

Quarterly Economic Observer

Spring 2014



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About NERI and this publication

The Nevin Economic Research Institute (NERI) has been established to provide information, analysis and economic policy alternatives. Named in honour of Dónal Nevin, scholar, trade unionist and socialist who gave a life of service to the common good, the Institute aims to undertake research that will be of relevance to the Trade Union movement and the general public across the island of Ireland.

This is the ninth Quarterly Economic Observer (QEO) of the Institute. The purpose of the QEO is to provide regular, accessible and timely commentary so as to equip trade unions and others in articulating and advancing a new economic paradigm where the old has failed. The QEO complements the NERI Spring 2014 Quarterly Economic Facts (QEF) which provides a set of statistical indicators to complement our analysis. Unless otherwise stated, the data cited in this Observer are the latest available as of mid-March 2014. The final draft of this document was completed on 20th March 2014.

This report has been prepared by staff of the Institute. We are grateful to three external reviewers from the academic and research community who reviewed and commented on an earlier draft of this document. The analyses and views expressed in this publication are those of the NERI and do not necessarily reflect those of others including the Irish Congress of Trade Unions or the unions supporting the work of the Institute.

Further information about NERI may be obtained at our website

www.NERInstitute.net

The Nevin Economic Research Institute
Quarterly Economic Observer
Spring 2014

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Executive Summary

This edition of the NERI's *Quarterly Economic Observer* (QEO) outlines our latest expectations for the economic outlook in the Republic of Ireland and Northern Ireland (Section 3). It also presents an analysis of earnings in Northern Ireland and in particular how low pay affects people by their gender, age, geography or the sector in which they work (Section 4).

Economic Outlook

Our economic outlook for both parts of the island of Ireland is broadly positive but uncertain.

In the Republic we still anticipate small positive growth in 2014, and slightly more robust growth in 2015. However concerns remain over the impact of the contraction in the pharmaceutical industry which along with reduced personal consumption contributed to negative economic growth in the final quarter of 2013. Low wage growth and persistently high long-term unemployment and youth unemployment also remain among key domestic concerns. Internationally the political tensions relating to the Ukraine and the threat of deflation in the Eurozone also weigh on the analysis.

In Northern Ireland, there are some positive economic signals, reflecting recent developments in the UK economy as a whole. Although these trends only amount to two consecutive quarters of growth in 2013 while the Northern Ireland economy remains over 9% below its pre-crisis peak.

Based on the assumptions and expectations outlined Section 3, our current projections for the Northern Ireland are:

- A modest increase in overall employment, albeit a slower pace than the UK as a whole. Key growth sectors for Northern Ireland employment include Agriculture, Hospitality and Transport.

For Republic of Ireland:

- Modest growth in 2014 and 2015, at 1.6% and 2.1% respectively; growth rates which are dragged down by approximately 0.5% of GDP in each year given the contraction of the pharmaceutical sector.
- A return to growth in personal consumption, the first such increase in this component of domestic demand since 2010.
- A decrease in exports owing to the aforementioned contraction on the pharmaceutical sector.
- A decrease in government debt both nominally and as a % of GDP in 2014. Government debt will decrease even with the inclusion of the deficit for 2014.

Earnings and Low Pay in Northern Ireland

In section 4 of this QEO we look at earnings and the extent of low pay in Northern Ireland and find that:

- Overall, more than a quarter of workers - or just under 169,000, earn below the Living Wage
- 17% or nearly 115,000 of workers are defined as low paid because they earn two thirds of the median hourly wage or less.
- 9% or just over 61,000 earn at or below the minimum wage

Looking at how these statistics are spread across the labour market we find that:

- 8% of male workers earn the Minimum Wage or below compared with 9% of female workers. However only 22% of male workers earn below the Living Wage compared with 29% of females.
- Several constituencies have 10% of workers earning the Minimum Wage or less while, North Antrim has both the highest proportion of workers below two thirds of the Median Wage (25%) and the highest proportion (35%) below the Living Wage.

- The Accommodation & Food Sector has the largest proportion of low paid workers, with 40% earning the minimum wage or less and 76% of workers earning below the Living Wage. Within this sector Food services has the largest proportion of workers, 66% earning the minimum wage or less.
- Other sectors with large numbers of low paid workers include Wholesale & Retail, Administration and Agriculture. Within Wholesale and Retail nearly a quarter (24%) of retail workers earn the minimum wage or less while 59% earn below the Living Wage
- While average figures indicate that overall the Health Sector appears well paid, in fact 44% of Social Services workers and 51% of Residential Care workers earn below the Living Wage
- These statistics pose significant policy challenges for all levels of government in Northern Ireland. Chief among these is to :
 - o enforce the Minimum Wage effectively and provide above inflation increases that would make up ground lost since 2007;
 - o promote the Living Wage across the economy and implement it at all levels of government, including local government, public procurement and all contracted services
 - o examine the case for sectoral wage agreements that would allow upward pressure on wages without damaging competitiveness either domestically or internationally

1 Introduction

Our economic outlook for both parts of the island of Ireland is still positive but cautious. In the Republic we still anticipate small positive growth in 2014, and slightly more robust growth in 2015. However concerns remain over the impact of the contraction in the pharmaceutical industry, the absence of domestic wage growth, continuing political tensions in the Ukraine and fears of deflation within the Eurozone. In Northern Ireland, despite a positive outlook for employment we anticipate that political instability in Stormont and a referendum in Scotland will add to a general climate of uncertainty.

In this *Quarterly Economic Observer* (QEO) we update our economic expectations for the Ireland North and South (Section 3). Complementing this, in Section 4 we examine the position of earnings and low pay in Northern Ireland. We look at how low pay affects different industries, localities and age groups and discuss possible policy responses to these trends.

The QEO is structured as follows. Recent economic trends in both parts of Ireland are reviewed in Section 2. Section 3 provides an overview of recent macro-economic projections made by various agencies and includes the NERI's macroeconomic projections out to 2016. In Section 4 we examine earnings and low pay in Northern Ireland. Section 5 concludes.¹

The Nevin Economic Research Institute (NERI) offers this report as a contribution to public debate on policy making and formation on the island of Ireland. We welcome feedback, comment and suggestions. The precise data used and the specifics of any proposal/projections are subject to review as fresh information and data become available.

¹ The analysis here complements a number of recent and forthcoming NERI research papers. These are cited throughout the report and can be accessed on the NERI website.

2 Overview of Recent Economic Trends

This section of the Quarterly Economic Observer (QEO) examines the most recent trends in a number of key economic indicators in both the Republic of Ireland and Northern Ireland. Across both, the data point to continuing stabilisation but concerns remain about the strength and sustainability of any nascent recovery. Recent economic developments are summarised in Table 2.1.

Table 2.1 Some key economic trends in Ireland and the UK (2008-2013)

		2008	2009	2010	2011	2012	2013
Total Employment (% of the working-age population)	ROI	67.6	61.9	59.6	58.9	58.8	n/a
	NI	67.8	64.7	66.0	67.4	67.3	66.9
	UK	72.6	70.9	70.5	70.5	71.1	71.7
Unemployment (% of labour force)	ROI	6.4	12.0	13.9	14.7	14.7	13.1
	NI	4.5	6.5	7.1	7.2	7.5	7.6
	UK	5.7	7.6	7.9	8.1	7.9	7.6
Gross Domestic Product (% volume change over previous yr)	ROI	-2.2	-6.4	-1.1	2.2	0.2	-0.3
	NI*	-4.1	-5.3	-1.3	-1.9	-0.5	n/a
	UK	-0.8	-5.2	1.7	1.1	0.3	1.8

Sources: Republic of Ireland (ROI) and UK labour market data refer to the whole year and were taken from the Eurostat Labour Force Survey database (online reference code lfsi_emp_a and une_rt_a). Northern Ireland labour market data are based on an average of the four quarters for each year with data taken from the Labour Force Survey. GDP data for ROI and UK are from Eurostat National Accounts database (reference code nama_gdp_k). Northern Ireland Gross Value Added data are taken from ONS Regional Trends Series (Office for National Statistics, 2013).

Notes: ROI = Republic of Ireland, NI = Northern Ireland and UK = United Kingdom. * Northern Ireland output refers to Gross Value Added (GVA). Regional GVA (Income Approach) is taken from Office for National Statistics (2013) December. UK GDP includes output for Northern Ireland. Total employment refers to all persons in employment (ILO definition) aged 15-64 as a proportion of all persons aged 15-64. Unemployment is measured on the ILO definition basis and refers to persons aged 15-74. n/a = not available.

The remainder of this section is structured as follows. Initially to set a context for our review, we overview developments in the global, European and UK economies.

Subsequently we examine recent trends in the Republic and the section concludes by examining Northern Ireland.

2.1 Global Developments (including UK)

Data since our last edition (December 2013) continue to suggest that the international economy is experiencing a fragile recovery. Certainty regarding the raising of the United States (US) debt ceiling, combined with reduced contractionary policies for domestic demand, has underpinned upward expectations for US growth this year (IMF, 2014). Within Europe, recovery remains tentative. In its January 2014 *World Economic Outlook Update*, the IMF suggest that the “euro area is turning the corner from recession to recovery” with expectations of growth at 1% in 2014 and 1.4% in 2015. Across EU states growth is uneven, with Slovenia and Cyprus expected by the European Commission to remain in recession this year, while others are anticipated to record small levels of growth (European Commission, 2014: 1-5). In emerging markets, including China and India, prospects are also slowly improving with expectations of further growth likely to impact positively on international trade levels and international economic activity in general (IMF, 2014; European Commission, 2014).

All observers agree that the risks to the global economic outlook are weighted towards the downside. Given how small growth rates are in many regions, the possibility of negative impacts persist from factors which include natural resource supply/price shocks, political instability, rising long-term interest rates and repercussions from further ‘tapering’ of monetary easing policies, most particularly in the US.

Risks persist within Europe given the aforementioned low growth rates, simultaneous fiscal consolidation policies across countries, ongoing uncertainty regarding the capital requirements of some banks, the potential for deflation and the remaining instability of a number of crisis hit economies. Coupled with these, across the continent large output gaps remain, reflecting high and persistent unemployment levels, alongside high national, business and household debt levels in a number of countries.

The UK economy finished 2013 with growth of 0.7% in the final quarter, down from 0.8% in Q3, giving an overall growth rate of 1.8% for the year. Whilst 2013 growth is up from the 0.3% growth in 2012, the UK economy is still 1.4% below its pre-recession peak. The labour market continues to show signs of improvement but the most recent data suggest that the flow of positive figures may be coming to an end. The number of

people unemployed in the three months ending January 2014 fell by over 60,000 bringing the overall rate down to 7.2% from 7.4% in August-October. However the unemployment rate for the three months to the end of December 2013 was 7.2%, which was itself an increase of 0.1% on the three months to the end of November 2013. As all unemployment rates are released as three month averages this implies that the single month figures for December 2013 and January 2014 showed smaller reductions. The less rapid decline in unemployment eases pressure on interest rates, for the Bank of England (BOE). The BOE Forward Guidance policy is now aligned with the level of spare capacity in the economy but this change has created almost as much uncertainty as it intended to alleviate. That is because measures of spare capacity are highly subjective, and so it remains to be seen how and when financial markets will begin to factor in future rate increases.

Taken together, the global outlook is improving but recovery remains fragile and carries a number of risks.

2.2 Republic of Ireland

The outlook for the Republic of Ireland continues to improve. The aforementioned international economic risks carry significant implications for a small open economy. Similarly, there are internal sectoral contractions, most notably in the pharmaceutical sector, which have particular implications for growth and recovery (see section 3). Since our last QEO, there have been a series of signals principally suggesting an emerging recovery, these include:

- Strong growth in total employment in the year to Q4 2013 comprising 54,300 full-time jobs and 6,600 part-time jobs. 82.3% of this increase was for males with three sectors dominating the increases: *Agriculture, forestry and fishing* (+29.8% or 26,800), *Accommodation and food service activities* (+14.7% or 17,400), and *Professional, scientific and technical activities* (+12.7% or 13,000).² Among the overall increase, the growth in the numbers self-employed (+33,400) is of note and is greater than the increase in the number of employees (+28,300).

