013-14 'fiscal deficit' decreased to £9.2 billion (27.9 per cent of GVA).
- In 2012-13 the net fiscal balance or fiscal deficit in NI was equivalent to £5,187 per head, a figure considerably higher than the UK figure of

£1,999. As a percentage of GVA, the NI fiscal deficit was 29.1 per cent, again higher than the UK equivalent of 8.7 per cent.

- In 2013-14 the fiscal deficit was equivalent to £5,006 per head. This compared to a UK per head figure of £1,763. The NI fiscal deficit, as a percentage of GVA, was 27.9 per cent, which remained significantly higher than the UK equivalent of 7.5 per cent.
- Unless otherwise stated all estimates exclude North Sea oil revenue.
- The calculations employed to derive this net fiscal balance figure for NI require the estimation of several expenditure and revenue items. Therefore, the net fiscal balance estimates presented in this report are subject to some statistical uncertainty.
- The estimations throughout this report are not National Statistics.

SECTION 1: INTRODUCTION AND OVERVIEW

- 1.1 The purpose of this report is to provide an overview of public sector finances in Northern Ireland (NI) for the financial years 2009-10 to 2013-14. The expenditure and revenue analysis determines the 'net fiscal balance' for NI, estimated as aggregate public sector revenue less aggregate public sector expenditure.
- 1.2 As with previous reports in this series, the methodology applied continues to be generally consistent with that adopted by the Scottish Government in its annual publication 'Government Expenditure and Revenue in Scotland' (GERS)¹. While actual data has been used where possible, it has been necessary to make a number of apportionments based on NI's share of United Kingdom (UK) Gross Value Added (GVA)², population share or alternative methods.
- 1.3 The figures within this report are estimates and should therefore be viewed as such³. Variations in methodologies or the subsequent provision of more actual data could produce a more accurate reflection of the true fiscal balance. Particular caution should be used in relation to individual components of the fiscal balance as many revenue streams have been estimated and are not true values.
- 1.4 Users may be aware that HM Revenue and Customs (HMRC) published its third report providing a disaggregation of tax receipts between England, Scotland, Wales and Northern Ireland⁴ in October 2015. This report apportioned total UK tax receipts, tax credits and benefit payments administered by HMRC to England, Wales, Scotland and Northern Ireland. While the HMRC were able to draw on administrative data where it was available, comprehensive actual data on Northern Ireland receipts is not routinely available. Therefore as with the Net Fiscal Balance and GERS reports, HMRC also had to estimate the tax attributable to Northern Ireland using a variety of statistical techniques, including apportionment assumptions and adjustments where necessary. In some instances these are similar to those employed by DFP in producing the Net Fiscal Balance Report, while others differ. HMRC has acknowledged that a variety of alternative methodologies could justifiably be applied, which would lead to different estimates.
- 1.5 In terms of this 2012-13 and 2013-14 report for NI, the main estimates are produced using the methodology developed for the GERS report to

¹ Scottish Government (March 2015) 'Government Expenditure and Revenue in Scotland 2013-14'
<http://www.gov.scot/Resource/0047/00472877.pdf>

² Gross Domestic Product data is not available for Northern Ireland so Gross Value-Added (GVA) data is used instead. $GVA + \text{taxes on products} - \text{subsidies on products} = GDP$. Further note that the GVA figures used exclude Extra-Regio (off-shore contribution to GVA that cannot be assigned to any region).

³ Estimates have been revised from previous reports as a result of changes in methodology, the use of alternative data sources and revision of previous figures used.

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285765/disagg-info.pdf

maintain consistency with that and previous reports in the Net Fiscal Balance series. However a separate estimate of the net fiscal balance position based on the HMRC revenue data is also provided for comparison and completeness.

1.6 The remainder of this report is structured as follows:

Section 2: NI's Public Sector Accounts

1.7 Section 2 provides overall estimates of net fiscal balances in NI based on aggregate public sector revenue and expenditure estimates for the financial years 2009-10 to 2013-14.

Section 3: Public Sector Revenue

1.8 Section 3 presents estimates of NI's public sector revenue raised over the financial years 2009-10 to 2013-14.

Section 4: Public Sector Expenditure

1.9 Section 4 provides public sector expenditure estimates for NI over the financial years 2009-10 to 2013-14.

Section 5: Conclusion

1.10 This section summarises the main results of the analysis.

Annex A: Fiscal Background

1.11 Annex A contains a brief background to the public sector fiscal framework in NI and the UK.

Annex B: Public Sector Revenue Methodology

1.13 Annex B provides details on the methodology employed in this report to produce estimates of public sector revenue in NI.

Annex C: Public Sector Expenditure Methodology

1.14 Annex C presents details on the methodology employed to produce estimates of public sector expenditure in NI.

Annex D: NI's Public Sector Accounts (Exc. Non-Id & Acc. Adjustment)

1.15 Annex D illustrates an estimate of the NI fiscal balance based on identifiable expenditure only.

Annex E: NI's Public Sector Accounts (Inc. North Sea Oil)

- 1.16 Annex E illustrates an estimate of the NI fiscal balance including a per capita share of North Sea oil revenue.

SECTION 2: NI'S PUBLIC SECTOR ACCOUNTS

Introduction

- 2.1 This section presents an overview of NI's public sector accounts for the period 2009-10 to 2013-14, including estimates of the net fiscal balance over this five year period. It is important to bear in mind that the figures set out in this report are estimates subject to a margin of error and should be treated accordingly. Furthermore, as well as providing 2012-13 and 2013-14 figures for the first time, this report provides revised estimates for 2009-10 to 2011-12. Year-on-year comparisons should be made on the basis of the consistent estimates provided in this report.

Net Fiscal Balance 2012-13 and 2013-14

- 2.2 The 'net fiscal balance' shows the difference between total public sector revenue and total public sector expenditure (including accounting adjustments).
- 2.3 In 2012-13, NI recorded a negative net fiscal balance of £9.5 billion (or 29.1 per cent of GVA). In 2013-14, NI recorded a slightly lower negative fiscal balance of £9.2 billion, 27.9% of GVA.
- 2.4 Applying the NI methodology, in 2012-13 the total UK current budget deficit (excluding North Sea oil revenues) amounted to approximately £127 billion. This figure reduced to £113 billion in 2013-14.
- 2.5 The net fiscal balance or 'fiscal deficit' in NI was equivalent to £5,187 per head in 2012-13 and £5,006 per head in 2013-14. This compares to per head figures in the UK of £1,999 and £1,763 in 2012-13 and 2013-14 respectively. The NI fiscal deficit as a percentage of regional GVA was 29.1 per cent in 2012-13 and 27.9 per cent in 2013-14. In both years these were higher than the UK equivalent of 8.7 per cent and 7.5 per cent respectively.
- 2.6 Table 2.1 contains headline public sector revenue and expenditure figures relating to 2012-13 and 2013-14 estimates for NI and the UK.

Table 2.1: Net fiscal balance estimates: NI and the UK, 2013-14 (£m)

£ Million	2012-13		2013-14	
	NI	UK	NI	UK
Aggregate Expenditure	24,292	717,916	24,083	720,487
Aggregate Revenue	14,833	590,571	14,923	607,466
Net Fiscal Balance	-9,459	-127,345	-9,160	-113,021
Net Fiscal Balance per capita (£)	-5,187	-1,999	-5,006	-1,763
Net Fiscal Balance as a % of financial year GVA	-29.1%	-8.7%	-27.9%	-7.5%

Net Fiscal Balance 2009-10 to 2013-14

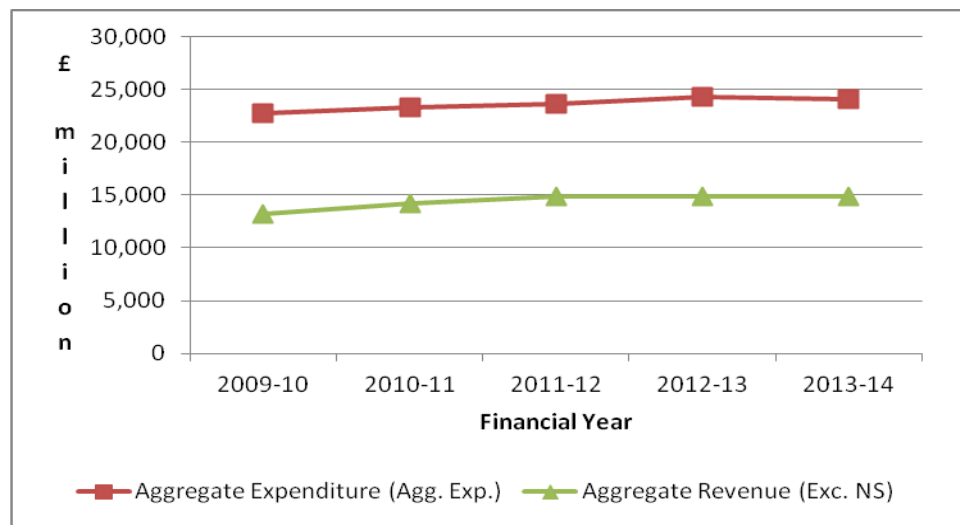
- 2.7 The remainder of this section profiles NI's fiscal position over the period 2009-10 to 2013-14, identifying trends in aggregate expenditure and revenue.
- 2.8 Table 2.2 shows how NI's fiscal deficit has decreased by approximately £0.4 billion over the period; from £9.6 billion in 2009-10 to £9.2 billion in 2013-14. As a percentage of regional GVA, the deficit decreased by 3.0 percentage points from 2009-10 to 2013-14. Within that 5 year period, the deficit dipped to a low of £8.9 billion in 2011-12 before increasing in 2012-13 to £9.5 billion.

Table 2.2: NI Fiscal Position 2009-10 to 2013-14

£ Million	NI				
	2009-10	2010-11	2011-12	2012-13	2013-14
Aggregate Expenditure	22,774	23,357	23,703	24,292	24,083
Aggregate Revenue	13,191	14,247	14,848	14,833	14,923
Net Fiscal Balance	-9,583	-9,110	-8,855	-9,459	-9,160
Net Fiscal Balance per capita (£)	-5,344	-5,048	-4,881	-5,187	-5,006
Net Fiscal Balance as a % of financial year GVA	-30.9%	-28.9%	-27.6%	-29.1%	-27.9%

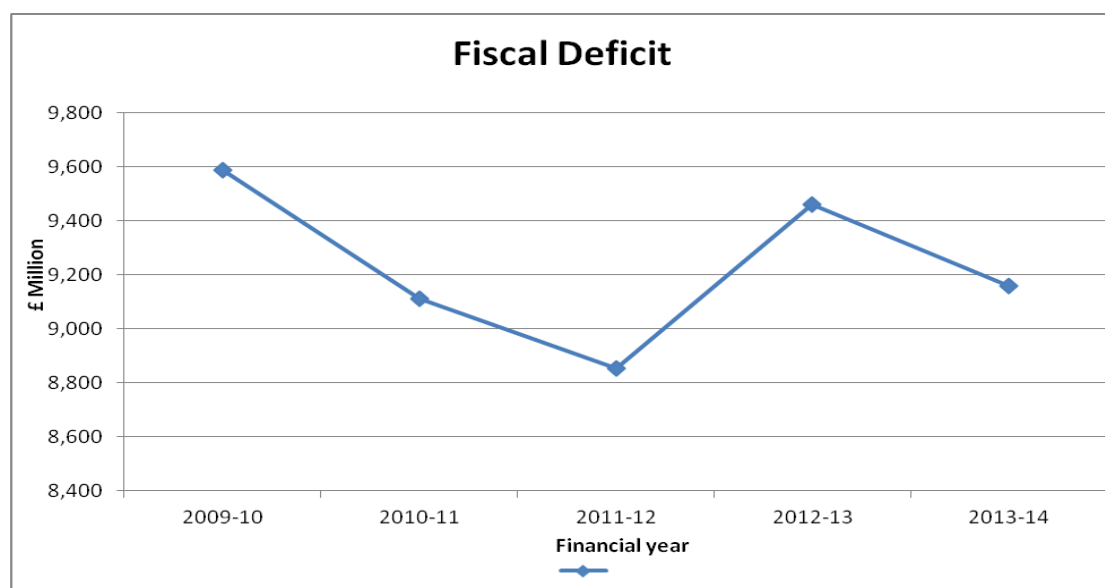
- 2.9 The information provided in this table is further illustrated in figures 2.3 and 2.4.
- 2.10 Figure 2.3 presents aggregate expenditure and revenue, highlighting NI's negative budget balance or 'deficit'. The gap between these two lines indicates the size of the NI deficit over the period 2009-10 to 2013-14.
- 2.11 Over the five year period, total spending increased by £1.3 billion (5.7 per cent) while estimated aggregate revenue increased by £1.7 billion (13.1 per cent), giving a net decrease in the NI fiscal deficit of approximately £0.4 billion (4.4 per cent).