² The CSO QNHS report (February 2014) suggests particular caution in the interpretation of data and trends in the Agricultural, forestry and fishing sector due to statistical revisions to the sample following Census 2011 (2014:1). However, even excluding these figures the employment growth is significant (+34,200).

- A further decrease in the rate of unemployment to 12.1% of the labour force (seasonally adjusted rate) implying that there are now 263,700 individuals unemployed.³
- An increase in the labour force to 2.16 million people (+19,600 people over the year to Q4 2013).
- A 1.7% reduction in underemployment compared to Q4 2012 bringing the numbers underemployed (working but with less hours that they wish to have) to 143,300 people (6.6% of the labour force).
- A 2.7% increase in the annual level of retail sales (excluding motor sales) in the year to December 2013.
- A 7.8% increase in ‘traditional sector’ industrial production in the year to January 2014. The traditional sector covers all areas of production except chemicals and pharmaceuticals, electronics and medical supplies.
- A continued decline in the total number of private dwelling houses in mortgage arrears (-4,705 to a total of 136,564 representing 17.9% of the total stock of mortgages). The data indicate a growing problem of mortgages in ‘very long-term arrears’ of 720 days and above. These represented 33,589 mortgages in Q4 2013 and accounted for 63% of the total outstanding arrears.⁴
- A further reduction in the cost of Government borrowing as indicated by a yield of less than 3% on a Government 10-year bond issued in March 2014. During the last quarter Ireland’s sovereign debt rating was upgraded by Moody’s (2014) to investment status (baa3).
- An 8.2% increase in the number of trips to Ireland in period November 2013-January 2014 compared to a year earlier plus some evidence of an increase in domestic holidaying.⁵
- The launch of the Ireland Strategic Investment Fund’s (ISIF) which has €6.8bn allocated from the NTMA discretionary portfolio to fund commercial domestic investment opportunities. However, the fund still requires legislation to be approved by the Oireachtas – due by mid-2014.

While much of the news has been positive, there have been a number of negative signals, these include:

³ Based on ILO definitions of labour force status.

⁴ Data from Central Bank of Ireland (2014) *Residential Mortgage Arrears and Repossessions Statistics* (Q4 2013). As it is possible for there to be multiple mortgages on the same property (split mortgages etc) the number of mortgages in arrears will exceed the number of private dwelling houses in arrears.

⁵ Domestic holiday data from CSO *Household Travel Survey*, Q3 2013.

- A decline of 0.3% in GDP based on provisional CSO data for 2013. The decline was driven by a 1.1% decrease in consumer spending and the contraction in the pharmaceutical sector (see discussion in section 3).
- An overall decline in industrial production (-1.4% in year to January 2014) and exports (-5% in 2013). This phenomenon is principally driven by declines in the pharmaceutical sector (see discussion in section 3).
- Decreases in the number of women aged less than 35 years in employment – falling by 17,100 in the year to Q4 2013.
- Sustained high levels of youth unemployment (rate for 15-24 year olds at 24.2%) and long-term unemployment, with the latter accounting for 61.4% of the total unemployed.
- Sustained high levels of net outward migration with an estimated 33,100 more people emigrating than immigrating in the year ending April 2013.
- A small decrease in average hourly earnings of -0.9% in the year to Q4 2013 and a -0.6% fall in weekly earnings over the same period.
- Investment levels in the economy continue to sit at record low levels of close to 10% of GDP.
- A remaining risk that Ireland's banks will require additional capital injections, some of it sourced from the exchequer, to address the mortgage distress crisis and the forthcoming ECB balance sheet assessments.

Overall, as we outline in the next section, there are signs of economic recovery although challenges and risks remain.

Timely data are available for a number of key indicators of domestic economic activity and demand in the Republic of Ireland and these are presented below as follows:

- Total employment (Chart 2.1);
- The volume of retail sales (Chart 2.2);
- Changes in real average weekly earnings from employment (Chart 2.3);
- Changes in the real value of total domestic demand (Chart 2.4); and
- Changes in the volume of exports (Chart 2.5).

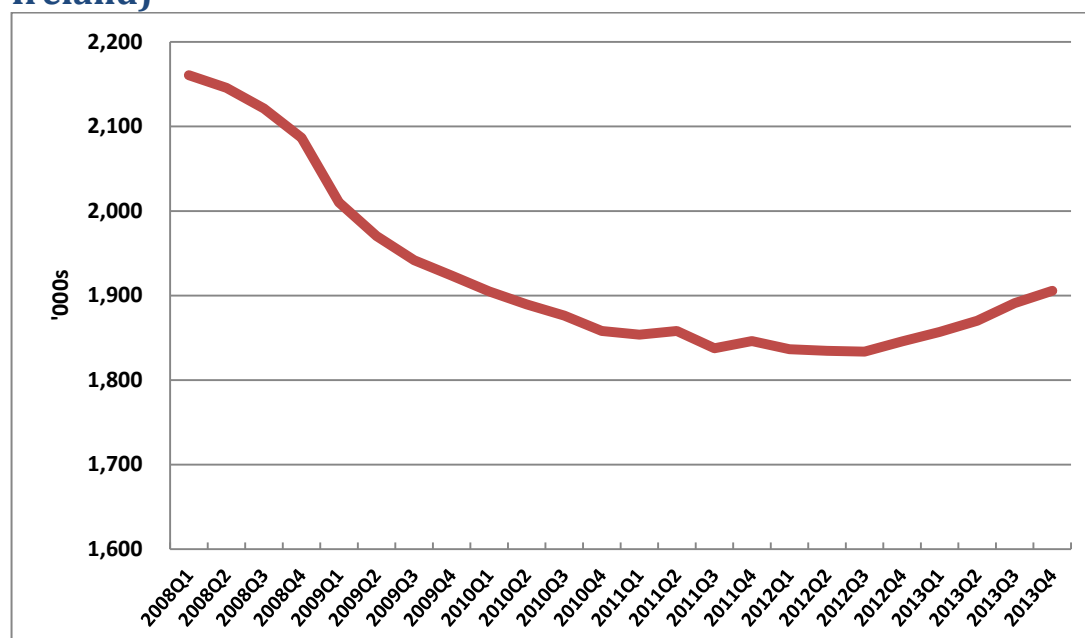
Chart 2.1 illustrates the notable recovery in employment over the past year. Overall employment levels have now returned to where they were in early 2010. However, as

the chart shows, employment numbers remain considerably below their levels at the outset of the crisis; compared to Q1 2008 employment numbers are down 255,000.

The retail sector experienced notable declines in employment in the early stages of the economic crash and since then has remained subdued.⁶ As Chart 2.2 shows, retail sales have remained flat since 2008, a phenomenon closely related to the decline and suppressed nature of domestic demand over recent years (see Chart 2.4). Over that period average real weekly wages (a measure of the buying power of earnings) varied given periods of inflation, deflation and pay reductions (see Chart 2.3). The most recent data (Q4 2013) reflects a reduction in average real wages relative to a year earlier, a trend principally driven by public sector wage declines under the *Public Service Stability Agreement 2013-2016* (Haddington Road agreement).

Finally, Chart 2.5 highlights the growth in exports which have been key to the Republic experiencing any positive economic growth over recent years. The aforementioned decline in late 2012, driven by a decrease in goods exports, remains a key concern and area of uncertainty.

Chart 2.1 Quarterly Trends in Total Employment (Republic of Ireland)

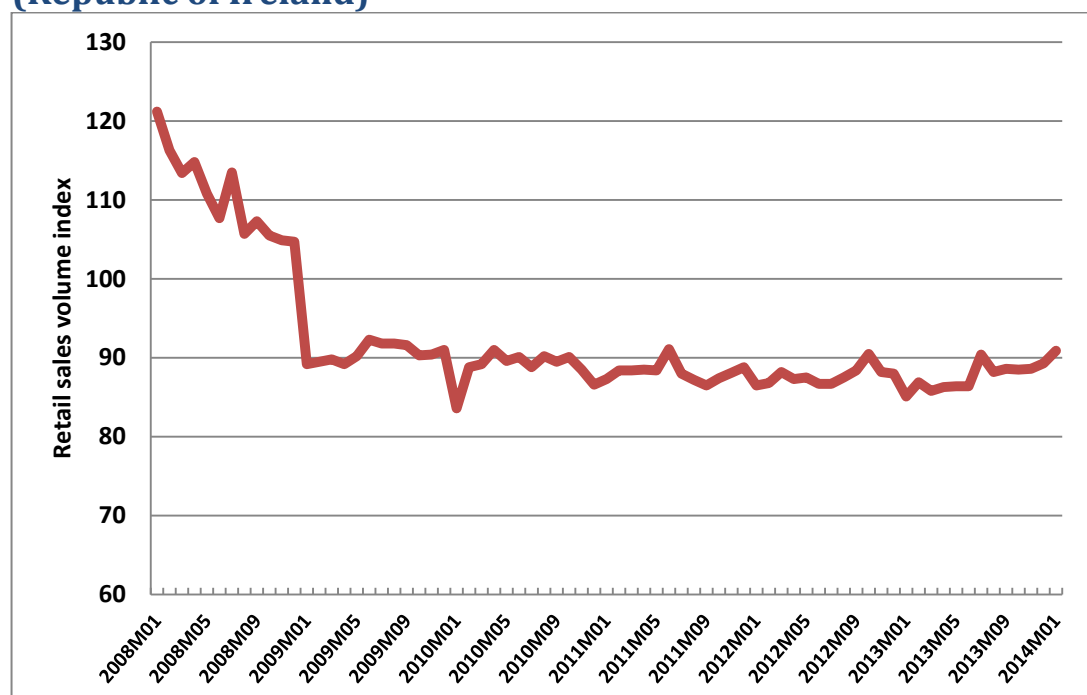


Source: CSO Quarterly National Household Survey (reference code from CSO StatBank is QNQ03)

Note: Total employment seasonally adjusted.

⁶ See O'Farrell (2013) for a profile of the changes between 2008 and 2013.

Chart 2.2 Monthly Trends in the Volume of Retail Sales (Republic of Ireland)



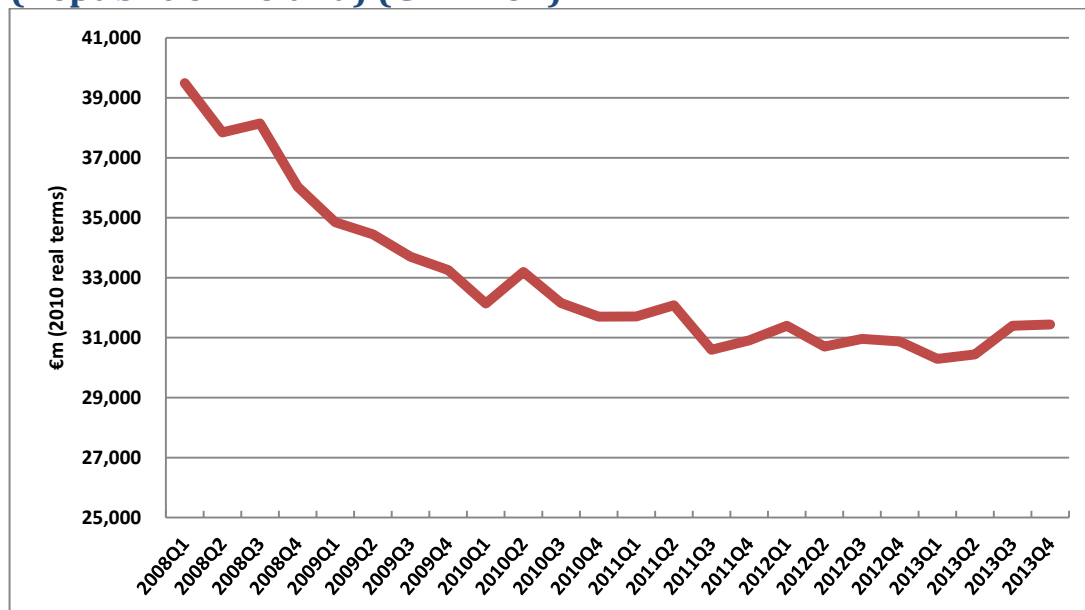
Source: CSO Retail Sales Index (StatBank code RSM03)
Notes: Volume of retail sales (seasonally adjusted)
 2014M01 = January 2014

Chart 2.3 Changes in Real Average Weekly Earnings (Republic of Ireland)



Sources: Source: CSO survey on Earnings Hours and Employment Costs (EHQ08); CSO EU Harmonised Index of Consumer Prices (CPM05)
Note: Values expressed in April 2013 prices.

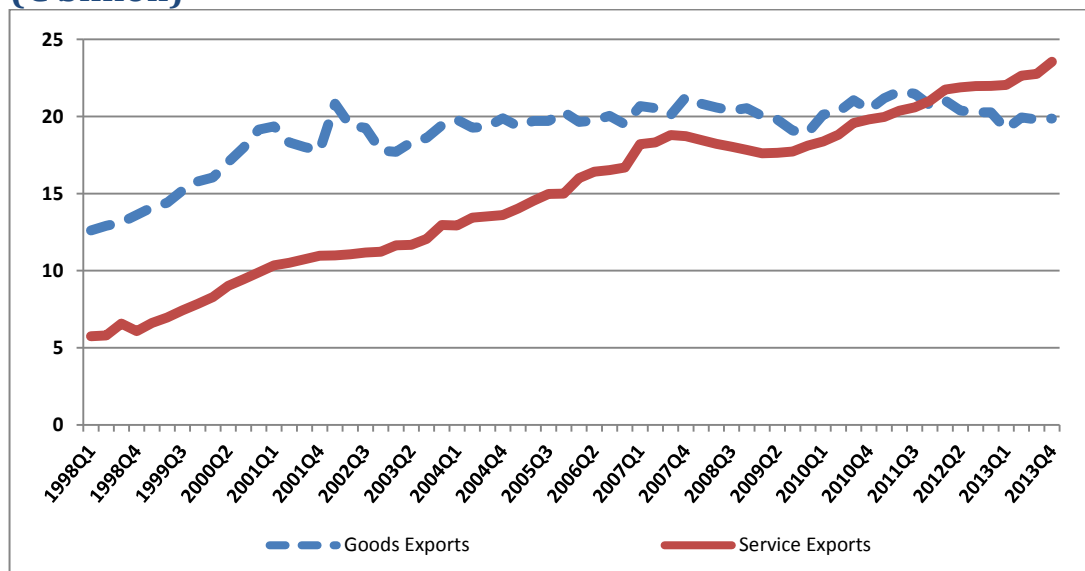
Chart 2.4 Trends in the Real Value of Domestic Demand (Republic of Ireland) (€ million)



Source: CSO: Quarterly National Accounts.

Notes: Final Domestic Demand = Personal Consumption + Government Consumption + Investment. Domestic demand chiefly differs from GDP due to the size of net exports = exports – imports, and changes in values of physical stocks. All values adjusted for seasonal variation.

Chart 2.5 Trends in the Volume of Exports – Republic of Ireland (€ billion)



Source: Central Statistics Office, Quarterly National Accounts.

2.3 Northern Ireland

The Northern Ireland economy has emitted mixed signals in the first quarter of 2014. Data released in December 2013 show that Northern Ireland Gross Value Added (GDP plus indirect taxes, less subsidies) increased by 0.1% in 2012, however this was a fall of 0.5% in real terms (ONS, 2013b). The latest PMI data for Northern Ireland show the largest increase in the index for 10 years indicating a continuing recovery (Ulster Bank, 2014). Sectors such as construction, manufacturing and retail all recorded significant increases in orders and new business, but the increase in construction has abated somewhat since December 2013. The upturn in the manufacturing index contrasts with a sharp contraction for that sector in November suggesting a certain amount of volatility. On a more cautious note PMI data also indicated a contraction of new export business in December. The increased activity is also expected to translate into increased jobs for these sectors.

The Northern Ireland jobs market presents a more mixed bag for the beginning of 2014 with significant gains and losses across most sectors. The construction sector saw two substantial closures with Dungiven based KPL shedding almost 150 jobs only weeks after Antrim based construction firm MIVAN shed over 250 jobs. These losses follow the demise of the Patton group in November 2012 which saw the loss of another 250 jobs in 2013. There was a significant boost to the sector with the announcement by Sandvik that they will be creating 160 new jobs at their site in Ballygawley Co. Tyrone. While the increase in jobs for Northern Ireland is welcome, the Ballygawley increase flows from the closure of Sandvik's other UK site in Derbyshire with the loss of over 360 jobs. These losses combined with the knock-on effects for sub-contractors pose serious challenges for the construction sector.

The manufacturing sector saw some significant boosts particularly in the Aerospace sector with Bombardier winning substantial new orders leading to important investment in its East Belfast plant. Wings for the New C series will be designed and built at the plant while new orders were received on the CRJ aircraft whose engine and fuselage components are also manufactured in Northern Ireland. Along with companies like B/E Aerospace in Kilkeel which manufactures aircraft seating, the aerospace industry in Northern Ireland hopes to double turnover and create 4,000 jobs over the next 10 years which would be a welcome boost in high value added manufacturing.

Wrightbus continued positive news for the manufacturing sector recording significantly increased orders from East Asian markets in Hong Kong, Malaysia and Singapore. Additionally Ryobi, a Japanese car parts manufacturer, announced 100 jobs at its aluminium casting plant in Carrickfergus bringing its total employment on that site to over 380. In the retail sector there were significant losses at Gino and NV clothing stores, while there were smaller jobs announcements from firms like Argento jewellers. The service sector also added jobs with the announcement of up to 250 customer service positions by mobile telecoms company EE.

House prices in Northern Ireland remained flat in the last quarter of 2013 following modest gains in 2013 with a year on year increase of 4% (NISRA, 2014c). These increases are somewhat overshadowed by continuing house price growth in other parts of the UK. Halifax (2014) reported that the house price to mean earnings ratio for the UK has increased to 4.7, for the first time since Q1 2004, well above 1990s levels. The rate for Northern Ireland in 2013 was 3.3, but 4.2 when comparing house prices to median rather than mean earnings (NISRA, 2014c). House prices are an important economic indicator but it is always worth remembering that rampant price increases can also have detrimental economic consequences. Figures from the HML mortgage group showed that 2 in every 5 mortgages granted in Northern Ireland after 2005 are in negative equity. The sudden upturn in UK house prices remains concerning especially when coupled with government support schemes such as 'Help to Buy'.

Last year the Northern Ireland Statistics Research Agency (NISRA) released, on a trial basis, a new index referred to as the Northern Ireland Composite Economic Index (NICEI) which measures overall economic activity in Northern Ireland. There was a delay in releasing 2013 figures for quarter 2 and 3 due to methodological revisions. The Index for Northern Ireland showed an increase of 1.6% in the third quarter 2013 following a more modest increase of 0.2% in the second quarter. The contraction in quarter one was also revised down from 0.8% to 0.4%. This recent data and the trends in the NICEI since 2007 are summarised in chart 2.6. Despite two consecutive quarters of growth the index is still some 9.5% below its pre-crisis peak in 2007 while UK GDP is less than 2% below its peak.

2014 UK Budget

On the 19th of March Chancellor of the Exchequer George Osborne delivered his 2014 Budget statement to the House of Commons. Overall government fiscal policy remains committed to reductions in government expenditure extending to the end of the decade despite serious concerns over the sustainability of the current recovery. Modest updates were made to growth projections for 2014 and 2015, with small downward revisions for 2016-18.

The Office for Budget Responsibility (OBR) in their report claim that the recent positive growth in GDP is using up spare capacity in the economy and so there is no space to ease off on austerity measures for the public finances. This is however a highly subjective judgment and there is a risk that it is a premature diagnosis. As of now the OBR has the lowest estimate of the output gap (the measure of spare capacity) among all major economic commentators. They have plans this to review how they calculate the output gap. If this review leads to an increase in the output gap and consequently how much spare capacity they calculate is in the economy then their views on austerity could be seriously undermined.

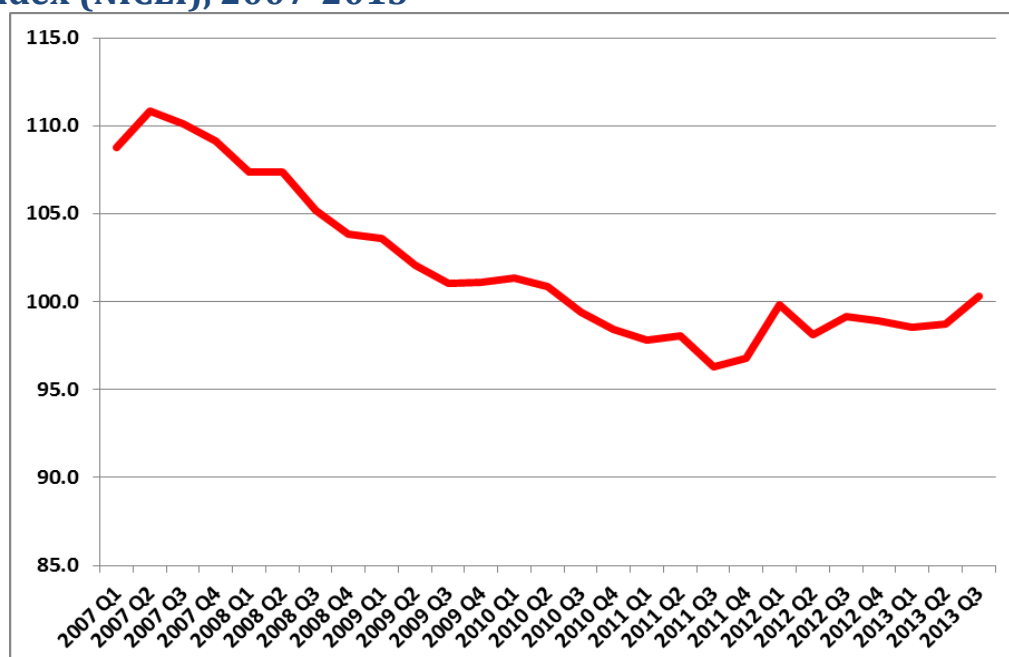
On tax, the government continued its policy of increases to the tax-free threshold, bringing it up to £10,500. While this policy is supposedly aimed a low income earners it is worth pointing out that it ignores those on incomes below £10,000 and benefits the richest 10% of earners the most.

On savings and pensions, the government has introduced some innovative measures, in particular ending the compulsory purchase of annuities and increasing thresholds for ISA's. However as the Household Savings Rate has fallen substantially over the last two years and while many earners struggle to meet day to day expenditure it is not clear how many people will actually benefit from these measures.

The Chancellor acknowledged that despite much talk of sustained recovery, levels of business investment have not increased to acceptable levels. To this he has offered increased tax-free thresholds up to £500,000. However another tax cut is unlikely to be enough to reach the 8% and 9% year on year investment growth that the OBR expects over the next half decade.

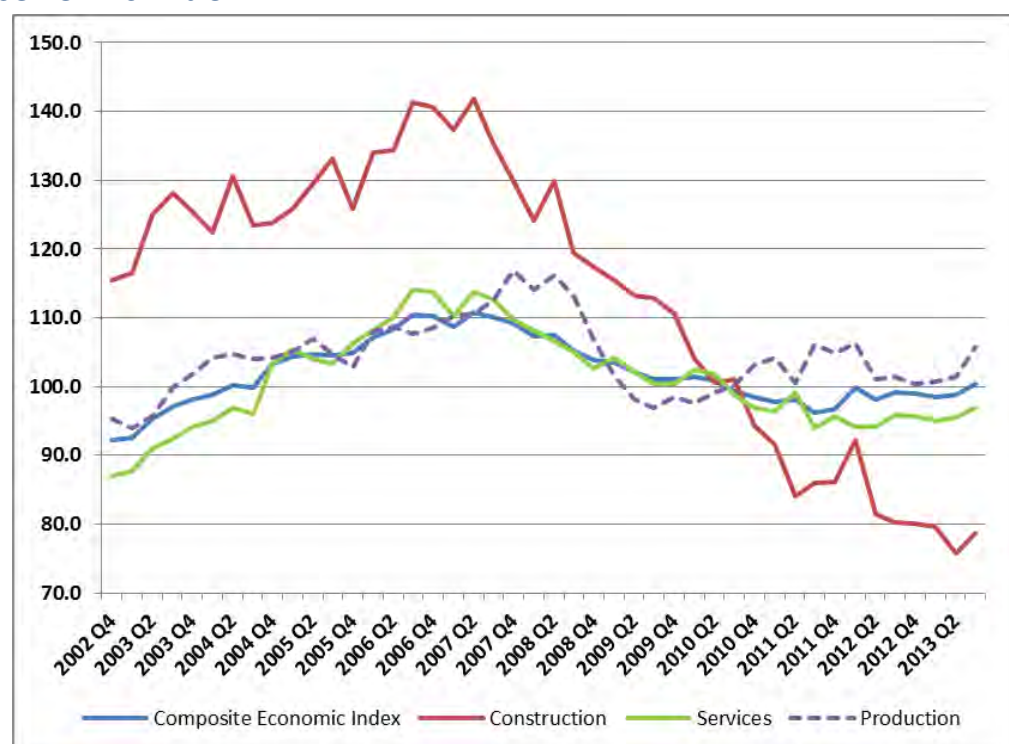
The only significant announcement for Northern Ireland was the creation of an 'Enterprise Zone' in Coleraine. Enterprise Zones provide rate relief and tax allowances for companies who locate within them. However the historical experience of these schemes is that planned investment is merely diverted from other areas and little additional investment is created.