Figure 2.3: NI Trends in Aggregate Revenue and Aggregate Expenditure, 2009-10 to 2013-14



2.12 Figure 2.4 illustrates the trend of the 'fiscal deficit' over the five year period 2009-10 to 2013-14. Decreases were recorded between 2009-10 and 2011-12. This coincides with increases in the 3 main revenue streams for Northern Ireland - income tax, NICs and VAT - and a decreasing rate of growth in government expenditure over this time period. Although an increase was recorded in the 'fiscal deficit' from 2011-12 to 2012-13, due to stagnant revenue and increased expenditure, it decreased over the most recent time period (2012-13 to 2013-14) by 3.2 per cent. This can be attributed to a decrease in expenditure coupled with increased revenue. Overall, the period of 2009-10 to 2013-14 witnessed a decrease in the 'fiscal deficit' of approximately 4.4 per cent.

Figure 2.4: NI Fiscal Deficit Position, 2009-10 to 2013-14



- 2.13 The NI fiscal position from 2009-10 to 2013-14 shows a broadly similar trend to that seen in the UK public finances where revenue grew by 15.8 per cent, while expenditure rose by 5.8 per cent.

Revenue

- 2.14 Table 2.5 details the main components of public sector revenue in NI over the period 2009-10 to 2013-14. A further disaggregation of revenue is presented in section 3.
- 2.15 In 2013-14, total estimated public sector revenue in NI was approximately £14.9 billion representing a significant increase of 13.1 per cent from 2009-10. Increased revenue from VAT contributed most in absolute terms to the increase in tax revenues.

Table 2.5: Summary of Total Public Sector Revenue in NI, 2009-10 to 2013-14 (£m)

Revenue Stream £ Million	NI				
	2009-10	2010-11	2011-12	2012-13	2013-14
Income tax	2,469	2,593	2,509	2,479	2,605
VAT	2,325	2,794	3,170	3,119	3,271
National Insurance Contributions (NICs)	2,051	2,091	2,173	2,235	2,295
Local Authority Revenue	1,000	1,028	1,057	1,105	1,123
Corporation tax (excluding NS revenues)	685	808	729	755	768
Fuel duties	876	901	886	869	880
Gross operating surplus & rent	1,908	1,989	2,090	2,191	1,982
Other Revenues	1,877	2,044	2,234	2,080	2,000
Current receipts (excluding NS revenues)	13,191	14,247	14,848	14,833	14,923

Note: figures may not sum to totals due to rounding.

Expenditure

- 2.16 Table 2.6 presents a summary of Total Expenditure on Services (TES) for the main spending functions in NI over the period 2009-10 to 2013-14. A more detailed breakdown of expenditure is provided in section 4, including the estimation of the accounting adjustment required to bring TES in line with Total Managed Expenditure (TME) – the principal public sector expenditure aggregate used in UK Public Finance Accounts.

Table 2.6: Summary of Total Public Sector Expenditure on Services (TES) in NI, 2009-10 to 2013-14 (£m)

Expenditure Category	NI				
	2009-10	2010-11	2011-12	2012-13	2013-14
Social protection	7,580	7,572	7,954	8,331	8,586
Health	3,466	3,621	3,658	3,863	3,899
Education	2,714	2,826	2,793	2,849	2,751
Public order and safety	1,367	1,499	1,488	1,442	1,410
Defence	1,089	1,133	1,107	1,039	1,038
General public services ¹	1,578	1,972	1,939	1,810	1,888
Other ²	3,885	3,568	3,499	3,371	3,419
Total	21,679	22,191	22,438	22,705	22,993

Note: figures may not sum to totals due to rounding.

1. This category is comprised of public and common services, international services, and debt interest.

2. This category is comprised of EU transactions, enterprise & economic development, science & technology, employment policies, agriculture, fisheries & forestry, transport, environment protection, housing & community amenities, and recreation, culture & religion.

Alternative Net Fiscal Balance 2013-14 estimate based on HMRC regional tax figures

2.17 As indicated in Section 1, HMRC has produced a report providing a disaggregation of tax receipts between England, Scotland, Wales and Northern Ireland. This provides alternative estimates for most tax revenues (except some that are locally raised such as rates income, and the non-cash item, gross operating surplus). The effect of applying these alternate HMRC estimates (where available) is to reduce total aggregate revenue for NI in 2013-14 from the £14.9bn included at Table 2.2 to £14.3bn. This in turn would increase the 2013-14 net fiscal balance from £9.2bn to £9.8bn.

SECTION 3: PUBLIC SECTOR REVENUE

Introduction

- 3.1 This section focuses on public sector revenues. As mentioned previously, there are a number of practical and theoretical difficulties that arise when allocating shares of UK tax revenue to each of its constituent countries as data on taxation is generally not available on a regional basis. Therefore, it has been necessary in some cases to estimate regional shares using reasoned assumptions. If more actual data was available this would lead to a more accurate reflection of total revenue raised in NI.
- 3.2 The data used to derive the figures for this report is taken from the Office for National Statistics (ONS) PSAT2 Database. Details of the methodology employed and the various sources of data used in estimating total public sector revenue in NI are provided in Annex B. In particular, table B1 provides a summary of the apportionment method applied and the source of data used to estimate each revenue stream.
- 3.3 North Sea oil revenues are excluded from this public sector revenue estimation. For a hypothetical exercise including a per capita share of North Sea revenues allocated to NI, refer to Annex E.

Estimated Revenue 2013-14

- 3.4 The estimates of revenue generated in NI and the UK for 2013-14 are presented in Table 3.1. The table also shows the estimated contribution from each revenue stream and the proportion of UK revenue raised in NI. Based on the calculations, NI revenues are estimated at £14.9 billion in 2013-14 or 2.5 per cent of the UK total non-North Sea revenue.

Table 3.1: Current Revenue: NI and UK 2013-14

Revenue Stream	UK (£ million)	NI (£ million)	Share of UK
Income tax (net of tax credits)	156,011	2,605	1.7%
Corporation tax (excluding North Sea revenues)	35,623	768	2.2%
Capital gains tax	3,907	86	2.2%
Inheritance tax	3,401	43	1.3%
Stamp duties	12,479	147	1.2%
National Insurance Contributions (NICs)	107,306	2,295	2.1%
VAT	120,226	3,271	2.7%
Fuel duties	26,881	880	3.3%
Tobacco duty	9,556	436	4.6%
Alcohol Duties	10,308	238	2.3%
Betting & Gaming duties	1,645	72	4.4%
Air Passenger duty	3,003	83	2.8%
Insurance Premium tax	3,018	78	2.6%
Land fill tax	1,179	30	2.5%
Climate Change Levy	1,200	27	2.3%
Aggregates levy	294	6	2.2%
VED	6,121	174	2.8%
Business rates (non-domestic rates)	24,493	566	2.3%
Council Tax (domestic rates)	27,360	557	2.0%
Other taxes & royalties ¹	12,677	333	2.6%
Interest & dividends	5,592	161	2.9%
Gross operating surplus and rent	31,939	1,982	6.2%
Other taxes on income and wealth	3,247	84	2.6%
Current Receipts (excluding North Sea Revenues)	607,466	14,923	2.5%
North Sea Revenues (NI on a per capita basis) ²	4,766	136	2.9%
Current Receipts (including North Sea Revenues)	612,232	15,059	2.5%

¹ Includes money paid into the National Lottery Distribution Fund.

² Consists of North Sea corporation tax, petroleum revenue tax and royalties.

3.5 The main sources of NI estimated tax receipts were: income tax (net of tax credits) amounting to £2.6 billion; Value-Added Tax (VAT) amounting to £3.3 billion; and National Insurance Contributions (NICs) amounting to £2.3 billion. Collectively, these estimated receipts accounted for around 55 per cent of NI public sector revenue in 2013-14.

3.6 Table 3.2 shows NI receipts and their respective proportion of total estimated NI public sector revenue.

Table 3.2: Current Revenue in NI 2013-14

Revenue Stream	NI (£ million)	Share of NI Total
Income tax (net of tax credits)	2,605	17.5%
Corporation tax (excluding North Sea revenues)	768	5.1%
Capital gains tax	86	0.6%
Inheritance tax	43	0.3%
Stamp duties	147	1.0%
National Insurance Contributions (NICs)	2,295	15.4%
VAT	3,271	21.9%
Fuel duties	880	5.9%
Tobacco duty	436	2.9%
Alcohol Duties	238	1.6%
Betting & Gaming duties	72	0.5%
Air Passenger duty	83	0.6%
Insurance Premium tax	78	0.5%
Land fill tax	30	0.2%
Climate Change Levy	27	0.2%
Aggregates levy	6	0.0%
VED	174	1.2%
Business rates (non-domestic rates)	566	3.8%
Council Tax (domestic rates)	557	3.7%
Other taxes & royalties ¹	333	2.2%
Interest & dividends	161	1.1%
Gross operating surplus & rent	1,982	13.3%
Other taxes on income and wealth	84	0.6%
Current Receipts (excluding North Sea Revenues)	14,923	100.0%

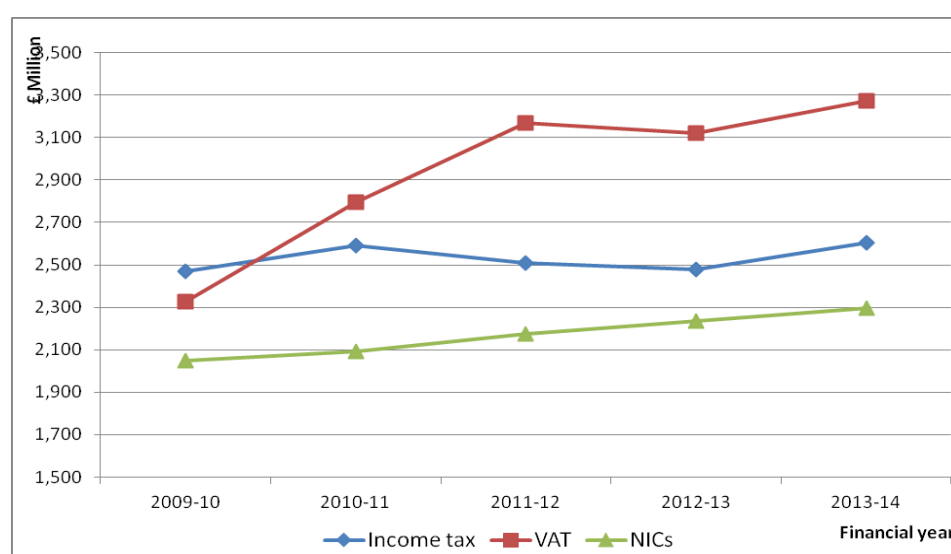
Note: figures may not sum to totals due to rounding.

¹ Includes money paid into the National Lottery Distribution Fund.

Estimated Revenue 2009-10 to 2013-14

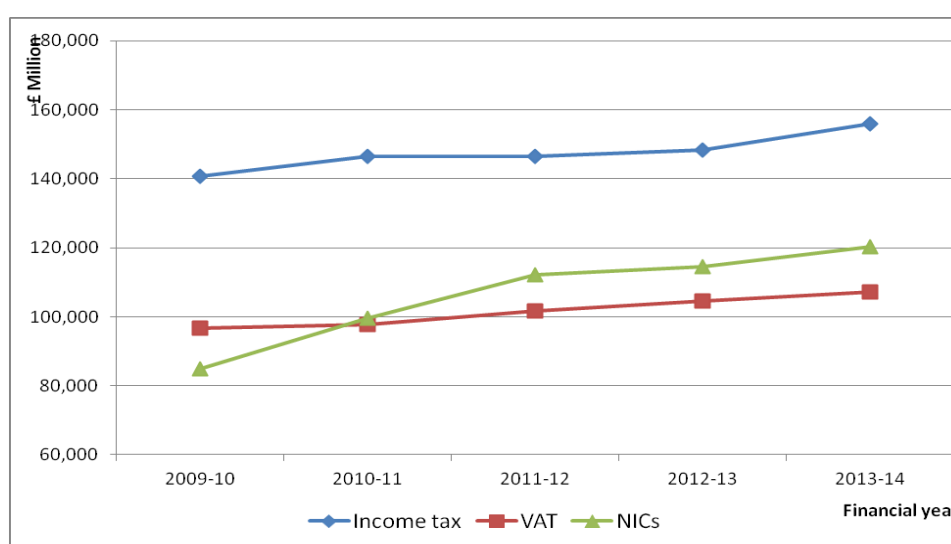
- 3.7 Figures 3.3 and 3.4 illustrate the trends in NI and the UK respectively for each of the three largest revenue categories (namely income tax, VAT, and NICs).

Figure 3.3: Trend of NI Largest Revenue Categories, 2009-10 to 2013-14



3.8 In NI income tax, VAT and NICs have all experienced growth in the 5 years from 2009-10 to 2013-14. VAT in particular has experienced significant growth from 2009-10 to 2011-12, which can be partly attributed to the rise in the VAT rate from 17.5% to 20% in January 2011. Likewise, income tax, VAT and NICs have experienced growth in the UK over the same period. Figure 3.3 shows that NI VAT revenues are now higher than income tax revenues. Comparatively, in the UK income tax receipts continue to be substantially higher than the other main sources of revenue.