Chart 2.6 Trends in the Northern Ireland Composite Economic Index (NICEI), 2007-2013



Source: Northern Ireland Statistics and Research Agency (2014b)

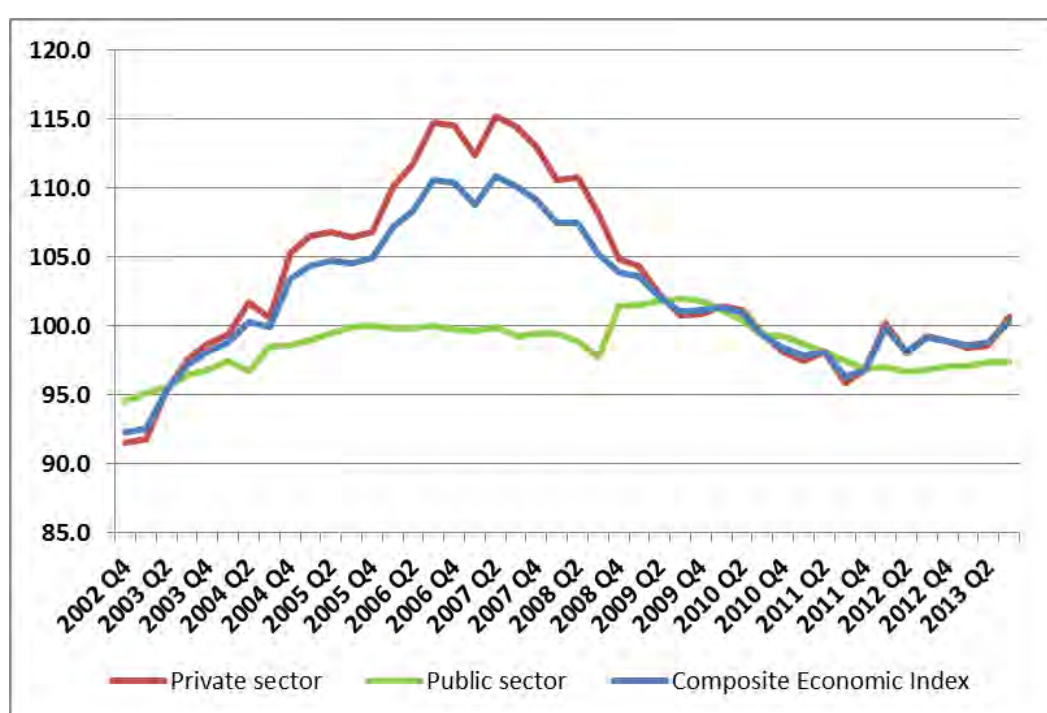
Chart 2.7 Sectoral changes in the Northern Ireland Composite Economic Index



Source: Northern Ireland Statistics and Research Agency (2014b)

Chart 2.7 shows the recent very modest increase in the construction sector which follows a consistent downward trend from late 2007. In that time the construction index has lost almost half of its value which highlights the depth of contraction and puts the recent spurt of market confidence in context with the reality of the sector. The production sector recorded modest growth in both Q2 and Q3 of 2013, having already been the best performing sector throughout the crisis. The recent jobs data indicate that this sector could bring further growth in 2014. Growth in the service sector has been more lacklustre in recent years and the small increases in the second and third quarter of 2013 continued that trend. Overall the construction sector remains weak and despite more positive news from the production sector, it is unlikely that this level of growth will be sufficient to substitute for the level of output lost in this sector.

Chart 2.8 Public and private sector performance in the Northern Ireland Composite Economic Index

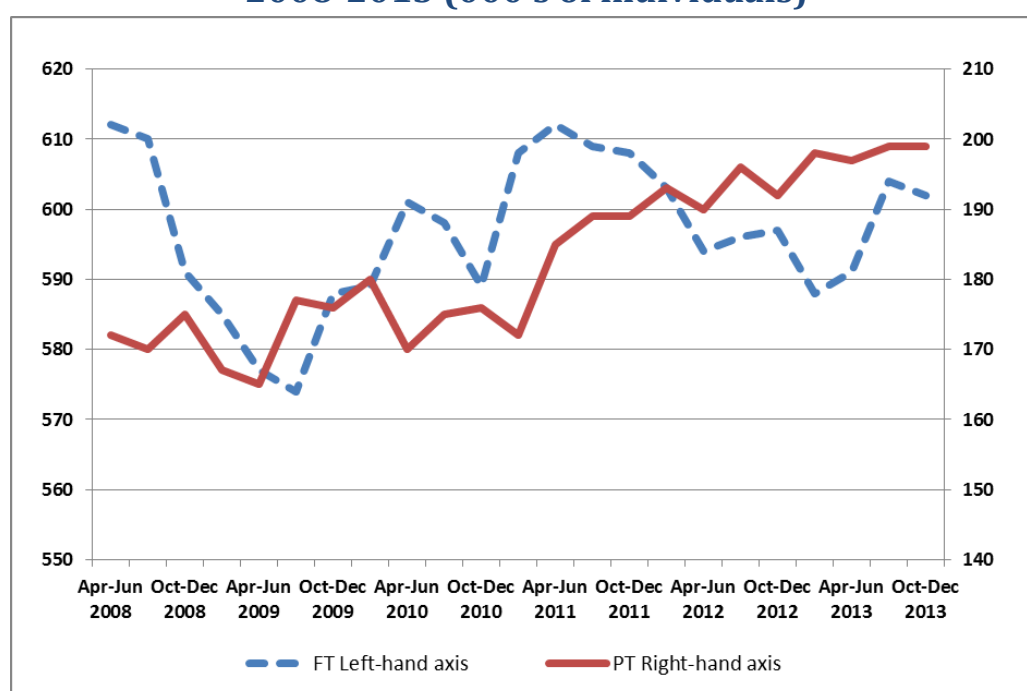


Source: Northern Ireland Statistics and Research Agency (2014b)

As Chart 2.8 shows, the public sector in Northern Ireland has been on a gradual downward trend since late 2009. Public sector increased very slightly in the second quarter of 2013 but remained flat in Q3. The decline in public sector activity is closely

matched by declining employee jobs figures for the sector as well. Since mid-2009 private sector growth has mirrored growth in the composite index overall, increasing by 2.2% in quarter 3 following more modest growth of 0.2% in quarter 2. Overall the public sector remains stagnant mostly due to cuts in government expenditure. Growth in the private sector has struggled to contribute anything approaching robust growth and there is a danger that the economy could contract substantially if further cuts in government expenditure materialise after the 2015 UK general election.

Chart 2.9 Full and Part-time employment, Northern Ireland, 2008-2013 (000's of individuals)



Source: NISRA (LFS Quarterly Supplement)

The Northern Ireland labour market has seen little change in recent months. Unemployment in the three months to the end of January was 7.5% showing no change from the previous quarter (August to October) figures. However the January unemployment rate shows a 0.1% increase on the quarter ending December 2013, which in itself was a 0.1% increase on the quarter ending November 2013. It appears that the single month figures for December and January pushed up the three month average rate as they did at UK level. Data for November to January 2014 also show a small drop in full-time employment with part-time employment now just over 200,000. Youth unemployment fell marginally standing at 22.3%, however the youth

claimant count also increased by 50 in the same period. Long term unemployment measured as those out of work for 12 months or longer decreased by 5,000, however there was an increase of 8,000 in those unemployed for up to six months. Overall the labour market remained largely unchanged and it remains to be seen whether a brief pause in good data at UK level will become more long lasting.

Table 2.2 brings together data on enterprise and business, skills, labour and infrastructure in Northern Ireland. The purpose of this table is to show an overall structural picture of the Northern Ireland economy.

Updates from the previous version of this table (NERI QEO Winter 2013) show increase in GVA per head and how that factors into overall productivity for the region. This table will be updated in subsequent QEOs as figures for 2013 begin to emerge.

Table 2.2 Some key economic trends in Northern Ireland, 2008-2012

	2008	2009	2010	2011	2012
Enterprise & Business					
No of Business	-	-	121,000	122,000	114,000
% of Businesses in Construction	-	-	22.8	23.8	22.9
Business Births	5,655	3,945	4,590	3,745	3,945
Business Deaths	4,175	5,170	5,230	4,950	5,315
No. of Businesses with no employees	-	-	85,440	88,475	81,000
No. of Businesses 500+ employees	-	-	55	55	50
Research & Development Expenditure	367.8	509.5	535.4	567.5	624.1
R&D Enterprises	196.6	341.6	353.2	388.8	461.3
% R&D Foreign owned firms	60.3	26.8	32	26	22.2
% R&D Domestic owned firms	39.7	73.2	68	74	77.8
R&D Higher Education	154.2	150.9	166.1	164.3	147.3
R&D Government	17	17	16	14.4	15.5
Patents applied for	253	213	240	249	252
Patents granted	11	11	7	16	23
No. of Tourists (International and GB)*	-	-	-	1.56m	1.55m
Skills					
% Working Age Pop. with Degree	-	19	19	18.5	19
% Working Age Pop. with Higher Ed (below degree)	-	7	8	5.3	7.4
% Working Age Pop. with A-level	-	26	25	20.8	25
% Working Age Pop. with GCSE	-	20	22	28.2	22.5
% Working Age Pop. other quals	-	7	6	4.5	6.1
% Working Age Pop. no quals	-	12	20	22.7	20
% Employed with Degree	24	25	24	24.8	25.6
% Employed with Higher Ed(below degree)	9	8	9	6.9	9
% Employed with A-level	25	26	25	22.8	26.5
% Employed with GCSE	21	20	21	26	20.8

Table 2.2 Some key economic trends in Northern Ireland (continued)

	2008	2009	2010	2011	2012
% Employed other quals	6	7	7	5.1	5.8
% Employed. no quals	15	15	13	14.5	12.3
% School Leavers with 2+ A levels	44.6	46.3	50.2	52.7	53.3
% School leavers with 5 GCSE's	88.7	89.7	91.3	92.8	93.5
% School leavers with No GCSE's	3.9	3.6	2.9	2.1	2.2
% School leavers with No Formal quals	3	2.8	2.3	1.7	1.9
% School leavers to Higher Ed	38.5	39.9	42.9	42.2	41.7
% School leavers to Further Ed	27.4	29.5	32.4	33.1	32.6
% School leavers to Employment	12.1	10.2	6.7	7	6.6
% School leavers to Unemployment	3.3	3.5	3.1	3.6	3.8
% School leavers to Training	15.9	14.8	12.7	11.8	13.1
% School leavers to Unknown	2.8	2	2.1	2.4	2.2
Labour					
Productivity (GVA per head)	16518	15863	16038	16019	16127
Median Gross Weekly Pay	345	354.6	354.7	354.5	360.2
Real % change in Productivity	-5.1	-6	-1.9	-2.4	-1
Real % change in Median gross pay	1.3	0.5	-3.1	-2.4	0.1
Median Gross Pay Male Full time	439.8	460	455.6	461.8	478.9
Median Gross Pay Female Full time	385.2	402.6	409.4	417.9	440
Median Gross Pay Male Part time	139.9	150	132.4	139.2	139
Median Gross Pay Female Part time	152.6	161.4	152.2	154.4	153.8
No. of Vacancies	83,119	56,351	51,469	47,107	55,964
No. of Redundancies	2,782	4,596	2,096	1,808	3,354
Infrastructure					
Electricity Imported	545	1,937	2,297	1,769	-
% Electricity from renewables	5	7.3	9.3	8.9	14.3
Housing Completion	13,477	9,722	9,745	7,694	6,800
Residential Property Price Index	152.5	124.5	119.8	103.8	90.75

Sources: Department for Business Innovation and Skills (2013) Business Population Estimates for the UK and Regions 2012 BIS: London Northern Ireland Statistics and Research Agency (2013) Northern Ireland Residential Property Price Index Quarter 3 2013 NISRA: Belfast Northern Ireland Statistics and Research Agency (2013) LFS Quarterly Supplement Northern Ireland Statistics and Research Agency (2013) Northern Ireland Research & Development Statistics 2012 NISRA: Belfast Intellectual Property Office (2013) The Patent Office Annual Report and Accounts 2012/13 IPO: London Northern Ireland Statistics and Research Agency (2013) Great Britain and Other Overseas Visitors to Northern Ireland 2012 NISRA: Belfast Department of Education (2013) Qualifications and Destinations of Northern Ireland School Leavers 2011/12 DENI: Belfast Office for National Statistics (2013) Regional Gross Value Added Income Approach ONS: London Northern Ireland Statistics and Research Agency (2012) Annual Survey of Hours and Earnings NISRA: Belfast Northern Ireland Statistics and Research Agency (2012) Vacancies in Northern Ireland: Statistics from 2007 to 2012 NISRA: Belfast Northern Ireland Statistics and Research Agency (2012) Northern Ireland Redundancy Statistics NISRA: Belfast Office for National Statistics (2012) Generation and supply of electricity in Scotland, Wales, Northern Ireland and England, 2004 to 2011 ONS: London Northern Ireland Statistics and Research Agency (2013) Northern Ireland Housing Statistics 2011-12 NISRA: Belfast Northern Ireland Statistics and Research Agency (2013) Northern Ireland Environmental Statistics Report NISRA: Belfast

Note: *Tourism numbers exclude domestic visits within NI and visits from the ROI.

3 Macroeconomic Projections

This section of the QEO outlines our outlook for the economies of both parts of the island of Ireland. For the Republic, we report a set of projections out to 2016 and include our expectations for national income and its components, changes to employment, unemployment along with Government finances. In the case of Northern Ireland we report a set of projections for employment growth within the broad industrial sectors based on a forecast for the United Kingdom. As in previous editions we compare our expectations to those from some other agencies in relation to output and the labour market.

Our review in section 2 of ongoing signs of economic recovery in the international and domestic economies sets the context for these assessments. Compared to our analysis in Winter 2013, our expectations for economic growth in the Republic of Ireland have been revised to reflect improved levels of consumer spending and further improvements in the labour market.

The section is structured as follows:

- assumptions in regard to international developments;
- economic projections for the Republic of Ireland; and
- economic outlook for Northern Ireland.

3.1 Macroeconomic Assumptions for the Global Economy⁶

As noted in the previous section, the present emergence of growth/recovery across the international economy is accompanied by a series of caveats and uncertainties. Within Europe, growth remains small and fragile, weighed down by widespread fiscal contraction policies⁷, high macroeconomic and household debt burdens in some countries, uncertainty regarding future capital supports required for the banking sector and unresolved fiscal crises in a number of peripheral economies. The UK

⁶ More details on the international economy, including the UK, are outlined in section 2 of this QEO.

⁷ See for example a recent European Commission study by in 't Veld (2013) which explored this issue.

economy, significant for both parts of the island, has sustained growth throughout 2013. However, the composition of this growth, the continuing over reliance on household consumption still raises serious concerns about sustainability in the medium term.

More broadly, the slowdown in some emerging economies has the potential to impact on trade, growth and recovery across many regions including Europe. While growth remains relatively high in many of these economies, its pace has been slowing, carrying possible implications for capital flows, trade and economic activity generally.

Collectively, this implies an improving, if fragile, outlook for the international economy. It also serves as a challenging context for export growth – the key driver over recent times of economic growth in the Republic.

Medium-term risks remain, in particular for those ‘advanced economies’ at the heart of the recent financial crisis. In their September 2013 *Interim Economic Assessment* the OECD noted two challenges facing these regions: (i) high unemployment which may lead to structural unemployment even as the recovery takes hold; and, (ii) persistently weak investment in advanced economies which has slowed capital growth, risks impeding productivity growth during the recovery and serves as a further drag on domestic demand (OECD, 2013a).

Overall, our assumptions are built on an international economic outlook that is positive yet fragile.

3.3 Macroeconomic Projections for the Republic of Ireland

Developments in the Republic of Ireland’s labour market, consumer spending and pharmaceutical sector impact on our macroeconomic projections outlined in Table 3.1. The expectations and trends reflected in these projections are outlined below.

Gross Domestic Product

Compared to our projections in winter (December) 2013, our expectation for GDP growth and the performance of its components has been marginally revised upwards.

Overall, we anticipate growth in 2014 to be 1.6%, a figure dragged down by approximately 0.5% of GDP given the contraction of the pharmaceutical sector.⁸ As the impact of the pharma-sector's contraction fades, we anticipate a return to higher growth levels of 2.1% in 2015 and 3% in 2016. The latter figure buoyed by a reduction in fiscal austerity measures.

Within the components of GDP our expectations are as follows:

Personal Consumption: We anticipate that personal consumption will recover in 2014 growing by 0.6%; the first growth in this key component of domestic demand since 2010. Although household finances remain under strain, indications from retail sales and exchequer VAT returns point towards some growth. However, although consumption growth is moving into positive territory, our expectation is that it will remain positive but low out to 2016. As the major component of the domestic economy, this sustained weakness in personal consumption weighs heavily against much greater activity within the domestic economy.

Investment: Uncertainty and the challenges of accessing credit have impeded growth in investment in recent years. Ireland, like other advanced economies cited by the OECD earlier, continues to considerably under-invest relative to historical norms; a phenomenon explored in an NERI paper by Duggan (2013). We anticipate increases in investment this year climbing to 6.1% in 2014 and remaining around that growth rate out to 2016. We anticipate that these increases, from such low levels, will be driven by improvements in business confidence and expectations, investment in machinery and airplanes alongside the impact of the various Government investment programmes (stimulus) announced during 2012, 2013 and 2014.

While we anticipate that investment will play an important role in supporting economic growth, we believe that there remains potential for this area of economic activity to increase further if Government and other agencies begin to make use of the recently established Ireland Strategic Investment Fund (ISIF) within the auspices of the National Pension Reserve Fund (NPRF). Although this initiative was publically launched in March 2014, it still requires legislation to be presented and approved by

⁸ The impact of this contraction has been examined by Enright and Dalton (2013) in a Department of Finance research working paper and by FitzGerald (2013). Our assumption of a negative net GDP effect is confined to 2013 and 2014 although we are aware that the "patent cliff" effects extend across the period 2012-16.

the Oireachtas (due mid-2014) before the funds can be accessed and used. To date, it remains a regret that these funds have not be leveraged to support a stimulus to the domestic economy.

Government consumption: Our projections for Government current spending reflect the policy directions outlined by the Department of Finance in Budget 2014 (2013). Exchequer spending will continue to contract to 2015 with some stabilisation in its real value in 2016.

Exports: Our projections for exports have been revised down for 2014 to take account of the greater than expected contraction in the pharma-sector. This contraction is principally related to a number of drugs going off patent and a restructuring of production and the value of exports as a result. The contraction is likely to have some labour market implications and is also likely to carry some implications for exchequer corporate tax income.⁹

This contraction in exports, feeds through to an overall decline in the sector's contribution to national income although we recognise that the effect is sector specific and consequently our considerations of employment growth have been formed on the basis of the underlying economic growth which is occurring before the pharma-sector effects are counted (see below).

The Republic's export growth is also challenged given the aforementioned difficult external environment, but we anticipate it will return to higher levels of overall growth from 2015.

Imports: The performance of the export sector represents a key influence of the scale and growth of imports; much of Ireland's exports are import intensive. We have revised our expectations for this component of GDP to take account of the contraction in the pharma-sector which we anticipated will impact on imports. However, underlying levels of growth, and the slow recovery in household consumption and investment will feed through to increase import levels from 2015.

⁹ See FitzGerald (2013) who anticipates that this could result in a small decrease in exchequer corporate tax revenues.

Labour Market

Employment growth: As we have outlined in section 2, the recent increases in employment levels have been significant and above our previous expectations (and those of all others projecting economic trends). In 2014 we expect the year to record an increase of 1.5% in employment; less than that recorded in 2013 (+2.3%) which we consider to have been partially related to the re-emergence of activity in a number of labour intensive industries (e.g. accommodation and food; tourism).

We anticipate that increases in growth, investment and the slow recovery in personal consumption will drive further employment growth out to 2016. Our employment projections adopt the ILO employment definition – working for pay, profit or in a family business for one or more hours in a week – and do not distinguish between any part-time/full-time split in employment growth.

Table 3.1 Projections of Output, Public Finances and Labour Market (Republic of Ireland) to 2016

	2013 values	2013	2014	2015	2016
National Income		<i>Percentage real change over previous year</i>			
Gross Domestic Product	€164.0bn	-0.3	1.6	2.1	3.0
Personal Consumption	€83.1bn	-1.1	0.6	0.9	1.2
Investment	€18.4bn	4.2	6.1	6.0	6.2
Government Consumption	€25.0bn	-0.5	-1.9	-1.5	0.2
Exports	€177.1bn	0.2	1.9	3.0	3.5
Imports	€138.7bn	1.0	1.3	2.5	2.6
Government Finances*		<i>Percentage of GDP</i>			
General Government Deficit	€11.95bn	-7.3	-4.6	-2.5	-1.8
Gross Debt	€206.6bn	126.0	120.5	118.2	114.5
Labour Force		<i>Percentage change over previous year</i>			
Employment	1,837,800	2.3	1.5	1.4	1.4
		<i>Percentage of Labour Force</i>			
Unemployment	316,000	13.1	11.5	10.9	10.2

Notes: 2013 data are preliminary figures from CSO National Accounts, Eurostat Labour Force Survey and NERI Government Finance calculations.
2014-2016 data are NERI projections.

*Projections do not include the impact of the exchequer's sale of Bank of Ireland preference shares (Dec 2013). Depending on accounting approaches, these may further reduce the 2013 general government deficit and reduce the levels of net and, eventually, gross debt.

Unemployment: Driven by further job creation, increases in training places and emigration, we expect the rate of unemployment to fall to an average of 11.5% for this

year (2014). We anticipate an average unemployment count of approximately 250,000 people during 2014. Growth and a recovery in domestic demand will contribute to further unemployment reductions out to 2016. At that point, our expectation is for an unemployment rate of 10.2% - still more than twice the pre-crisis level.

Government Finances

The growth in employment and the reductions in unemployment carry important implications for the Government's finances. Reductions in the numbers unemployed translate into expenditure reductions for the Department of Social Protection while employment increases generate additional direct and indirect tax revenue flows. Collectively, these feed through to lower deficit and debt outcomes. While we note the limited impact on the income and VAT exchequer returns of recent employment increases, there are never-the-less exchequer savings from welfare expenditures. Income tax revenue may also lag employment growth for the self-employed; although it will be slow to rise as a result of increases in the numbers of low-paid workers.