Figure 3.4: Trend of UK Largest Revenue Categories, 2009-10 to 2013-14



3.9 Table 3.5 shows estimates of UK and NI revenue for the period 2009-10 to 2013-14.

Table 3.5: Estimated Revenue Trend for UK and NI 2009-10 to 2013-14

£ Million	UK					NI				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Income tax (net of tax credits)	140,606	146,628	146,548	148,435	156,011	2,469	2,593	2,509	2,479	2,605
Corporation tax (excluding NS revenues)	30,737	35,173	33,225	34,977	35,623	685	808	729	755	768
Capital gains tax	2,504	3,589	4,336	3,926	3,907	58	82	98	87	86
Inheritance tax	2,386	2,716	2,905	3,106	3,401	36	34	30	39	43
Stamp duties	7,904	8,931	8,919	9,140	12,479	132	135	124	112	147
National Insurance Contributions (NICs)	96,638	97,747	101,597	104,483	107,306	2,051	2,091	2,173	2,235	2,295
VAT	84,825	99,523	112,067	114,465	120,226	2,325	2,794	3,170	3,119	3,271
Fuel duties	26,197	27,256	26,798	26,571	26,881	876	901	886	869	880
Tobacco duty	9,462	9,305	9,878	9,590	9,556	516	475	504	437	436
Alcohol duties	9,246	9,434	10,180	10,139	10,308	223	223	405	354	238
Betting & Gaming duties	1,029	1,069	1,221	1,228	1,645	28	43	49	54	72
Air Passenger duty	1,870	2,183	2,637	2,818	3,003	60	66	73	78	83
Insurance Premium tax	2,262	2,509	3,002	3,033	3,018	59	67	80	79	78
Land fill tax	944	1,094	1,075	1,116	1,179	29	32	28	29	30
Climate Change Levy	687	660	678	663	1,200	14	13	17	15	27
Aggregates levy	276	294	283	261	294	6	7	6	6	6
VED	5,692	5,789	5,930	6,003	6,121	164	167	171	170	174
Business rates (non-domestic rates)	21,500	21,527	22,691	23,865	24,493	510	524	533	557	566
Council Tax (domestic rates)	25,069	25,555	25,767	26,118	27,360	490	504	524	548	557
Other taxes & royalties ¹	13,287	13,716	14,902	14,077	12,677	359	393	410	379	333
Interest & dividends	4,852	5,493	5,648	5,510	5,592	141	159	164	160	161
Gross operating surplus and rent	34,605	35,428	36,307	37,932	31,939	1,908	1,989	2,090	2,191	1,982
Other taxes on income and wealth	2,037	6,050	2,901	3,115	3,247	52	149	76	81	84
Current receipts (excluding NS revenues)	524,615	561,669	579,495	590,571	607,466	13,191	14,247	14,848	14,833	14,923
<i>North Sea revenues (per capita basis)²</i>	5,991	8,406	10,958	6,214	4,766	173	242	314	178	136
Current Receipts (including NS revenues)	530,606	570,075	590,453	596,785	612,232	13,363	14,489	15,162	15,011	15,059

See footnotes 1 & 2 at Table 3.1

3.10 Table 3.6 identifies the growth rate of each revenue category over the periods 2009-10 to 2013-14 and 2012-13 to 2013-14 for both the UK and NI.

Table 3.6: % Growth in Revenue between 2009-10 and 2013-14

£ Million	2009-10 to 2013-14		2012-13 to 2013-14	
	UK % Growth	NI % Growth	UK % Growth	NI % Growth
Income tax (net of tax credits)	11.0%	5.5%	5.1%	5.1%
Corporation tax (excluding NS revenues)	15.9%	12.1%	1.8%	1.7%
Capital gains tax	56.0%	47.2%	-0.5%	-2.0%
Inheritance tax	42.5%	19.4%	9.5%	10.3%
Stamp duties	57.9%	11.4%	36.5%	31.4%
National Insurance Contributions (NICs)	11.0%	11.9%	2.7%	2.7%
VAT	41.7%	40.7%	5.0%	4.9%
Fuel duties	2.6%	0.4%	1.2%	1.2%
Tobacco duty	1.0%	-15.5%	-0.4%	-0.4%
Alcohol duties	11.5%	6.7%	1.7%	-32.9%
Betting & Gaming duties	59.9%	155.2%	34.0%	34.0%
Air Passenger duty	60.6%	38.3%	6.6%	6.4%
Insurance Premium tax	33.4%	33.6%	-0.5%	-0.5%
Land fill tax	24.9%	2.1%	5.6%	4.0%
Climate Change Levy	74.7%	89.5%	81.0%	80.0%
Aggregates levy	6.5%	0.5%	12.6%	11.0%
VED	7.5%	6.1%	2.0%	2.4%
Business rates (non-domestic rates)	13.9%	11.0%	2.6%	1.6%
Council Tax (domestic rates)	9.1%	13.7%	4.8%	1.6%
Other taxes & royalties ¹	-4.6%	-7.1%	-9.9%	-12.0%
Interest & dividends	15.3%	14.1%	1.5%	1.1%
Gross operating surplus & rent	-7.7%	3.9%	-15.8%	-9.5%
Other receipts & accounting adjustments	59.4%	63.5%	4.2%	3.4%
Current receipts (excluding NS revenues)	15.8%	13.1%	2.9%	0.6%
North Sea revenues (per capita basis)²	-20.4%	-21.2%	-23.3%	-23.5%
Current Receipts (including NS revenues)	15.4%	12.7%	2.6%	0.3%

See footnotes 1 & 2 at Table 3.1

HMRC Revenue estimates for Northern Ireland

3.13 Table 3.7 compares the 2013-14 tax revenue estimates from the NI Net Fiscal Balance report and the HMRC report. It has not been possible to compare all revenue streams as some are included in the NI Net Fiscal balance report but not in the HMRC report and vice versa. The comparison highlights a number of differences in the estimates, however the most significant revenue stream not included in the HMRC report is Gross Operating Surplus & Rent (a non-cash item), which accounts for almost £2.0bn of the total revenue estimate in the Net Fiscal Balance report.

Table 3.7: Comparison of Revenue Estimates – NFB and HMRC

Tax Revenue Stream	NFB 2013-14 (£million)	HRMC 2013-14 (£million)
Income tax (net of tax credits)	2,605	2,620
Corporation tax (excluding NS revenues)	768	478
Capital gains tax	86	34
Inheritance tax	43	38
Stamp duties	147	37
National Insurance Contributions (NICs)	2,295	2,282
VAT	3,271	2,972
Fuel duties	880	905
Tobacco duty	436	434
Alcohol duties	238	312
Betting & Gaming duties	72	61
Air Passenger duty	83	87
Insurance Premium tax	78	78
Land fill tax	30	29
Climate Change Levy	27	9
Aggregates levy	6	34
VED	174	N/A
Business rates (non-domestic rates)	566	N/A
Council Tax (domestic rates)	557	N/A
Other taxes & royalties	333	N/A
Interest & dividends	161	N/A
Gross operating surplus & rent	1,982	N/A
Other taxes on income and wealth	84	N/A
Customs Duties	N/A	64
Child and Working Tax Credits	N/A	1,055
Child Benefit	N/A	377
Swiss Capital Tax	N/A	13
Annual tax on enveloped dwellings	N/A	2

- 3.14 Table 3.8 shows that the NI fiscal deficit is estimated at £9.8bn using the HMRC tax revenue estimates. This is a difference of 6.9 per cent compared to the estimate using the methodology developed through the GERS report. As a percentage of GVA, the fiscal deficit estimate using HMRC data is 2.0 percentage points higher than the estimate calculated using the GERS methodology and the fiscal deficit per capita is 6.9 per cent higher at £5,365.

Table 3.8: Net Fiscal Balance estimates using HMRC revenue data

£ Million	2013-14 NI
Aggregate Expenditure	24,083
Aggregate Revenue	14,267
Net Fiscal Balance	-9,816
Net Fiscal Balance per capita (£)	-5,365
Net Fiscal Balance as a % of financial year GVA	-29.9%

SECTION 4: PUBLIC SECTOR EXPENDITURE

Introduction

- 4.1 This section provides a more detailed analysis of public expenditure in NI. The estimates presented are based on data contained in the November 2014⁵ Country and Regional Analysis (CRA) of HM Treasury's 'Public Expenditure Statistical Analysis' publication⁶ (hereafter referred to as PESA).
- 4.2 In accordance with PESA, public expenditure data has been disaggregated into three components: identifiable expenditure; non-identifiable expenditure; and an accounting adjustment. Identifiable expenditure is that which can be recognised as benefiting individuals, enterprises or communities within particular regions. Examples of identifiable expenditure include welfare payments and most health and education expenditure.
- 4.3 Non-identifiable expenditure is incurred on behalf of the UK as a whole and cannot be apportioned to an individual country or region. The largest element of non-identifiable expenditure is defence expenditure. For example, defence spend benefits the UK as a single entity rather than specific parts. Debt interest payments, defence, and international services are typically the largest elements of non-identifiable expenditure.
- 4.4 A hypothetical exercise estimating the NI fiscal balance excluding non-identifiable spending and the accounting adjustment is attached at Annex D of this report. However, clearly there are aspects of total UK public expenditure that need to be considered.
- 4.5 Both identifiable and non-identifiable expenditure consist of current and capital expenditure. Current expenditure includes items such as welfare payments and public sector pay. Capital expenditure largely comprises spend on infrastructure such as roads, schools and hospitals. Total identifiable and total non-identifiable expenditure sum to produce an estimate of Total Expenditure on Services (TES). An accounting adjustment is then required to bring TES into line with Total Managed Expenditure (TME), the principal public sector expenditure aggregate used in UK Public Finance Accounts.

⁵ See Annex C for more detail

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/380589/Country_and_Regional_Analysis_November_2014_Combined.pdf

In Summary:

- **Identifiable (Current + Capital) + Non-Identifiable (Current + Capital) = Total Expenditure on Services**
- **Total Expenditure on Services + Accounting Adjustment = Total Managed Expenditure**

Total Expenditure on Services

4.6 Table 4.1 shows estimated public sector TES for NI by expenditure category in 2013-14. Based on the methodologies adopted in this report, TES was estimated at £23.0 billion in NI. This was equivalent to 3.4 per cent of total UK public sector expenditure. The largest expenditure component was social protection, which accounted for 37.3 per cent of NI TES. Health and education were the next largest spending categories, accounting for respective TES shares of 17.0 per cent and 12.0 per cent.

Table 4.1: NI Total Expenditure on Services (TES), 2013-14

	Northern Ireland	
	Expenditure £ million	Share of Total Expenditure
Public and common services	542	2.4%
EU transactions	93	0.4%
International services	288	1.3%
Debt interest	1,059	4.6%
Defence	1,038	4.5%
Public order and safety	1,410	6.1%
Enterprise and economic development	316	1.4%
Science and technology	98	0.4%
Employment policies	176	0.8%
Agriculture, fisheries and forestry	537	2.3%
Transport	541	2.4%
Environment protection	267	1.2%
Housing and community amenities	825	3.6%
Health	3,899	17.0%
Recreation, culture and religion	565	2.5%
Education	2,751	12.0%
Social protection	8,586	37.3%
Total¹	22,993	100.0%

1. The sum of the constituent items may not always agree exactly with the total shown due to rounding.

4.7 Table 4.2 details total current and capital expenditure for NI and the UK over the period 2009-10 to 2013-14.

Table 4.2: Total Current and Capital Expenditure on Services (TES): NI and the UK 2009-10 to 2013-14 (£m)

	NI					UK				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Current	19,574	20,371	20,836	21,196	21,471	572,754	600,131	606,732	617,044	629,721
Capital	2,105	1,820	1,602	1,509	1,522	65,125	55,133	45,967	42,761	47,651
Total ¹	21,679	22,191	22,438	22,705	22,993	637,879	655,264	652,699	659,805	677,372

1. The sum of the constituent items may not always agree exactly with the total shown due to rounding. The UK total presented is taken directly from PESA.

4.8 Table 4.3 provides the shares of NI TES attributed to current and capital expenditure. From 2009-10 to 2013-14, capital expenditure decreased as a proportion of total expenditure annually, from 9.7 per cent in 2009-10 to 6.6 per cent in 2013-14.

Table 4.3: Current and Capital Expenditure (% of Total Expenditure): NI and the UK 2009-10 to 2013-14

	NI					UK				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Current	90.3%	91.8%	92.9%	93.4%	93.4%	89.8%	91.6%	93.0%	93.5%	93.0%
Capital	9.7%	8.2%	7.1%	6.6%	6.6%	10.2%	8.4%	7.0%	6.5%	7.0%

4.9 Tables 4.4 and 4.5 present TES by current and capital expenditure for NI and the UK.

4.10 Over the period 2009-10 to 2013-14, estimated TES increased from £21.7 billion to £23.0 billion in NI, an increase of 6.1 per cent. UK TES increased from £637.9 billion to £677.4 billion over the same period, a similar increase of 6.2 per cent.