Table 3.2 Overview of recent projections of change in real GDP (Republic of Ireland)

	2012	2013	2014	2015	2016	2017
Outcomes	0.2	-0.3				
Projections						
NERI	0.3	0.5	1.6	2.1	3.0	
Department of Finance	0.9	0.2	2.0	2.3	2.8	-
Central Bank	0.5	0.5	2.1	3.2	-	-
EU Commission	0.4	0.3	1.8	2.9	-	-
IMF	0.4	0.3	1.7	2.5	2.5	2.5
OECD	0.5	0.1	1.9	2.2	-	
ESRI (QEC)	1.3	0.3	2.7	-	-	-
Ernst and Young	0.0	0.1	1.7	2.0	2.5	2.8
Investec (formerly NCB)	0.3	0.7	2.1	2.3	2.2	

Sources: Department of Finance Budget 2014: Economic and Fiscal Outlook (October 2013) (Department of Finance, 2013); Central Bank: Quarterly Bulletin (January 2014); European Commission European Economic Forecast: Winter 2013 (February 2014); International Monetary Fund: Twelfth Review Under the Extended Arrangement (December, International Monetary Fund, 2013); OECD: Economic Outlook (November 2013); ESRI: Quarterly Economic Commentary (Winter 2013) (Duffy et al. 2013); Ernst and Young (2013b); Investec: Irish Economy Monitor (October 2013).

Notes: Data sources for Outcomes: Eurostat.
Previous forecasts for 2011-2012: Forecasts made at the end of the previous year (2010 and 2011, respectively, for 2011 and 2012)
Current forecasts for 2013-2016 as of August/September 2013 or the most recent period.

Our expectation is for an end-of-year budget deficit of 4.6% of GDP in 2014– better than the Government's Budget 2014 projection of 4.8% of GDP. We expect that further

improvements in the economy (outlined above) will drive the deficit lower and, given current policy plans, we expect a deficit of 2.5% in 2015 and 1.8% in 2016. The former achieves the long-standing Troika budget deficit target.

The Republic's gross debt peaked at 126% of GDP in 2013 and will begin to decline as a proportion of national income from this year. Given the NTMA cash reserves, we expect both the nominal and % GDP debt figures for Ireland to decrease in 2014 reaching €204.7 billion (120.5% GDP); this will occur despite the size of the 2014 budget deficit.

Table 3.2 compares our projections to those of other agencies. Projections of GDP growth in 2014 vary between a low of 1.6% (NERI) and a high of 2.7% (ESRI). As outlined above, our projection is at the lower end of the forecast spectrum given our expectations for the impact of the pharma-sector contraction. Among those agencies projecting GDP growth for 2015, the NERI projection is the second lowest just above Ernst and Young. Conversely, our figure for 2016 is the most optimistic reflecting our view that a moderation in fiscal austerity in 2016 is likely to have a particularly beneficial impact in that year.

Table 3.3 Overview of recent projections of unemployment as % labour force (Republic of Ireland)

	2012	2013	2014	2015	2016	2017
Outcomes	14.7	13.1				
Projections						
NERI	14.9	13.1	11.5	10.9	10.2	
Department of Finance	14.9	13.5	12.4	11.8	11.4	-
Central Bank	14.8	13.6	11.9	11.0	-	-
EU Commission	14.8	13.3	11.9	11.2	-	-
IMF	14.8	13.3	12.3	11.7	11.3	10.9
OECD	14.8	13.6	13.2	12.3	-	-
ESRI (QEC)	14.8	13.1	12.0	-	-	-
Ernst and Young	14.9	13.5	12.9	11.9	10.9	10.2
Investec (formerly NCB)	14.2	13.6	12.9	11.8	10.5	
Sources:	See table 3.2.					
Notes:	See table 3.2.					

Various projections for the rate of unemployment are compared in Table 3.3. The better-than-expected improvements in the numbers unemployed throughout 2013 have resulted in all agencies revising their expectations – as we do in this edition of the QEO. While there are differences between the projections, the general expectation is

for unemployment to continue to fall out to 2016. Of those who project to 2016, the NERI's estimate is the lowest at 10.2%.

Risks to the forecast

Our forecasts above have been formed on the basis of available data and expectations, based on past trends, of the behaviour of key macroeconomic indicators in the future. Like all forecasts, uncertainties with regard to future international and domestic trends serve as a risk to the reliability of our projections.

Internationally, the fragility of European and US economic growth coupled with uncertainty regarding future growth prospects in emerging economies point towards a potential risk. Higher or lower growth in these areas could emerge and have notable knock on implications for the Republic's macroeconomy. These might emerge from further European banking and sovereign debt issues, European interest rate increases, European deflation concerns, energy prices increases, international political tensions (particularly in the Ukraine and the Middle East) and expectations of the withdrawal of central bank monetary supports.

Domestically, our forecasts would be altered by unexpected development in the Euro-Sterling exchange rate, further exchequer requirements to fund capital injections into the commercial banks, a change in the anticipated nature of the pharma-sector contraction and any interruption to the investment stimulus plans Government have set out for 2014 and onwards. While we expect household spending to recover in real terms in 2014, there is a risk that the austerity measures in Budget 2014 combined with the increased property taxes and rising utility costs may dampen some of that recovery. A further domestic risk relates to the sustainability of the Government's proposed expenditure adjustments – these underpin the exchequer performance figures yet, in sectors such as health, are proving difficult to deliver.¹⁰

The sustainability of some recent trends could also impact on our forecasts. Changes to employment growth and migration trends would have consequences for our labour market projections. Similarly, the sustainability of the recent recovery in tourism

¹⁰ Our pre-Budget Autumn 2013 QEO pointed to the lack of potential to cut further from public services in Budget 2014; one of the reasons we outlined the potential for a tax orientated budgetary adjustment.

numbers will depend on factors including the performance of new airline/shipping routes during the remainder of 2014.

Finally, uncertainty regarding current data measures of economic output and labour market indicators serves as a concern. In the past there have been significant retrospective revisions to these measures; which were it to reoccur would alter the baseline measures of the economy and impact on the accuracy of our forecasts.

3.4 Macroeconomic Outlook for Northern Ireland

Macroeconomic Outlook

Northern Ireland as a small regional economy is clearly dependent on the fate of medium term growth for the UK as a whole. Presently much of the UK recovery has been confined to London and the South East of England with some intermittent spurts of growth in the Midlands regions. The two main concerns for the Northern Ireland economy are the sustainability of the present UK recovery and the extent to which the recovery may by-pass Northern Ireland. On the first point, the small pickup in business investment at UK level gives some limited indication of more balanced and sustainable growth. On the second concern, the output data for Northern Ireland in Q2 and Q3 of this year indicate that some of the recovery is filtering down at regional level. However both of these events are based on data from one or two quarters, not enough to reverse the worrying trends of the last four years.

Within Northern Ireland the political situation is unfortunately giving rise to uncertainty once again. The near collapse of the Stormont Executive in February and continuing tensions over a possible agreement to resolve outstanding issues in the peace process have contributed to situation of relative political instability. The continuing political stalemate over issues such as welfare reform has also contributed to the unpredictable nature of policy decisions in Northern Ireland. Finance Minister Simon Hamilton has cautioned that the economic consequences of not implementing a Welfare Reform bill will begin with a £5m monthly fine rising to £250m annually. However, as mentioned in our Winter QEO 2013, the cost to the local economy from implementing Welfare Reform as proposed could be as high as £750m per year.

Employment Projections

As mentioned previously, Northern Ireland is a small regional economy and trends in the UK will be a main determinant for Northern Ireland in the short term. However, it was also noted that trends in the UK do not affect all regions uniformly and regional forces are also important for the economic performance of Northern Ireland. Acknowledging this, the projections presented in this section are based on a shift share analysis that is driven by a central forecast of national UK employment and augmented by regional characteristics. An explanation of the shift share model is contained in the appendix 7.3 of this publication.

The central forecast for the UK economy is taken from the National Institute for Economic and Social Research (NIESR). NIESR operate one of the few fully specified econometric models of the UK economy, NIGEM. This model has performed consistently over the last number of years and is regularly updated, so it provides a robust, independent national forecast.

The shift share calculation uses historical relationships between the regional and national economy and those between industrial sectors to produce the projections contained in Table 3.4. The projections are based on share of employment between industrial sectors as defined by the Labour Force Survey.

Table 3.4 Projections of Employment by Sector for Northern Ireland to 2015

	2012	2013	2014	2015
Total Employment	785,250	789,000	(% change) 1.0	0.2
<i>UK Employment (NIESR projection)</i>			1.9	0.9
Industries				
Agriculture, forestry and fishing	27,500	30,500	10.1	10.4
Energy and water	10,250	11,750	13.8	14.2
Manufacturing	94,000	90,500	-3.2	-4.2
Construction	59,250	57,500	-2.4	-3.4
Distribution, hotels and restaurants	162,250	166,750	3.3	2.3
Transport and communication	40,750	42,500	3.5	3.8
Banking and finance	87,750	87,500	0.3	-0.7
Public admin, education and health	269,000	267,000	-0.2	-1.2
Other services	34,500	35,000	2.0	1.0

Sources: Northern Ireland (NISRA) Labour Force Survey (2011-2013)
United Kingdom (ONS) Labour Force Survey (2012-2013)
NIESR (February 2014) *Prospects for the UK Economy (Kirby et al)*

Note: Industry total are year average figures based on quarterly data

Total employment growth in Northern Ireland is just over half of that expected for the UK in 2014, whilst it is less than a third of the UK increase in 2015. At industry level Agriculture and Energy continue strong growth in both years, but these are relatively small employers overall. Manufacturing and Construction are projected to decline in both years. The projection for Manufacturing contrasts somewhat with positive jobs figures outlined in section 2, but the reality may be that only some parts of the Manufacturing sector are doing well. Distribution, Hotels & Restaurants, the second biggest employer by sector is set to increase steadily over the next two years. As we will outline in section 4 there may be challenges associated with this growth given the

profile of earnings in this sector. The same is true to a lesser extent in the Transport and Communications sector.

Banking and Finance sees a small increase in 2014 only for this to be erased by a contraction in 2015. Reductions in Public administration, Health and Education in both years confirm the trend for this sector as outlined in Section 2. Overall employment growth remains positive out to 2015 but as employment growth in the UK reduces to a medium term growth rate of 0.8%, the employment gains for Northern Ireland will be more muted.

Table 3.5 outlines the expectations of other forecasters for the Northern Ireland labour market. The NERI projections contrast somewhat with those of Ernst and Young in that we project slightly stronger growth in 2014 and slightly weaker growth in 2015. Forecasts for output in 2014 are much more optimistic than those that were made for 2013 with most forecasters expecting at least a doubling in the rate of growth.

Table 3.5 Overview of recent projections of Economic Activity and employment/unemployment (Northern Ireland)

	2011	2012	2013	2014	2015
Outcome (GVA)	0.0	-	-	-	-
Outcome (NICEI)	-1.8	-0.1	-	-	-
Outcome (Employment)	2.9	0.3	-	-	-
Outcome (Unemployment)	7.2	7.5	-	-	-
Economic Activity					
Ernst & Young (GVA)	0.5	-0.8	1.0	2.0	2.0
PWC (GVA)	0.3	-0.3	0.7	1.6	-
Danske Bank (GVA)	-	-0.8	0.5	2.4	-
Employment					
NERI			1.0	0.2	
Ernst & Young	-2.6	-1.7	0.6	0.3	0.3
Unemployment % Labour Force					
Danske Bank	7.3	7.6	7.5	6.9	-
Ernst & Young	7.4	7.6	7.9	7.8	7.7

Sources: Ernst and Young: Economic Eye, Winter (2013); PWC: Northern Ireland Economic Outlook November (2013); Danske Bank Economic Overview Q4 2013 (January 2014) Danske Bank (2014b) Quarterly Sectoral Forecast (March 2014)

Note: Gross Value Added differs from GDP by the difference between taxes and government subsidies.

Risks to the forecast

Our projections are based on an assumed central forecast for UK employment in 2014 and 2015. Whilst the NIGEM model has an impressive track record, it is a model. Within Northern Ireland it is also possible that particular sectors will break out of recent trends and consequently outperform what is projected table 3.4.

Domestically events could alter these projections significantly, for instance a significant downsizing in one of the four major banks would substantially alter the outlook for that sector. Internationally, Northern Ireland faces the same uncertainties as the Republic of Ireland regarding both the Eurozone and US economies. Northern Ireland is seeking to become a more export orientated and FDI based economy, but presently it is not as exposed to these international headwinds as the Republic of Ireland. Interest rate uncertainty was somewhat becalmed by the Bank of England's forward guidance policy, but as mentioned previously the reconfiguration of this policy may give rise to further uncertainty

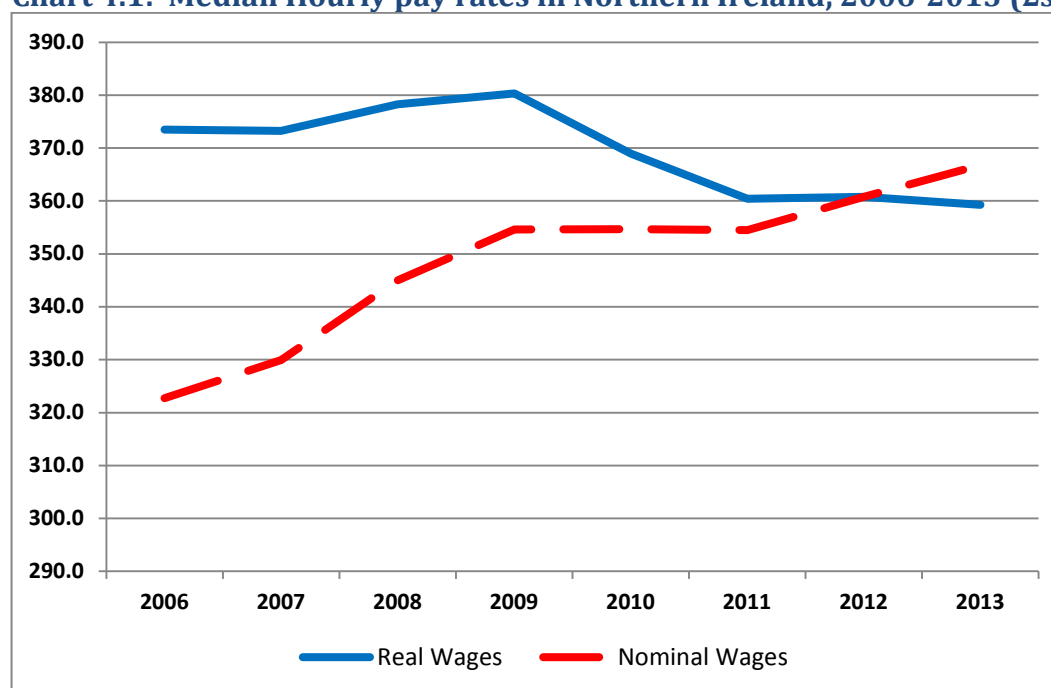
The Scottish Independence referendum is the main structural risk to these projections. The effect on Northern Ireland, not only economically but politically and socially would be substantial. Should a yes vote prevail, the dynamics of regional economies within the UK would be fundamentally altered and little preparation or research has been devoted to examining such an outcome.

4 Earnings and Low Pay in Northern Ireland

4.1 Introduction

The UK economy suffered a substantial financial adjustment following the global economic crisis that began in 2008. Since then much of the debate has focused on differing strategies for economic recovery, austerity versus investment, tackling budget deficits and controlling unemployment. The recent run of positive economic data in the UK indicates that a recovery is underway. However growth has been led by increased household consumption and that raises serious concerns about the sustainability of this recovery. That is because this recovery is different to previous recessions in two important respects, wages and employment.

Chart 4.1: Median Hourly pay rates in Northern Ireland, 2006-2013 (£stg)



Source: Annual Survey of Hours and Earnings 2006-13. Median Hourly earnings (excluding overtime)

Note: Real Wages are calculated using the latest available GDP deflators from HM Treasury

Given the depth of the recession that hit the UK in 2008, the performance of employment has been somewhat better than expected. Whilst unemployment increased sharply, compared to the contraction of output in the economy, employment has held up well. This situation has given rise to what some have dubbed the

productivity puzzle¹⁰. Simply put, more people are being employed to produce less output in the economy. This trend has been complemented with the biggest squeeze on UK real wages in over 50 years. The productivity puzzle and wage squeeze are recent developments that have combined with a long term trend of increasing wage inequality in the UK. The increasing inequality itself has been due to growth in high and low paying jobs and a gradual disappearance of mid-level paying jobs (Resolution Foundation, 2012). This pattern is known as labour market polarisation and it is not confined to the UK. This topic was covered for the Republic of Ireland in the NERI Winter 2013 Quarterly Economic Observer¹¹. We intend to broaden that analysis into Northern Ireland later in the year, but the subject of this QEO is how all of these labour market trends have affected the spectrum of earnings in Northern Ireland and the growth of low wages in particular.

The next section focuses on definitions of low pay, how it can be measured and benchmarked. The subsequent sections detail the extent of low pay in Northern Ireland looking at gender, age, geography and industries. While not ignoring structural issues, the policy section will focus on proposals to tackle the growth of low pay.

4.2 What is low pay?¹²

Low pay is officially defined as two thirds of the median gross hourly wage (Eurostat, 2013a). For the year 2013, the median hourly wage rate was £10.19 which implies a $\frac{2}{3}$ rate of £6.79. As this measure is a function of the earnings distribution, sensitive to movements within that distribution, we examine two other measure of low pay as well.

Low pay could also be defined as those earning the MW or below. Introduced in 1999 the National Minimum Wage is set by government on the advice of the Low Pay Commission (LPC) in London. The Commission is mandated to set a statutory wage that would provide a floor for earnings but also one which, if implemented, would not endanger overall employment in the economy. For the year ending November 2013 the UK MW was set at £6.19. While a new rate of £6.31 was set in November 2013, the data we are using is from April 2013 when the £6.19 rate applied.

¹⁰ See Mac Flynn (2013)

¹¹ See O'Farrell (2013)

¹² The data for all charts in this section is available in appendix 7.4.

The MW is distinct from the relatively new idea of the Living Wage (LW) which began as UK concept in the early 2000's. The LW began as a campaign by low paid workers in the east end of London who found it impossible to make ends meet working MW jobs in the city. Work was commissioned by the Greater London Authority to calculate a wage rate based on the minimum amount of earnings required to live. In 2011, researchers at the University of Loughborough expanded this analysis to come up with a rate for the rest of the UK outside of London. The LW is set independently by these two groups and is an optional rate which employers can choose to offer. In practice the main distinction between a minimum and LW is that the MW is set with regard to affordability for employers whereas a LW is set with regard to affordability for employees. For the year ending November 2013 the Outside-London UK Living Wage was set at £7.45¹³.

This research will examine the pervasiveness of low pay as defined by these three benchmarks.

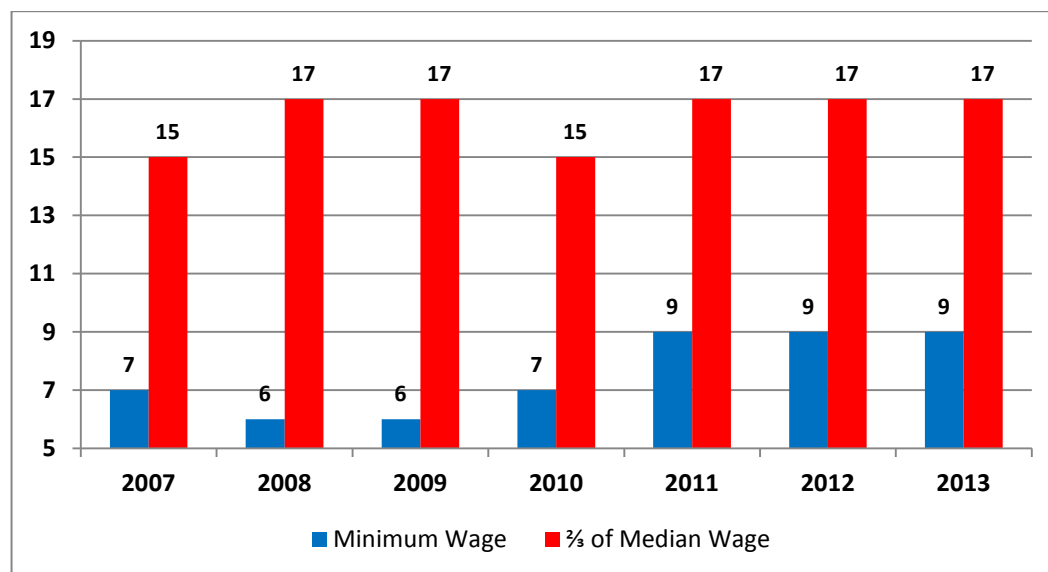
The data we use to measure low pay in Northern Ireland is the Annual Survey of Hours and Earnings (ASHE), a UK-wide survey of the Office for National Statistics and carried out by the Northern Ireland Statistics and Research Agency. ASHE data is a comprehensive but limited guide to pay in Northern Ireland. It is limited in that it provides information for employees only and does not cover the section of the labour force in self-employment (which has been growing sharply since 2010). While the Average Weekly Earnings survey provides monthly, weekly and hourly figures for wages in all categories across the workforce, this survey is not carried out for Northern Ireland. It is also important to remember the figures presented here relate to earnings, not income¹⁴.

Chart 4.2 shows the percentage of earners earning below both the MW and $\frac{2}{3}$ of the median Wage for Northern Ireland from 2007 to the most recent data for 2013. The time series shows some interesting patterns with regard to these two measures.

¹³ The Living Wage outside London is capped every year, see Collins (2014)

¹⁴ A methodology note in the annex of this publication explains how calculations are made from ASHE data

Chart 4.2 Percentage Earning at or below Minimum Wage or $\frac{2}{3}$ of Median Wage 2007-2013



Source: Annual Survey of Hours and Earnings 2007 - 2013

Notes: Wages defined as hourly pay excluding overtime

Living Wage rates for April 2013 = £7.45; April 2012 = £7.20

The percentage of those in low pay as defined by the $\frac{2}{3}$ measure has been consistently between 15% and 17% of employees since 2007. The drop to 15% in 2010 coincided with a fall in the median wage and not a decrease in low pay. Since 2007 however the numbers earning MW or below has increased steadily from a low of 6% in 2008 to 9% in 2013¹⁵. Chart 4.2 shows that while overall proportions of low pay are consistently at 17%, the numbers below MW have been increasing.

The LW as a concept has only existed outside of London since 2011 (Hirsch & Moore, 2011), and so we can only show Northern Ireland levels for April 2013 and 2013. As Chart 4.3 shows that in 2013 25% or nearly a quarter of earners in Northern Ireland earned below the LW, a 2% point increase on 2012 figures. While the ASHE data does allow us to calculate an indicative number of jobs, the figures do come with a health warning. The total number of employee jobs in the ASHE data set for 2013 is 674,000 and 25% of this would equal 169,000. However while the percentage below the LW was lower in 2012, the total job count was higher at 753,000 and so 23% would amount to just over 188,000. Therefore percentage figures provide the best picture based on the data available and job counts can provide additional context but direct comparisons across years are not advisable.