4.11 Current expenditure by the NI public sector accounts for approximately 93 per cent of TES in both NI and the UK. Between 2009-10 and 2013-14 current expenditure increased by 9.7 per cent in NI and by 9.9 per cent in the UK.

4.12 In comparison, NI public sector capital expenditure accounts for around 7.0 per cent of TES. Overall, capital expenditure declined by 27.7 per cent in Northern Ireland and by 26.8 per cent in the UK as a whole over the period 2009-10 to 2013-14.

Table 4.4: NI Total Expenditure on Services (TES), 2009-10 to 2013-14 (£m)

	Current					Capital					Total				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	509	524	475	474	494	74	62	38	31	48	583	586	513	505	542
EU transactions	80	97	100	92	93	0	0	0	0	0	80	97	100	92	93
International services	189	210	211	212	270	17	21	17	16	17	206	231	228	228	287
Debt interest	789	1,155	1,198	1,077	1,059	0	0	0	0	0	789	1,155	1,198	1,077	1,059
Defence	972	1,009	1,003	940	945	117	124	104	99	93	1,089	1,133	1,107	1,039	1,038
Public order and safety	1,285	1,418	1,399	1,364	1,341	82	81	89	78	69	1,367	1,499	1,488	1,442	1,410
Enterprise and economic development ¹	250	195	205	267	270	256	82	63	40	47	506	277	268	307	317
Science and technology	84	86	78	84	86	8	7	8	4	12	92	93	86	88	98
Employment policies	133	170	158	152	176	1	0	0	0	0	134	170	158	152	176
Agriculture, fisheries and forestry	540	506	470	459	485	22	24	32	35	52	562	530	502	494	537
Transport	260	296	301	305	294	329	409	309	273	248	589	705	610	578	542
Environment protection	244	240	253	242	238	9	19	16	18	29	253	259	269	260	267
Housing and community amenities	530	403	486	445	434	592	431	476	375	391	1,122	834	962	820	825
Health	3,278	3,418	3,463	3,548	3,648	188	203	195	315	251	3,466	3,621	3,658	3,863	3,899
Recreation, culture and religion	435	483	459	488	431	112	120	85	92	133	547	603	544	580	564
Education	2,443	2,602	2,635	2,719	2,621	271	224	158	130	130	2,714	2,826	2,793	2,849	2,751
Social protection	7,553	7,559	7,942	8,328	8,584	27	13	12	3	2	7,580	7,572	7,954	8,331	8,586
Total	19,574	20,371	20,836	21,196	21,471	2,105	1,820	1,602	1,509	1,522	21,679	22,191	22,438	22,705	22,993

1. The sum of the constituent items may not always agree exactly with the total shown due to rounding.

Table 4.5: UK Total Expenditure on Services (TES), 2009-10 to 2013-14 (£m)

	Current					Capital					Total				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	11933	11125	10465	10045	10305	1819	1635	1111	1267	1831	13752	12760	11576	11312	12136
EU transactions	904	3,628	2,034	4,307	5,174	0	0	0	0	0	904	3,628	2,034	4,307	5,174
International services	6,537	7,257	7,360	7,407	9,474	596	743	592	546	621	7,133	8,000	7,952	7,953	10,095
Debt interest	27,258	39,953	41,791	37,641	37,109	0	0	0	0	0	27,258	39,953	41,791	37,641	37,109
Defence	33,652	34,982	35,056	32,899	33,169	4,060	4,305	3,606	3,456	3,261	37,712	39,287	38,662	36,355	36,430
Public order and safety	31,432	31,014	30,509	29,936	28,674	2,686	2,002	1,525	1,364	1,491	34,118	33,016	32,034	31,300	30,165
Enterprise and economic development ²	5,126	2,792	3,256	3,933	4,224	7,110	2,024	1,595	938	1,051	12,236	4,816	4,851	4,871	5,275
Science and technology	2,819	2,885	2,957	3,107	3,325	734	521	607	492	1,114	3,553	3,406	3,564	3,599	4,439
Employment policies	3,953	4,603	3,170	2,986	3,852	144	94	83	100	76	4,097	4,697	3,253	3,086	3,928
Agriculture, fisheries and forestry	5,549	5,150	5,522	4,990	5,044	273	329	270	305	439	5,822	5,479	5,792	5,295	5,483
Transport	9,767	8,830	8,375	7,861	8,055	13,204	12,660	11,667	10,910	12,319	22,971	21,490	20,042	18,771	20,374
Environment protection	8,188	8,145	8,212	7,716	8,141	2,209	2,784	2,250	2,888	3,374	10,397	10,929	10,462	10,604	11,515
Housing and community amenities	4,018	3,219	2,732	3,175	3,146	12,326	9,900	7,314	6,773	8,590	16,344	13,119	10,046	9,948	11,736
Health	110,737	114,437	116,987	119,491	124,772	6,180	5,389	4,249	4,782	4,710	116,917	119,826	121,236	124,273	129,482
Recreation, culture and religion	10,383	10,380	9,797	10,852	9,442	2,796	2,582	2,714	1,879	2,225	13,179	12,962	12,511	12,731	11,667
Education	78,550	82,351	79,108	80,652	84,263	9,934	9,148	7,789	6,633	6,758	88,484	91,499	86,897	87,285	91,021
Social protection	221,948	229,380	239,401	250,046	251,552	1,053	1,018	595	427	-208	223,001	230,398	239,996	250,473	251,344
Total¹	572,754	600,131	606,732	617,044	629,721	65,124	55,134	45,967	42,760	47,652	637,878	655,265	652,699	659,804	677,373

1. The sum of the constituent items may not always agree exactly with the total shown due to rounding. The total presented is taken directly from PESA 2014.

4.13 Figures 4.6 and 4.7 show similar trends in the growth of the three largest expenditure categories in both NI and the UK respectively. The largest categories in both regions are social protection (which covers expenditure on welfare payments and so on), followed by health expenditure and then by expenditure on education.

Figure 4.6: Trend of NI Largest Expenditure Categories, 2009-10 to 2013-14

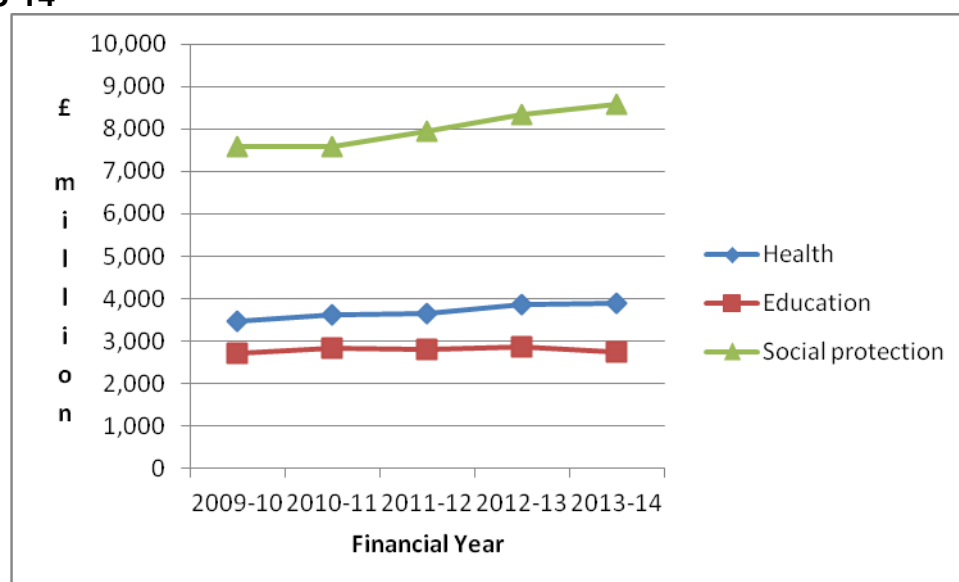
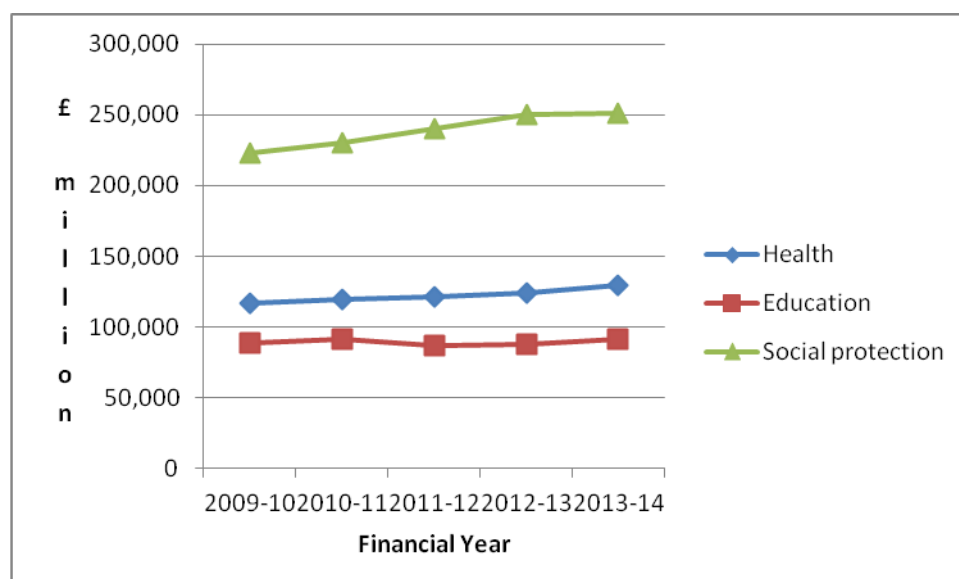


Figure 4.7: Trend of UK Largest Expenditure Categories, 2009-10 to 2013-14



4.14 Per capita TES spend for both NI and the UK is presented in Table 4.8. TES per capita for NI was estimated at £12,556 in 2013-14; 20.0 per cent (£2,052) higher than UK TES per capita.

4.15 TES per capita is generally higher in NI across most spending categories. In absolute terms, the greatest differences on a per capita basis occurred in social protection and public order & safety, which were £772 and £300 higher respectively in NI than in the UK.

Table 4.8: Total Expenditure on Services (TES) per capita: NI and UK, 2013-14 ¹

	NI (£)	UK (£)	Difference (NI less UK)	Relative Expenditure for NI (UK=100)
Public and common services	296	189	107	156
EU transactions	52	81	-29	64
International services	157	157	-1	100
Debt interest	579	579	0	100
Defence	567	568	-1	100
Public order and safety	771	471	300	164
Enterprise and economic development	173	82	91	211
Science and technology	54	69	-16	77
Employment policies	96	61	35	157
Agriculture, fisheries and forestry	293	86	208	343
Transport	296	318	-22	93
Environment protection	146	180	-34	81
Housing and community amenities	451	183	268	246
Health	2,131	2,020	111	106
Recreation, culture and religion	308	182	126	169
Education	1,504	1,420	84	106
Social protection	4,693	3,921	772	120
Total	12,556	10,504	2,052	120

1. Figures in this table have been rounded to the nearest whole number.

4.16 As might be expected public expenditure on services varies across the UK regions. NI public expenditure per capita differs from the UK average for a number of reasons. Higher public expenditure per capita in NI may be a reflection of the relative importance of particular activities, such as agriculture, forestry and fisheries. NI also has a lower population density than the UK which may partly explain the relative cost of providing a given level of public services, particularly in services such as health and education.

4.17 Furthermore, the range of activities classified within the public sector differs across the UK regions. This therefore affects the level of public expenditure required within those regions. For instance, water and sewerage services are within the public sector's remit in NI but are provided by the private sector in England.

Identifiable and Non-identifiable Expenditure

- 4.18 Public sector TES for NI may be disaggregated into identifiable expenditure and non-identifiable expenditure. In 2013-14, UK identifiable expenditure accounted for 81.8 per cent of UK TES. The remaining non-identifiable expenditure cannot be attributed directly to the UK regions because it is incurred for the benefit of the UK as a whole (e.g. defence spending). For the purposes of this analysis a share of UK non-identifiable expenditure may be apportioned to NI on a share of either UK population or UK Gross Value Added (GVA). Annex C of this paper further outlines the assumptions and methodologies employed in the apportionment of non-identifiable expenditure.
- 4.19 TES is shown by identifiable and non-identifiable expenditure for NI over the period 2009-10 to 2013-14 in Table 4.9. Identifiable expenditure amounted to £20.1 billion in 2013-14 while non-identifiable expenditure totalled £2.9 billion (12.8 per cent of TES).

Table 4.9: NI Total Expenditure on Services (TES), Identifiable and Non-identifiable, 2009-10 to 2013-14 (£m) ¹

	Identifiable (ID)					Non-identifiable (Non-ID)					Total (ID + Non-ID)				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	441	456	383	379	417	142	131	130	125	126	583	587	513	504	543
EU transactions	0	0	0	0	0	80	97	100	92	93	80	97	100	92	93
International services	5	6	6	5	5	201	225	222	223	284	206	231	228	228	289
Debt interest	0	0	0	0	0	789	1,155	1,198	1,077	1,059	789	1,155	1,198	1,077	1,059
Defence	0	0	0	0	0	1,090	1,133	1,107	1,039	1,038	1,090	1,133	1,107	1,039	1,038
Public order and safety	1,302	1,448	1,440	1,398	1,382	64	51	48	44	28	1,366	1,499	1,488	1,442	1,410
Enterprise & economic development ²	370	320	284	289	298	136	-42	-16	17	18	506	278	268	306	316
Science and technology	78	80	73	79	88	14	13	13	9	10	92	93	86	88	98
Employment policies	134	171	158	152	176	0	0	0	0	0	134	171	158	152	176
Agriculture, fisheries and forestry	559	525	503	495	535	4	5	0	0	2	563	530	503	495	537
Transport	583	699	603	567	525	6	6	7	11	16	589	705	610	578	541
Environment protection	249	250	265	255	257	3	9	4	7	10	252	259	269	262	267
Housing & community amenities	1,122	834	962	820	824	0	0	0	0	0	1,122	834	962	820	824
Health	3,442	3,595	3,638	3,844	3,882	24	25	19	19	17	3,466	3,620	3,657	3,863	3,899
Recreation, culture and religion	412	463	416	462	458	135	140	128	118	106	547	603	544	580	564
Education	2,714	2,826	2,794	2,849	2,750	0	0	0	0	0	2,714	2,826	2,794	2,849	2,750
Social protection	7,478	7,460	7,839	8,207	8,458	102	112	115	124	129	7,580	7,572	7,954	8,331	8,587
Total	18,889	19,133	19,364	19,801	20,055	2,790	3,060	3,075	2,905	2,936	21,679	22,193	22,439	22,706	22,993

1. Non-identifiable expenditure figures above have apportioned 'Outside the UK' and 'Non-identifiable spending' figures from PESA.

2. The sum of the constituent items may not always agree exactly with the total shown due to rounding.

Identifiable Expenditure

4.20 Table 4.10 compares identifiable expenditure for NI and the UK in 2013-14. Identifiable expenditure in NI was similar to that of the UK, with social protection, health and education being the main spending categories.

Table 4.10: Identifiable Expenditure on Services: NI and UK, 2013-14

	NI		United Kingdom	
	Expenditure £ million	Share of Identifiable Expenditure	Expenditure £ million	Share of Identifiable Expenditure
Public and common services	417	2.1%	7,713	1.3%
International services	5	0.0%	159	0.0%
Defence	0	0.0%	70	0.0%
Public order and safety	1,382	6.9%	29,183	5.1%
Enterprise and economic development	298	1.5%	4,640	0.8%
Science and technology	88	0.4%	4,064	0.7%
Employment policies	176	0.9%	3,658	0.6%
Agriculture, fisheries and forestry	535	2.7%	5,405	0.9%
Transport	525	2.6%	19,666	3.4%
Environment protection	257	1.3%	11,159	1.9%
Housing and community amenities	824	4.1%	11,736	2.0%
Health	3,882	19.4%	128,894	22.5%
Recreation, culture and religion	458	2.3%	7,967	1.4%
Education	2,750	13.7%	91,017	15.9%
Social protection	8,458	42.2%	247,507	43.2%
Total	20,055	100.0%	572,838	100.0%

4.21 Table 4.11 presents a NI/UK per capita comparison of identifiable expenditure. In 2013-14, identifiable expenditure per capita in NI was £10,961, which was 22.7 per cent higher than the corresponding UK figure. In absolute terms, the greatest differences occurred in public order and safety, social protection and housing and community amenities.

Table 4.11: Identifiable Expenditure per capita, 2013-14 ¹

	NI	UK	Difference (NI less UK)	Relative Expenditure (UK = 100)
Public and common services	228	120	108	189
International Services	3	2	0	110
Defence	0	1	-1	0
Public order and safety	755	455	300	166
Enterprise and economic development	163	72	90	225
Science and technology	48	63	-15	76
Employment policies	96	57	39	169
Agriculture, fisheries and forestry	292	84	208	347
Transport	287	307	-20	94
Environment protection	140	174	-34	81
Housing and community amenities	450	183	267	246
Health	2,122	2,011	111	106
Recreation, culture, and religion	250	124	126	201
Education	1,503	1,420	83	106
Social protection	4,623	3,861	762	120
Total	10,961	8,936	2,025	123

1. Figures in this table have been rounded to the nearest whole number.

Non-identifiable expenditure

- 4.22 This section presents a breakdown of non-identifiable expenditure on services in NI and the UK.
- 4.23 PESA contains data on non-identifiable expenditure as well as on expenditure incurred on programmes outside the UK. In order to ensure that the data is comparable, expenditure incurred outside the UK has been included within non-identifiable expenditure for both NI and the UK. The rationale for including such expenditure in non-identifiable expenditure rests on the fact that benefits are shared among the UK constituent countries. An example of this is the service provided by overseas UK embassies to all UK residents.
- 4.24 Table 4.12 provides estimates of non-identifiable expenditure for NI and the UK over the period 2009-10 to 2013-14. Tables 4.13 and 4.14 disaggregate non-identifiable expenditure into its current and capital components both for NI and the UK respectively.
- 4.25 In 2013-14, total non-identifiable expenditure attributed to NI was estimated at £2.9 billion, 2.8 per cent of the UK figure. Defence and debt interest were the largest elements, accounting for 71.4 per cent of non-identifiable expenditure apportioned to NI.
- 4.26 Tables 4.13 and 4.14 indicate that in 2013-14 current expenditure accounted for 95.2 per cent of non-identifiable expenditure in NI and for 95.9 per cent in the UK.

Table 4.12: NI and UK Non-identifiable expenditure, 2009-10 to 2013-14 (£m) ¹

	NI					UK				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	142	131	130	125	126	4894	4533	4518	4370	4423
EU transactions	80	97	100	92	93	904	3,628	2,034	4,307	5,174
International services	201	225	222	223	284	6,954	7,786	7,748	7,780	9,936
Debt interest	789	1,155	1,198	1,077	1,059	27,258	39,953	41,791	37,641	37,109
Defence	1,090	1,133	1,107	1,039	1,038	37,634	39,212	38,601	36,288	36,360
Public order and safety	64	51	48	44	28	2,199	1,773	1,668	1,533	981
Enterprise & economic development	136	-42	-16	17	18	4,711	-1,457	-572	607	634
Science and technology	14	13	13	9	10	505	484	492	330	375
Employment policies	0	0	0	0	0	0	1	1	1	1
Agriculture, fisheries and forestry	4	5	0	0	2	151	179	38	4	78
Transport	6	6	7	11	16	246	243	271	475	709
Environment protection	3	9	4	7	10	120	296	156	234	355
Housing & community amenities	0	0	0	0	0	0	0	0	0	0
Health	24	25	19	19	17	817	881	675	677	589
Recreation, culture and religion	135	140	128	118	106	4,676	4,841	4,463	4,109	3,700
Education	0	0	0	0	0	2	3	3	3	4
Social protection	102	112	115	124	129	3,521	3,866	4,003	4,315	3,837
Total²	2,790	3,060	3,075	2,905	2,936	94,592	106,222	105,890	102,674	104,265

1. This includes the categories in PESA 'Outside the UK' and 'Non-identifiable Spending'.

2. The sum of the constituent items may not always agree exactly with the total shown due to rounding.

Table 4.13: NI Non-identifiable expenditure, 2009-10 to 2013-14 (£m)

	Current					Capital				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	135	125	123	119	120	7	5	7	6	6
EU transactions	80	97	100	92	93	0	0	0	0	0
International services	184	204	205	208	266	17	21	17	15	17
Debt interest	789	1,155	1,198	1,077	1,059	0	0	0	0	0
Defence	972	1,009	1,003	940	945	117	124	104	99	93
Public order and safety	55	44	42	39	26	9	7	6	5	2
Enterprise and economic development	-5	-48	-22	9	18	141	6	6	9	1
Science and technology	11	10	9	8	8	3	3	4	1	2
Employment policies	0	0	0	0	0	0	0	0	0	0
Agriculture, fisheries and forestry	4	5	0	0	2	0	0	0	0	0
Transport	3	3	4	8	11	3	3	3	3	6
Environment protection	1	1	1	1	1	3	8	4	5	9
Housing and community amenities	0	0	0	0	0	0	0	0	0	0
Health	24	25	19	19	17	0	0	0	0	0
Recreation, culture and religion	114	118	108	116	101	21	22	20	1	4
Education	0	0	0	0	0	0	0	0	0	0
Social protection	102	112	115	124	129	0	0	0	0	0
Total¹	2,469	2,860	2,905	2,760	2,796	321	199	171	144	140

1. Note that the sum of the constituent items may not always agree exactly with the total shown due to rounding.

Table 4.14: UK Non-identifiable expenditure, 2009-10 to 2013-14 (£m)

	Current					Capital				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Public and common services	4,659	4,338	4,294	4,172	4,217	236	194	224	199	206
EU transactions	904	3,628	2,034	4,307	5,174	0	0	0	0	0
International services	6,362	7,046	7,165	7,253	9,330	592	739	583	527	607
Debt interest	27,258	39,953	41,791	37,641	37,109	0	0	0	0	0
Defence	33,576	34,909	34,990	32,834	33,095	4,058	4,303	3,611	3,454	3,265
Public order and safety	1,904	1,534	1,472	1,373	894	295	238	196	161	87
Enterprise and economic development	-167	-1,662	-773	300	614	4,878	205	202	307	20
Science and technology	390	380	336	290	298	116	103	156	40	76
Employment policies	0	1	0	0	1	0	0	0	0	0
Agriculture, fisheries and forestry	151	179	38	4	74	0	0	0	0	4
Transport	142	150	178	370	482	104	95	92	105	225
Environment protection	20	21	23	44	31	100	275	133	189	325
Housing and community amenities	0	0	0	0	0	0	0	0	0	0
Health	817	881	675	677	586	0	0	0	0	3
Recreation, culture and religion	3,937	4,094	3,774	4,064	3,550	739	748	689	45	150
Education	2	3	3	3	3	0	0	0	0	0
Social protection	3,521	3,866	4,003	4,315	4,537	0	0	0	0	-700
Total¹	83,476	99,321	100,003	97,647	99,995	11,118	6,900	5,886	5,027	4,268

1. Note that the sum of the constituent items may not always agree exactly with the total shown due to rounding

4.27 Table 4.15 highlights similarities in the composition of non-identifiable expenditure for NI and the UK which is expected as NI's non-identifiable expenditure is estimated by apportioning a percentage share of the UK figure.

Table 4.15: Non-identifiable expenditure: NI and the UK, 2013-14 (£m)

	NI		UK	
	Expenditure	Share of non-identifiable expenditure	Expenditure	Share of non-identifiable expenditure
Public and common services	126	4.3%	4,423	4.2%
EU transactions	93	3.2%	5,174	5.0%
International services	284	9.7%	9,936	9.5%
Debt interest	1,059	36.1%	37,109	35.6%
Defence	1,038	35.4%	36,360	34.9%
Public order and safety	28	1.0%	981	0.9%
Enterprise and economic development	18	0.6%	634	0.6%
Science and technology	10	0.3%	375	0.4%
Employment policies	0	0.0%	1	0.0%
Agriculture, fisheries and forestry	2	0.1%	78	0.1%
Transport	16	0.5%	709	0.7%
Environment protection	10	0.3%	355	0.3%
Housing and community amenities	0	0.0%	0	0.0%
Health	17	0.6%	589	0.6%
Recreation, culture and religion	106	3.6%	3,700	3.5%
Education	0	0.0%	4	0.0%
Social protection	129	4.4%	3,837	3.7%
Total¹	2,936	100.0%	104,265	100.0%

1. Note that the sum of the constituent items may not always agree exactly with the total shown due to rounding.

- 4.28 Table 4.16 presents non-identifiable expenditure for NI and the UK in 2013-14 on a per capita basis. NI non-identifiable expenditure was estimated to be £1,605 per capita and was almost identical to the UK figure (£1,626 per capita) which is expected given the method of apportionment.

Table 4.16: Non-identifiable Expenditure per capita: NI and UK, 2013-14¹

	NI (£)	UK (£)
Public and common services	69	69
EU transactions	51	81
International services	155	155
Debt interest	579	579
Defence	567	567
Public order and safety	15	15
Enterprise and economic development	10	10
Science and technology	5	6
Employment policies	0	0
Agriculture, fisheries and forestry	1	1
Transport	9	11
Environment protection	5	6
Housing and community amenities	0	0
Health	9	9
Recreation, culture and religion	58	58
Education	0	0
Social protection	71	60
Total	1,605	1,626

1. Figures in this table have been rounded to the nearest whole number.

Accounting Adjustments

- 4.29 The public sector expenditure figures presented in this section have focused on Total Expenditure on Services (TES). However, Total Managed Expenditure (TME) is the main spending aggregate used in UK public sector finances. Therefore, an accounting adjustment is required to bring TES in line with TME. The largest component of this adjustment is general government capital consumption which is depreciation of fixed capital resources from public service provision. General government capital consumption represents approximately half of the total accounting adjustment. The other main component of the adjustment is certain VAT refunds.
- 4.30 Table 4.17 sets out total UK accounting adjustments for the years 2009-10 to 2013-14. In 2013-14, total UK accounting adjustments

were estimated at £43.4 billion. The accounting adjustments range from 6.0 per cent to 8.1 per cent of TME throughout this period.

Table 4.17: UK Accounting Adjustment, 2009-10 to 2013-14 (£m)

	2009-10	2010-11	2011-12	2012-13	2013-14
UK TME	680,739	700,892	701,163	717,919	720,361
UK TES	637,876	655,262	652,702	659,808	676,977
UK Accounting Adjustment	42,863	45,630	48,461	58,111	43,384

Source: November 2014 PESA Release - Country and Regional Analysis, Table A1

4.31 Table 4.18 provides a disaggregation of NI accounting adjustments for the years 2009-10 to 2013-14. In 2013-14, the total public sector accounting adjustment for NI was estimated at £1.1 billion, or 2.5 per cent of the total UK accounting adjustment. UK accounting adjustments have been apportioned to NI using a variety of methods. Further detail on the calculation of the accounting adjustment is provided in Annex C of this report.

Table 4.18: NI Accounting Adjustment, 2009-10 to 2013-14 (£m)

	2009-10	2010-11	2011-12	2012-13	2013-14
Capital consumption					
Central Government Capital Consumption	506	535	571	589	592
Local Government Capital Consumption	257	272	293	310	322
Current Expenditure					
Current VAT refunds	257	312	330	315	316
Capital VAT refunds	50	58	63	58	57
VAT receipts paid to EU	31	64	64	37	59
Student Loans subsidy	-40	-124	-66	-105	-180
Imputed subsidy from Local Authorities to the Housing Revenue Account	-46	-52	-31	-8	-8
Imputed flows for renewable obligation certificates	32	37	42	62	72
Capital Expenditure					
Bank of England Asset Purchase Facility Flows	-191	-261	-301	-415	-427
Royal Mail Pension Plan	0	0	0	326	0
Local Authority Pensions	-55	-62	-65	-68	-63
Network Rail	0	0	0	0	0
Tax Credits	161	159	135	85	78
Residual (Current & Capital)	133	229	229	400	271
Total accounting adjustment	1095	1166	1265	1587	1090
Percentage of UK accounting adjustment	2.6%	2.6%	2.6%	2.7%	2.5%

Aggregate Expenditure

4.33 Table 4.19 shows the breakdown of aggregate expenditure in NI. In 2013-14, TME was estimated at £24.1 billion; of this £20.1 billion was identifiable, £2.9 billion was non-identifiable, and £1.1 billion represented accounting adjustments. This equated to aggregate expenditure per head of £13,162.

Table 4.19: NI Expenditure, 2013-14 (£m)

£ million	NI
Identifiable Expenditure	20,055
Non-Identifiable Expenditure	2,938
Total Expenditure on Services	22,993
Accounting Adjustments	1,090
Total Managed Expenditure	24,083
TME per capita (£)	13,162

SECTION 5: CONCLUSION

- 5.1 This report provides an estimate of the net fiscal balance position for NI over the five year period from 2009-10 to 2013-14, with a particular focus on 2012-13 and 2013-14 (the most recent years for which financial outturn data is available).
- 5.2 Table 5.1 summarises the fiscal positions of NI and the UK. In 2013-14, the estimated net fiscal balance for the public sector in NI was a deficit of £9.2 billion (27.9 per cent of GVA).
- 5.3 In 2009-10 the estimated fiscal position for NI excluding North Sea revenue was a deficit of £9.6 billion. The 2013-14 estimation represents a decreased deficit of £0.4 billion over the period 2009-10 to 2013-14.

Table 5.1: Net Fiscal Balance Estimates: NI and the UK, 2013-14 (£m)

£ Million	NI	UK
Aggregate Expenditure	24,083	720,487
Aggregate Revenue	14,923	607,466
Net Fiscal Balance	-9,160	-113,021
Net Fiscal Balance per capita (£)	-5,006	-1,763
Net Fiscal Balance as a % of financial year GVA	-27.9%	-7.5%

- 5.4 As noted previously, HMRC published statistics on regional tax revenue in the UK. Using this data, the fiscal deficit is estimated at £9.7bn for 2013-14. This estimate has been derived simply by replacing our figures with HMRC figures where possible and therefore both the statistics and alternative fiscal deficit estimate should be used with caution.

ANNEX A: FISCAL BACKGROUND

Total Managed Expenditure (TME) in the UK

In the current UK public finance framework Total Managed Expenditure (TME) is the key spending aggregate. This is a measure of public sector expenditure drawn from components in National Accounts produced by the Office for National Statistics (ONS). TME includes the current and capital expenditure of the whole public sector, including local government and public corporations (but excludes financial transactions).

TME comprises two components:

- Departmental Expenditure Limits (DEL) – DEL expenditure is planned on a multi-year basis, normally three years in successive Spending Reviews which apply to the UK as a whole. It is divided into: Capital DEL, which is capital spending that adds to the Government's fixed assets; and Resource DEL, which reflects the ongoing costs of providing services, including pay, the cost of depreciation, grants paid to the private sector and so on.
- Annual Managed Expenditure (AME) – spending that cannot be constrained within firm multi-year limits and is therefore adjusted and allocated annually by the UK Government. For example AME includes social protection. This is spending that is 'demand-led' and cannot be planned far in advance. AME is also disaggregated into capital and resource components.

DEL makes up the majority of TME. The sum of DEL and AME plus an 'accounting adjustment' is equal to TME.

Public Expenditure Data

Information on the allocation of Government expenditure on services between the UK regions is provided annually in the HM Treasury PESA exercise.

Public Expenditure in NI

HM Treasury is responsible for managing and implementing UK fiscal and macroeconomic policy, as well as determining public expenditure allocations across the UK regions. As a result, NI's Budget, along with that for Scotland and Wales, continues to be determined within the framework of public expenditure control in the UK. However, once overall public expenditure budgets for the regions have been determined, the Devolved Administrations have freedom to make their own spending decisions on evolved programmes within that budget.

For programmes within the remit of DEL (for each of the Devolved Administrations) the block grant allocated by the UK Government in Westminster is currently determined by application of the 'Barnett Formula'. Under this formula, budget allocations are determined by a population-based share of funding increases on comparative government spending programmes in Whitehall departments.

UK Public Sector Revenues

The majority of public sector revenue raised in NI is under the control of the UK Government and is collected by HM Revenue and Customs. The largest sources of tax revenue are income tax, value added tax and national insurance contributions.

Local government in NI can raise its own revenue from domestic rates and non-domestic rates (also known as business rates).

Net Fiscal Balance

The 'net fiscal balance' is estimated as the difference between total public sector revenue and total public sector expenditure (including accounting adjustments).

ANNEX B: METHODOLOGY FOR PRODUCING ESTIMATES OF PUBLIC SECTOR REVENUE

This annex details the apportionment methodologies and sources used to estimate public sector revenue in NI.

UK fiscal revenues are taken from the Office for National Statistics (ONS) Public Sector Finance Statistics. Detailed components, revenue by revenue, are taken from an ONS database (PSAT2) which is produced on a quarterly basis. The UK revenue figures presented in this report are consistent with outturns published by ONS in 2015 Quarter 1.

In some cases, revenue figures can be directly attributed to NI and require no further estimation. Examples include inheritance tax revenue and national insurance contributions. However, the majority of public sector revenues are collected centrally and their distribution by region is often unavailable. In these instances, UK figures are apportioned to NI using specific methodologies. It should be noted that in certain cases a variety of alternative methodologies could be applied each leading to variations in estimates. Where possible, the most accurate and up to date apportionment methods have been applied.

In March 2015, the Scottish Government published fiscal deficit estimates covering the period 2009-10 to 2013-14 in '*Government Expenditure & Revenue Scotland 2013-14*'⁷ (GERS). Strictly speaking, NI's fiscal deficit estimate is not directly comparable to Scotland's as a result of differing methodologies for certain revenue streams. Caution should therefore be used in making any such comparisons. However, NI apportionment methods have been updated to reflect revisions in the methodology employed by the Scottish Government, where it was relevant and practical to do so. This has led to an improved NI fiscal deficit estimation.

There are two stages in estimating a revenue stream for NI. In the first stage, the UK outturn figure is obtained from PSAT2. In the second stage, NI's share is estimated according to a specific methodology. Note that generally information comes from survey data for the UK. Examples include the Survey of Personal Incomes and the Family Spending Survey.

Table B.1 summarises the various apportionment methodologies and sources used to estimate public sector revenues in NI.

⁷ GERS Report, 2013-14: <http://www.gov.scot/Resource/0047/00472877.pdf>

Table B.1: Apportionment methodologies and sources used to estimate Public Sector Revenues in NI

Revenue	Methodology	Source	Revised
Income tax (net of tax credits)	NI's share of UK income tax liabilities	Survey of Personal Incomes (SPI): HMRC	No
Corporation tax (exc. North Sea Oil)	NI's share of profits (less holding gains) of UK corporations	Supplied directly by ONS	No
Capital gains tax	NI's share of UK GVA (less extra regio)	Regional Accounts: ONS	No
Inheritance tax	Actual Outturns for NI	Supplied directly by HMRC	No
Stamp duties	Land and property stamp duty: actual outturns Stocks and shares: NI/UK ratio of adults owning stocks, shares, unit trusts, PEPs and ISAs	Land and property stamp duty: HMRC Stocks and shares: DWP Family Resources Survey	No
National Insurance Contributions (NICs)	Employee and Employer estimates in NI and UK	Supplied directly by HMRC	No
VAT	Household VAT: NI's share of UK household VAT expenditure Business & Housing sector VAT: NI share of UK GVA Government VAT: NI share of UK government expenditure LG VAT Refunds: NI share of UK local government expenditure CG VAT refunds: Various	Family Spending Survey: ONS	Yes
Fuel duties	Petrol: NI's share of UK road traffic petrol consumption Diesel: NI's share of UK road traffic diesel consumption	Road Transport Energy Consumption at Regional and Local Authority Level: BERR	Yes
Tobacco duties	NI's share of UK expenditure on tobacco	Family Spending Survey: ONS	No
Alcohol duties	NI's share of UK consumption of alcohol	Family Spending Survey: ONS	Yes
Betting & Gaming duties	NI's share of UK expenditure on betting and gaming	Family Spending Survey: ONS	No
Air Passenger duty	NI's share of UK population	PESA 2014: HMT	No
Insurance Premium tax	NI's share of UK expenditure on insurance	Family Spending Survey: ONS	Yes
Land fill tax	NI's share of UK landfill tax supplied by HMRC	HMRC Disaggregated Tax Receipts	Yes
Climate Change Levy	Electricity: NI's share of UK electricity consumption Solids & other fuels: NI's share of UK GVA (less extra regio)	Electricity: BERR Solids & other fuels: HMRC	No
Aggregates Levy	NI share of UK GVA	Regional Accounts: ONS	No
Vehicle Excise Duty	As reported by DVLNI (less refunds)	DVLNI Annual Reports & Accounts	No
Business rates (non-domestic)	Actual data	Supplied by DFP Officials in Rating Policy Division	No

Council Tax (domestic)	Actual data	Supplied by DFP Officials in Rating Policy Division	No
Other Taxes & Royalties	Various	ONS UK Blue Book (2008): ONS	Yes
Interest & dividends	NI's share of UK public sector GVA	Regional Accounts: ONS	No
Gross Operating Surplus & Rent and other current transfers	CG: NI's share of UK CG NMCC LG: NI's share of UK LG NMCC PC: NI's share of UK public sector GVA	NMCC data: supplied directly by ONS GVA data: Regional Accounts ONS	Yes
Other taxes on income and wealth	Various	Various	No

The following describes the methodology employed in estimating each source of NI receipts.

Income tax

The UK figure for income tax is taken from the PSAT2 database published by ONS, and is presented net of tax credits.

NI's share of UK income tax is derived from the Survey of Personal Incomes (SPI) produced by HM Revenue and Customs (HMRC)⁸. This share is then applied to the UK figure for income tax published by HM Treasury.

The latest SPI survey was published by HMRC in January 2015 and provided data for 2012-13. Further note that the SPI data includes some records which cannot be allocated to a particular region - these have been excluded from the total used to estimate the NI share.

Corporation tax

The UK figure for total corporation tax is taken from the PSAT2 databank published by ONS. The estimate of NI corporation tax excludes North Sea corporation tax.

NI's share of UK corporation tax (excluding North Sea revenues) is taken to be its share of profits (less holding gains) of all public and private corporations in the UK. Information on profits (less holding gains) is directly supplied by ONS.

Capital gains tax (CGT)

The UK capital gains tax figure, taken from the PSAT2 databank published by ONS, is apportioned to NI according to its share of UK GVA (less extra-regio).

Inheritance tax (IHT)

The UK figure for IHT is taken from the PSAT2 databank published by ONS. HMRC directly provides actual outturn revenue figures raised from inheritance tax in NI.

Stamp duties

The UK figure for stamp duty is taken from the PSAT2 databank published by ONS.

NI stamp duty is estimated based on NI's share of UK revenue raised from (1) land and property stamp duties and (2) stocks and shares stamp duties.

⁸ The latest SPI data is available from:
<https://www.gov.uk/government/collections/personal-incomes-statistics>

Stamp duty land tax (SDLT) is published by HMRC⁹ and is disaggregated by government office region (GOR). NI's share of UK households who own stocks, shares, unit trusts, PEPs and ISAs as recorded in the Family Resources Survey¹⁰, produced by the Department for Work and Pensions (DWP), is used to estimate stamp duty from stocks and shares in NI.

National insurance contributions (NICs)

NI national insurance contributions (NICs) are based on an analysis of a 1 per cent sample of National Insurance Recording System (NIRS) data, supplied by HMRC, which is aggregated to represent the population using Government Actuary's Department (GAD) estimates of total NIC (employee and employer) accruals for each year. NI's share of employer and employee contributions in this sample is applied to the UK NICs figure to estimate NICs in NI. NI's apportionment ratio for 2011-12 was also used for 2012-13 and 2013-14. This figure will be revised in future editions as up-to-date data becomes available.

Value added tax (VAT)

The UK figure for VAT is taken from the PSAT2 database. The total figure is comprised of: net VAT, local government VAT refunds and central government VAT refunds. Net VAT is then split into VAT paid by households, businesses, government and the housing sector.

NI's share of UK household VAT revenues is estimated based on average weekly household expenditure data in the ONS Family Spending Report publications.¹¹ The 2014 edition of the Family Spending Report is used for 2012-13 and 2013-14. The 2013 edition is used for 2010-11 and 2011-12 and for 2009-10 the 2012 edition is used. The appropriate VAT rating (standard rate, reduced rate, zero-rate or exempt) is applied to each expenditure item to estimate average household VAT revenues in NI and the UK. These average VAT revenues per household are then scaled up by the number of households to estimate total VAT revenues in NI and the UK. The NI/UK ratio of total VAT revenues is then applied to apportion UK VAT receipts (as given in the PSAT2 databank) to NI. The methodology has been amended since the previous report and VAT refunds are now included in this figure as opposed to 'other taxes and royalties.' This is to maintain consistency with the GERS methodology.

NI share of business and housing sector VAT is apportioned by NI share of UK GVA. VAT paid by Government is apportioned by NI share of UK government expenditure.

⁹ Latest SDLT figures available from: <https://www.gov.uk/government/collections/stamp-duties-statistics>

¹⁰ Family Resources Survey available from: <https://www.gov.uk/government/statistics/family-resources-survey-2012-to-2013>

¹¹ Family Spending Reports available from: <http://www.ons.gov.uk/ons/rel/family-spending/family-spending/index.html>

Local government VAT refunds are apportioned through NI share of UK local government final consumption expenditure. Central government VAT refunds are apportioned as such:

- Ministry of Defence – NI share of UK population
- NHS – NI share of UK TES health
- Other government departments – NI share of UK TES (less defence and health)

Fuel duties

UK fuel duty revenue is apportioned to NI according to its share of UK fuel consumption. This is split into duty paid on petrol and diesel using data from HMRC's Hydrocarbon Oils Duties Bulletin¹². NI's share of petrol and diesel consumption is estimated using regional road traffic fuel consumption data published by the Department of Energy and Climate Change (DECC)¹³. The estimated NI/UK ratio of petrol and diesel consumption is then applied to apportion UK fuel duty to NI.

Tobacco duty

UK tobacco duty revenue is apportioned to NI based on regional household expenditure data in the ONS 'Family Spending Survey' publications. Average weekly household expenditure is scaled up by the number of households to estimate total weekly expenditure on tobacco in NI and the UK. The NI/UK ratio of total weekly expenditure on tobacco is used to apportion UK tobacco duty revenue (as published by in PSAT2 by ONS) to NI. Note that the Family Spending Survey editions used are the same as in VAT above.

Alcohol duty

UK figures are sourced from the PSAT2 database for spirits; cider and perry; wine; and beer. NI's share of total UK private household consumption of these products is then used to derive the proportion of duty attributable to NI.

Expenditure on alcoholic products is estimated using data from the DEFRA Family Food Survey.¹⁴ Total weekly consumption for NI and UK is then calculated by multiplying average consumption in NI and UK with their respective population estimates. The ratios of NI to UK consumption are then used to apportion UK alcohol duty revenues to NI.

¹² Source: HMRC Hydrocarbon Oils Duties Bulletin, available from:

<https://www.uktradeinfo.com/Statistics/Pages/TaxAndDutyBulletins.aspx>

¹³ Source: DECC - Regional and local use of road transport fuels, available from:

https://www.gov.uk/government/publications?departments%5B%5D=department-of-energy-climate-change&publication_filter_option=statistics

¹⁴ <https://www.gov.uk/government/collections/family-food-statistics>

Betting and gaming duty

UK betting and gaming duty revenue is apportioned to NI based on regional household expenditure data in the ONS Family Spending Reports. Average weekly household expenditure is scaled up by the number of households to estimate total weekly expenditure in NI and the UK. The NI/UK ratio of total weekly expenditure on gambling is used to apportion UK betting and gaming duty revenue (as published by ONS) to NI. Note that the Family Spending Reports used are the same as in VAT above.

Air passenger duty (APD)

UK air passenger duty revenue (APD), as published by ONS, is apportioned to NI according to its share of the UK population. Population figures are sourced from ONS.¹⁵

Insurance premium tax (IPT)

UK insurance premium tax (IPT), as published by ONS, is apportioned to NI according to its share of the UK weekly expenditure on insurance. Expenditure on insurance is estimated using the Living Costs and Food Survey, presented in the Family Spending Report. Weekly spend is then estimated by multiplying average household spend by the number of households in Northern Ireland and the UK. The ratio of weekly spending on insurance is then used to apportion NI share of UK insurance premium tax revenues. Note that the Family Spending Reports used are the same as in VAT above.

Landfill tax

The UK landfill tax figure is taken from PSAT2. This is then apportioned to NI based on the ratio of NI to UK landfill tax calculated from landfill tax data in the HMRC Disaggregated Tax Receipts publication.

Climate change levy

In apportioning the UK total for climate change levy (CCL), NI's consumption of electricity, gas and solids & other fuels are considered. The UK Climate Change Levy is taken from the PSAT2 database. Climate change levy receipts from electricity consumption are apportioned to NI according to its share of UK electricity consumption, which is derived from the 'Digest of UK energy statistics' (DUKES)¹⁶ published by the DECC. UK revenues from the consumption of gas and solids & other fuels¹⁷ are apportioned on the basis of NI's share of UK GVA (less extra regio). Note that up until 31 March 2011 supplies of gas in Northern Ireland have been exempt from CCL.

¹⁵ Population figures taken from: <http://www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-uk--england-and-wales--scotland-and-northern-ireland/2013/index.html>

¹⁶ Electricity consumption data is available from: <https://www.gov.uk/government/statistics/electricity-section-5-energy-trends>

¹⁷ Available from: <https://www.uktradeinfo.com/Statistics/Pages/TaxAndDutyBulletins.aspx>

Aggregates levy

The UK figure for the Aggregates Levy is taken from the ONS PSAT2 Database and apportioned to NI according to its share of GVA (less extra regio). The NI figure does not reflect the impact of the suspension of the Aggregates Levy Credit Scheme on 1st December 2010.

Vehicle excise duty

NI vehicle excise duty (VED) is recorded net of refunds in annual reports published by the Driver and Vehicle Licensing NI (DVLNI).

Domestic and Non-Domestic rates

NI domestic and non-domestic rates revenues for 2009-10 to 2013-14 were provided by the Department of Finance and Personnel (DFP) officials in Rating Policy Division (RPD) and require no further estimation.

For the financial years 2008-09 onwards the split between domestic and non-domestic rates has not been available for regional rates. Therefore, the respective shares of total rates in 2007-08 have been applied to the 2009-10 to 2013-14 total regional rates data. A breakdown of the district regional rate has also not been available for 2009-10 to 2010-11 and 2012-13 to 2013-14. Therefore the respective shares of total rates in 2007-08 have been applied to 2009-10 and 200-11 total district rates data and the respective shares of total rates in 2011-12 have been applied to 2012-13 and 2013-14. However it is important to note that the total domestic and non-domestic rates figure is an actual figure provided by RPD.

Other taxes and royalties

The UK figure for other taxes and royalties is comprised of a number of small revenues. UK figures for the sub categories of revenue listed below are taken from the PSAT2 database. Separate apportionment methods are used to allocate these revenues to NI.

1. Consumer Credit Act fees are apportioned to NI on a population share basis.
2. UK revenues paid to levy funded bodies are apportioned to NI according to its share of UK agricultural GVA. This is taken from ONS 'Regional Accounts'¹⁸ – GVA industry group 'Agriculture, forestry & fishing'.
3. Regulatory fees are apportioned to NI on a population share basis.

¹⁸ Available from: <http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2014/index.html>

4. UK TV licence revenue is apportioned based on NI's share of UK private households. This has been estimated using the ONS 'Family Spending Survey' publications (NI number of weighted households/UK number of weighted households). This share is then applied to the UK TV licence revenue as reported in the PSAT2 database by ONS.
5. National lottery revenues are apportioned according to NI's share of UK expenditure on gambling from the ONS 'Family Spending Survey' publications.
6. Renewable energy obligations are apportioned using the NI share of UK electricity consumption. This is taken from DECC as referenced above in the climate change levy methodology.
7. Fishing licence fees are apportioned to NI on a population share basis.
8. Passport Fees are apportioned to NI on a population share basis.
9. Fossil Fuel Levy is apportioned to NI on GVA share basis

Other Taxes on Income and Wealth

The UK figure for other taxes on income and wealth is comprised of a number of small revenues. UK figures for the sub categories of revenue listed below are taken from the PSAT2 database. Separate apportionment methods are used to allocate these revenues to NI, shown in table B2 below

Table B2: Apportionment methodologies for Other Taxes on Income and Wealth

Other Taxes on Income & Wealth	Apportionment Methodology
Company income tax receipts, net of repayments	GVA
Household charitable donations via gift aid and covenant tax reliefs	As for income tax
Betting and gaming duty (those elements that are classified as tax on income)	As for betting and gaming duty
OFGEM tax on Non-Fossil Purchasing Agency renewable energy income	As for other renewable energy obligations
Inland Revenue: Company IT withheld	As for corporation tax
Horserace betting levy board	As for betting and gaming duty
Central government contributions to payroll giving to charities	GVA
Tax credits - insurance and pension funds	As for income tax
Corporation tax credit expenditure	As for corporation tax
Company tax credits	As for corporation tax
Non-Profit Institutions Serving Households tax credits	As for income tax

Interest and dividends

UK figures for interest and dividend revenue received by Public Corporations, Local Government and Central Government, are obtained from the ONS PSAT2 database. The UK Public Corporation figure is apportioned to NI by share of UK public sector GVA. Public sector GVA is derived from the ONS 'Regional Accounts' – GVA industry groups 'Public administration and defence', 'Education', and 'Health and social work'. UK Local government and central government figures are apportioned using NI's share of UK population.

Gross operating surplus & Rent and other current transfers

In calculating gross operating surplus (GOS) for NI, separate UK figures for central government, local government and public corporations are taken from the ONS PSAT2 database. Central Government figures are apportioned to NI based on NI's share of UK Central Government Non-Market Capital Consumption (NMCC). Local Government figures are apportioned based on NI's share of UK Local Government NMCC. Public Corporation figures are apportioned to NI according to its share of public sector GVA.

The UK figure for rent and other current transfers is taken directly from GERS and is apportioned to NI according to its share of UK public sector GVA.

Current receipts (excluding North Sea revenues)

This is the total value of public sector revenues (excluding North Sea revenues) estimated for NI.

North Sea revenues

The UK Continental Shelf is included as a separate region of the UK (the extra regio territory) and is not allocated to specific regions.

Current receipts (including North Sea revenues)

This is the total value of public sector revenues (including North Sea revenues on a per capita basis) estimated for NI. Population figures are sourced from ONS, as previous. This apportionment method views North Sea revenues as non-identifiable UK revenue.

ANNEX C: METHODOLOGY FOR PRODUCING ESTIMATES OF PUBLIC SECTOR EXPENDITURE

This annex discusses the methodologies applied to allocate public sector expenditure to NI using data from official UK Government sources.

Estimates of public sector expenditure presented in this report are based on outturn data recorded in PESA November 2014

Total Expenditure on Services (TES) may be disaggregated into two components:

- Identifiable expenditure: expenditure that can be recognised as benefiting individuals, enterprises or communities within particular regions; and
- Non-identifiable expenditure: expenditure considered to occur on behalf of the UK as a whole and cannot be apportioned on an individual country or regional basis.

Note that both of these components can be separated further into current and capital expenditure.

TES accounted for approximately 83.3% of Total Managed Expenditure (TME) in 2013-14. TME is the total current and capital expenditure of the public sector on a national accounts basis. The other component of TME is referred to as the accounting adjustment.

Identifiable Expenditure

Identifiable expenditure is allocated on a 'who benefits' basis to the UK region where the expenditure is attributable. PESA November 2014 provides identifiable expenditure data by country and region of the UK. In this exercise the NI identifiable expenditure data is taken directly from Chapter A of PESA November 2014, 'Analyses of public expenditure by country, region and function'. Tables A1 to A14 provide the expenditure figures required for NI.

Non-Identifiable Expenditure

Non-identifiable expenditure cannot be identified as benefiting a particular UK region. It is incurred on behalf of the UK as a whole, where the entire UK population benefits, regardless of where the funds are spent. It mainly comprises expenditure on defence, debt interest and international services.

In addition, it should be noted that PESA includes data on expenditure outside the UK. For the purposes of this exercise, this category is included in non-identifiable expenditure for both the UK and NI data. The inclusion of this data in non-identifiable expenditure is consistent with the view that expenditure outside the UK should be categorised as non-identifiable, given that the benefits are shared amongst the UK constituent countries.

Similarly, as for identifiable expenditure, the data required is provided in chapter A of PESA November 2014. However, to estimate non-identifiable expenditure, which as noted above includes figures from outside the UK, the PESA data needs to be apportioned as it is not disaggregated into regions.

EU Transactions

EU transactions consist of two components: (1) receipts from; and (2) payments to the EU. The EU Division within the Department of Finance and Personnel (DFP) provides the figures for actual receipts from the EU to NI. UK payments to the EU are apportioned to NI according to its share of UK GVA (less extra regio).

Table C1 summarises the apportionment methodologies used to estimate NI non-identifiable expenditure from UK data published in PESA November 2014.

Table C1: Apportionment Methodologies for Non-identifiable Expenditure in NI 2009-10 to 2013-14

Element of Non-ID Expenditure	Methodology	
	Non-identifiable	Outside the UK
Public and common services	Population	Population
EU transactions	Actual	GVA
International services	Population	Population
Debt interest	Population	N/A
Defence	Population	N/A
Public order and safety	Population	N/A
Enterprise and economic development ¹	Population	Population
Science and technology	GVA	Population
Employment policies	N/A	Population
Agriculture, fisheries and forestry	Population	Population
Transport	GVA	Population
Environment protection	GVA	Population
Housing and community amenities	Population	N/A
Health	Population	Population
Recreation culture, and religion	Population	Population
Education	N/A	Population
Social protection	Population	Population

1. Under the CRA (Country and Regional Analysis) section of PESA November 2014, UK Government financial sector interventions are categorised under 'enterprise and economic development' as non-identifiable expenditure and are apportioned by NI population share of the UK.

Population figures and GVA (less extra regio) figures are sourced from the ONS^{19,20}. Note that GVA 'less extra regio' excludes income that cannot be satisfactorily assigned to any physical region.

¹⁹ Population figures taken from: <http://www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-uk--england-and-wales--scotland-and-northern-ireland/2013/index.html>

Accounting Adjustment

As mentioned previously, aggregate expenditure is termed Total Managed Expenditure (TME). This is calculated as TES summed with an accounting adjustment. To reiterate, TES for NI is the sum of NI identifiable expenditure taken directly from PESA November 2014 and the apportioned share of 'non-identifiable' and 'outside the UK' figures given in PESA November 2014, according to the methodologies presented in table C1. TES is produced on a different basis to TME, which is the primary measure of total public spending reported in the ONS National Accounts. TME includes general government capital consumption and reverses the deduction of certain VAT refunds. It also excludes a number of items in budgets which are captured by the TES, such as the grant equivalent element of student loans. The accounting adjustment is therefore used to ensure that estimates of total public spending for both Northern Ireland and the UK are reported on the basis of TME.

The accounting adjustment for the UK as a whole is given in PESA November 2014 Chapter A, Table A.1. To estimate the accounting adjustment for NI, the UK figure is apportioned using the methodologies set out in table C2. Note that the breakdown of the UK accounting adjustment figure into the elements below was provided by HM Treasury, courtesy of Scottish Government statisticians.

Table C2: Apportionment Methodologies for estimating the Accounting Adjustment in NI

Element of Accounting adjustment	Methodology
Central Government Capital Consumption	NI Share of UK TES
Local Government Capital Consumption	NI Share of UK TES
Current VAT refunds	NI Share of UK VAT
Capital VAT refunds	NI Share of UK VAT
VAT receipts paid to EU	NI Share of UK VAT
Student loans subsidy	Population
Imputed subsidy from Local Authorities to the Housing Revenue Account	NI Share of UK TES
Imputed flows for renewable obligation certificates	Population
Bank of England Asset Purchase Facility Flows	NI Share of UK TES
Royal Mail Pension Plan	NI Share of UK TES
Local Authority Pensions	NI Share of UK TES
Network Rail	N/A
Tax Credits	Population
Residual	NI Share of UK TES

²⁰ ONS Regional GVA (Nuts 1, 2 and 3) December 2014 (Table 1.1)
<http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added--income-approach-/december-2014/index.html>

ANNEX D: NI'S PUBLIC SECTOR ACCOUNTS – EXCLUDING NON-IDENTIFIABLE EXPENDITURE & ACC. ADJUSTMENT

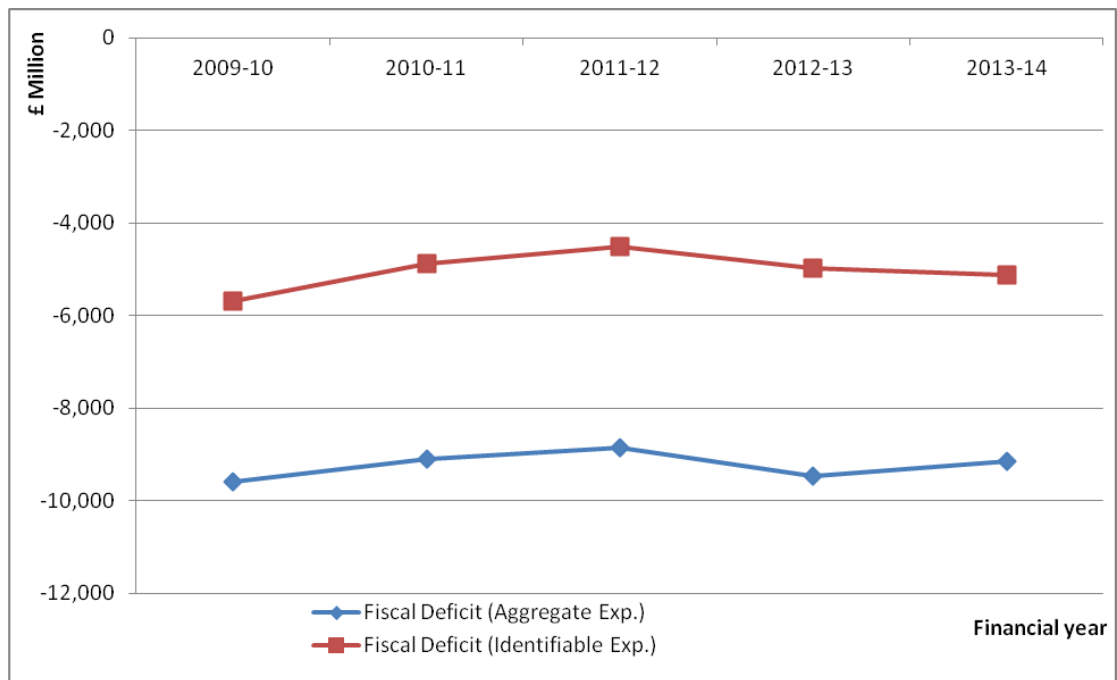
Non-identifiable expenditure is considered to occur on behalf of the UK as a whole and thus cannot be apportioned on an individual or regional basis. It is mainly comprised of defence expenditure and debt interest payments. For example, approximately 71.4 per cent of total NI non-identifiable expenditure was either attributed to defence or debt repayment expenditure in 2013-14. This exercise will examine the effect of removing this type of expenditure and in addition to this it will also exclude an accounting adjustment for depreciation and VAT refunds (i.e. not cash expenditure). The impact of such exclusion is demonstrated in the table and figure provided below, where in 2013-14 the impact was a considerable revision downwards in the NI fiscal deficit from 27.9 per cent to 15.6 per cent of GVA (12.3 percentage points).

Table D1: NI Net Fiscal Balance Estimates (Exc. Non-Identifiable Expenditure and Accounting Adjustment), 2009-10 to 2013-14 (£m)

£ Million	NI				
	2009-10	2010-11	2011-12	2012-13	2013-14
Aggregate Expenditure (Agg. Exp.)	22,774	23,357	23,703	24,292	24,083
Identifiable Expenditure (Id. Exp.)	18,889	19,133	19,364	19,801	20,055
Aggregate Revenue (Exc. NS)	13,191	14,247	14,848	14,833	14,923
Net Fiscal Balance (Agg. Exp.)	-9,583	-9,110	-8,855	-9,459	-9,160
Net Fiscal Balance (Id. Exp.)	-5,698	-4,886	-4,516	-4,968	-5,132
<i>Difference</i>	-3,885	-4,224	-4,339	-4,491	-4,028
Net Fiscal Balance per capita (£) (Agg. Exp.)	-5,344	-5,048	-4,881	-5,187	-5,006
Net Fiscal Balance per capita (£) (Id. Exp.)	-3,177	-2,707	-2,489	-2,724	-2,805
Net Fiscal Balance as a % of financial year GVA (Agg. Exp.)	-30.9%	-28.9%	-27.6%	-29.1%	-27.9%
Net Fiscal Balance as a % of financial year GVA (Id. Exp.)	-18.4%	-15.5%	-14.1%	-15.3%	-15.6%

Figure D2 shows that both fiscal deficit methodologies of expenditure inclusion cause the overall position to follow the same approximate trend over the five year period.

Figure D2: NI Fiscal Deficit Position shown by Aggregate Expenditure and Identifiable Expenditure Estimates, 2009-10 to 2013-14 (£m)



ANNEX E: NI'S PUBLIC SECTOR ACCOUNTS - INCLUDING A HYPOTHETICAL PER CAPITA SHARE OF NORTH SEA (NS) OIL REVENUES

The inclusion of a per capita share of North Sea oil revenue revises downwards the overall NI negative net fiscal balance; from £9.2 billion excluding North Sea oil revenues to £9.0 billion in 2013-14, as presented in table E1. This decline represents a reduction of £0.2 billion or 1.5 per cent.

However, applying the assumption of a zero share of North Sea oil revenue to NI follows the most logical approach as NI's activity in North Sea oil fields is unclear. To include this revenue within the main analysis would not be a true representation of NI's public sector revenue as evidence suggests that NI is not listed as servicing any of the strictly NS oil fields.

Table E1: Net Fiscal Balance Estimates (Inc. North Sea oil): NI and the UK, 2013-14 (£m)

£ Million	NI	UK
Aggregate Expenditure	24,083	720,488
Aggregate Revenue	15,059	612,232
Net Fiscal Balance	-9,024	-108,256
Net Fiscal Balance per capita (£)	-4,932	-1,689
Net Fiscal Balance as a % of financial year GVA	-27.5%	-7.2%

Table E2 shows the impact of the inclusion of North Sea oil revenues on the NI fiscal position over the period 2009-10 to 2013-14.

Table E2: NI Fiscal Position (Inc. North Sea oil), 2009-10 to 2013-14 (£m) ¹

£ Million	NI				
	2009-10	2010-11	2011-12	2012-13	2013-14
Aggregate Expenditure	22,774	23,357	23,703	24,292	24,083
Aggregate Revenue	13,363	14,489	15,162	15,011	15,059
Net Fiscal Balance	-9,411	-8,868	-8,541	-9,281	-9,024
Net Fiscal Balance per capita (£)	-5,248	-4,914	-4,708	-5,090	-4,932
Net Fiscal Balance as a % of financial year GVA	-30.4%	-28.1%	-26.6%	-28.5%	-27.5%
Reduction in Fiscal Deficit when NS Oil Inc.	173	243	314	178	136
% Reduction in Fiscal Deficit (Exc. NS Oil vs. Inc NS Oil)	-1.8%	-2.7%	-3.5%	-1.9%	-1.5%

1. Note that the sum of the constituent items may not always agree exactly with the total shown due to rounding.

Queries

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