¹⁵ The overall percentage of those below MW will be skewed by the 18-21 year old group who fall into a lower MW bracket, and the breakdown of age groups is discussed in the next section

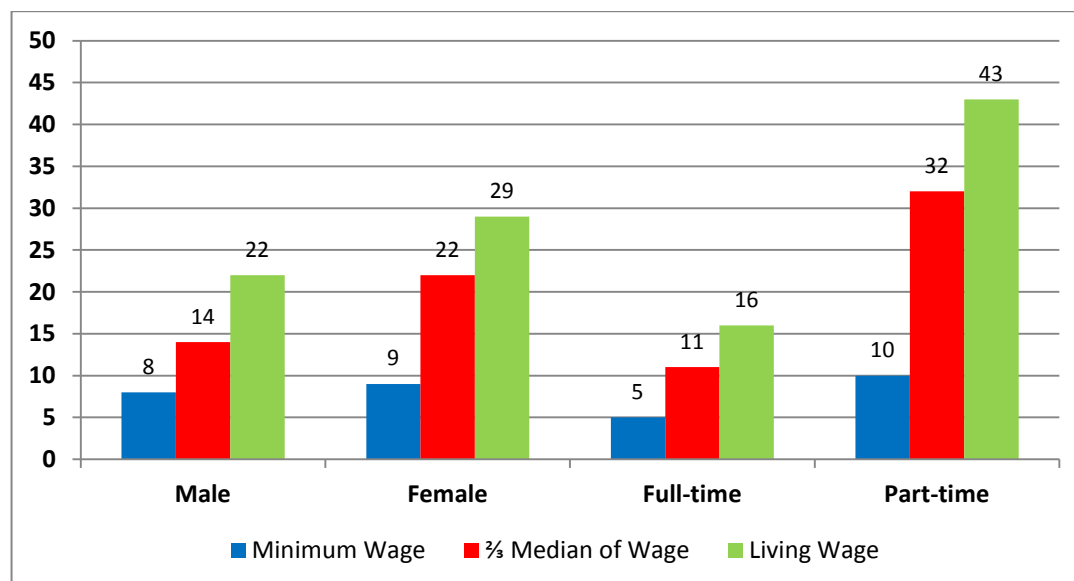
Chart 4.3 Percentage of Earners below the Living Wage in Northern Ireland



Source: Annual Survey of Hours and Earnings 2012; 2013
Notes: Wages defined as hourly pay excluding Overtime
 Living Wage rates for April 2013 = £7.45; April 2012 = £7.20

Looking more in depth at the 2013 figures we can see that differences emerge for those in working full time and part time and for males and females. In 2013 8% of males earned the MW or below while the figure for a female was 9%. Similarly 14% of males earned at or below $\frac{2}{3}$ of the median wage while this figure is 22% for females. Continuing that trend, 22% of males earned below the LW compared with 29% for females. However, often males and females earn equal pay in jobs, but females are often prevented by environmental and family pressures from taking on full time work and find themselves confined to lower paying part-time jobs (Buckner, Grant & Yeandle, 2005). As Chart 4.4 shows only 5% of full time workers earned the MW or below compared to 10% for part-time workers. Only 11% of full time workers are paid at or below $\frac{2}{3}$ of median wage compared to 32% for part-time workers. 16% of full time workers earn below the LW compared to 43% of part-time workers. As Chart 4.4 shows, low pay is more complex than the overall figures suggest and the next section will examine how low pay affects groups by age, industry and geography.

Chart 4.4 Percentage earning below the Living Wage, Minimum Wage & $\frac{2}{3}$ of the Median Wage by Gender & Type of worker in Northern Ireland 2013



Source: Annual Survey of Hours and Earnings 2013

Notes: Wages defined as hourly pay excluding Overtime

Living Wage rates for April 2013 = £7.45; Minimum wage = £6.19; $\frac{2}{3}$ Median Wage = £6.79

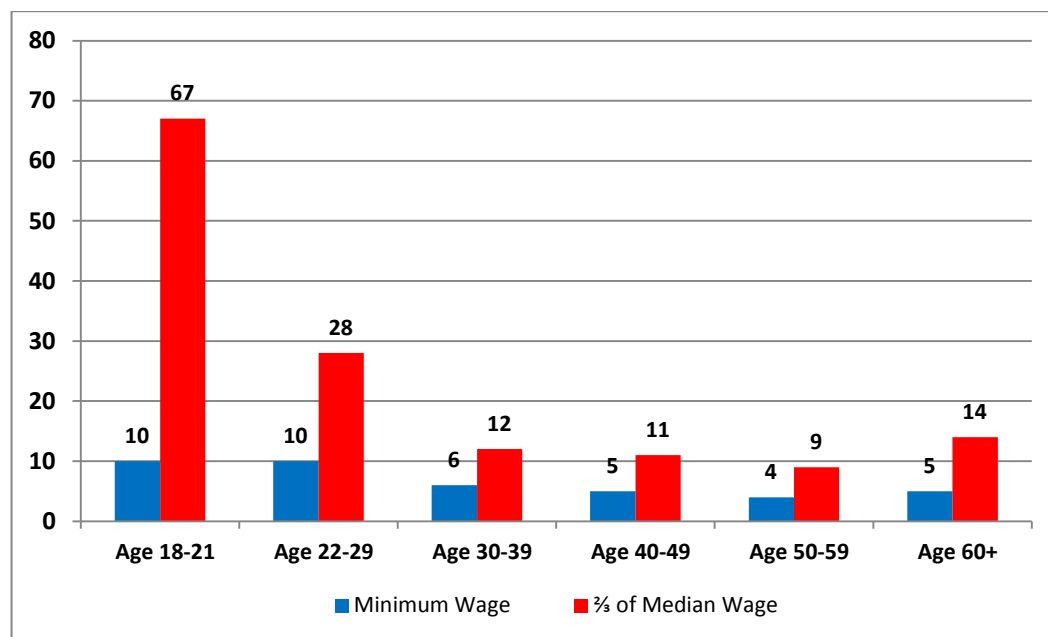
4.3 Who is low paid?¹⁶

Age Groups

Age is a common factor in determining low pay as intuitively those at the beginning of their working life would be expected to earn less than those with more experience and/or qualifications. This is reflected in differing MW rates among younger age groups with lower rates for those aged under 18, those aged 18-21 and the standard rate applying for all those 21 and over. As we can see from Chart 4.5, even accounting for the lower MW rate of £4.98 for 18-21 year olds, the two youngest age groups have the highest proportion of MW or below workers. Both have 10% of workers at this threshold, while the proportion almost halves for the next age bracket. The over 60 age group has 5% of workers on or below MW, and this may reflect a higher incidence of part-time work for those at or close to retirement age. The figures for the $\frac{2}{3}$ rate show a similar trend, but the 18-21 group is much larger mainly due to the lower MW rate for that group.

¹⁶ The data for all charts in this section is available in appendix 7.4.

Chart 4.5 Percentage earning at or below the Minimum Wage and $\frac{2}{3}$ of Median Wage by Age Group, Northern Ireland 2013

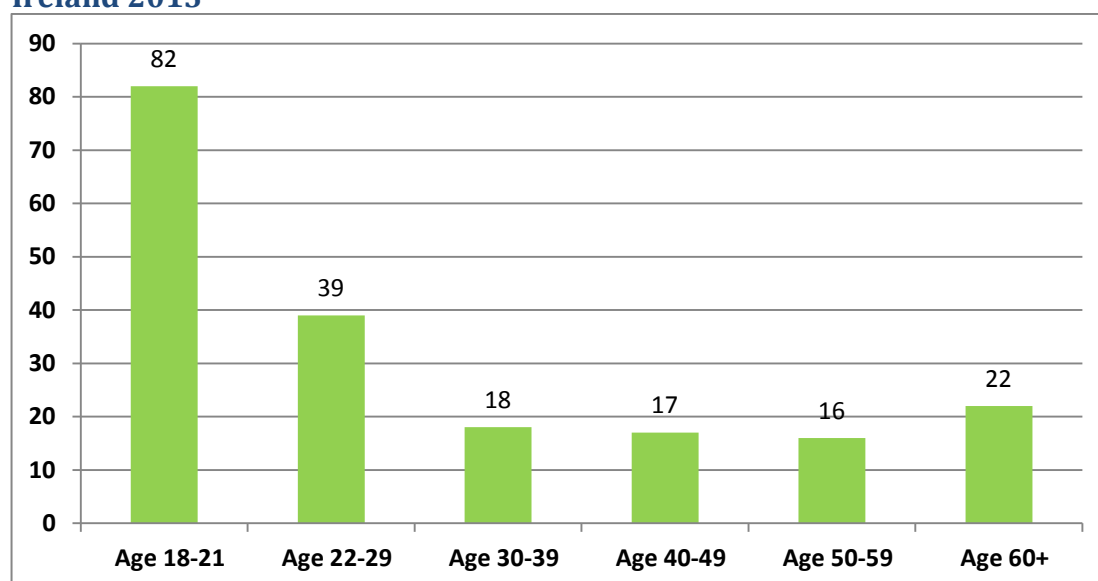


Source: Annual survey of Hours and Earnings 2013

Note: Minimum Wage for 18-21 is £4.98 and for 21 and over is £6.19 $\frac{2}{3}$ Median Wage =£6.79

Like the $\frac{2}{3}$ of median wage measure, the LW does not discriminate by age and so the 18-21 age group obviously falls well short of this threshold with 82% earning below the £7.45 rate. Perhaps the more concerning figure in Chart 4.6 is the 39% of 22-29 age group falling below the LW and the 28% below the $\frac{2}{3}$ measure. The 22-29 age group encompasses experienced workers, heads of households and covers a much larger section of the population than the 18-21 group, so arguably this statistic is more troubling for the domestic economy. Indicative ASHE jobs numbers would suggest that over 46,000 22-29 year olds earn under a LW. The same pattern emerges for the over 60's on the LW as it does for the MW.

Chart 4.6 Percentage earning below Living Wage by Age Group, Northern Ireland 2013



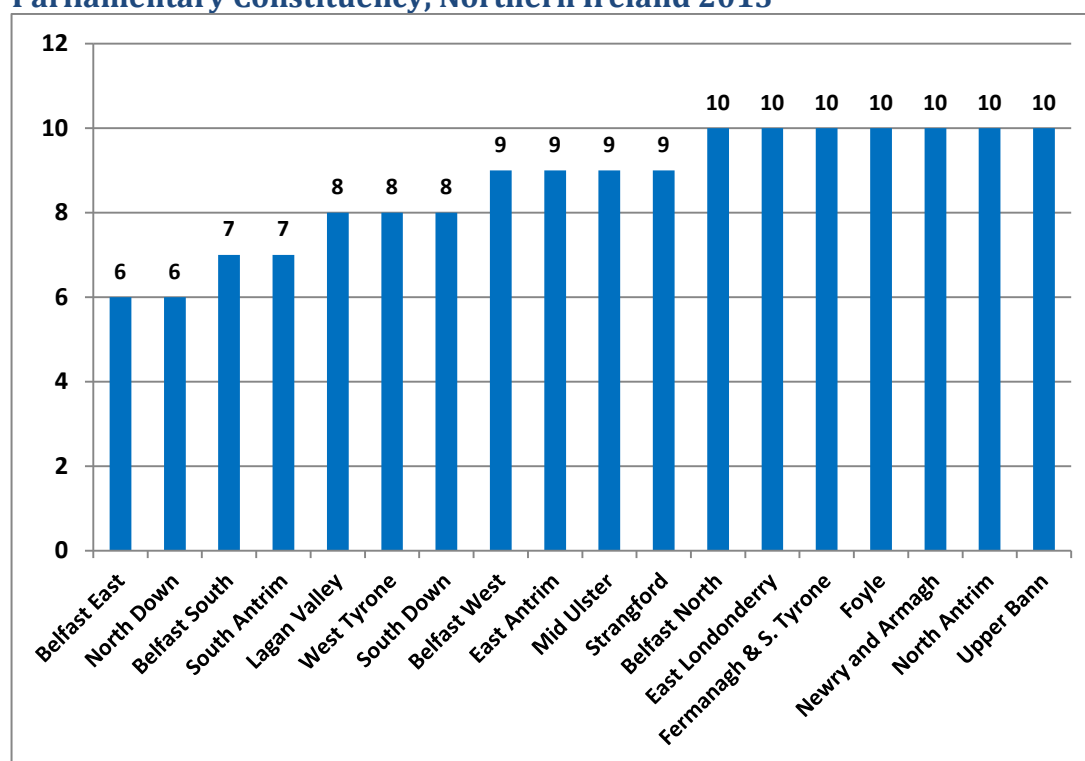
Source: Annual Survey of Hours and Earnings 2013

Note: Living Wage (outside London) for all Age groups in April 2013 was £7.45

Geography

Low pay is not uniformly spread throughout Northern Ireland and geographical comparisons show clear divisions. Northern Ireland is an economy characterized by small and medium sized enterprises with some large employers mostly concentrated in the main industrial hubs. Chart 4.7 breaks down low pay by residence based parliamentary constituencies showing them by ascending percentages of MW workers. The patterns of low pay are perhaps not immediately surprising with more affluent areas such as North Down and South Belfast towards the bottom of the range. However while constituencies like West Belfast often record high rates of child poverty and unemployment, the figures do suggest it experiences marginally less incidences of low pay than areas like North Belfast or Upper Bann. Seven constituencies form the upper end of the chart recording 10% of workers at or below MW. Indicative job figures suggest that Upper Bann has the highest number of MW earners at 4,400, while East Belfast has the lowest amount with 1,690. However it is worth mentioning that within constituencies huge variations are possible. Unfortunately while local authority figures are reported the sample size for the Northern Ireland ASHE does not allow for accurate comparisons at this level.

Chart 4.7 Percentage Earning at or below Minimum Wage by Parliamentary Constituency, Northern Ireland 2013

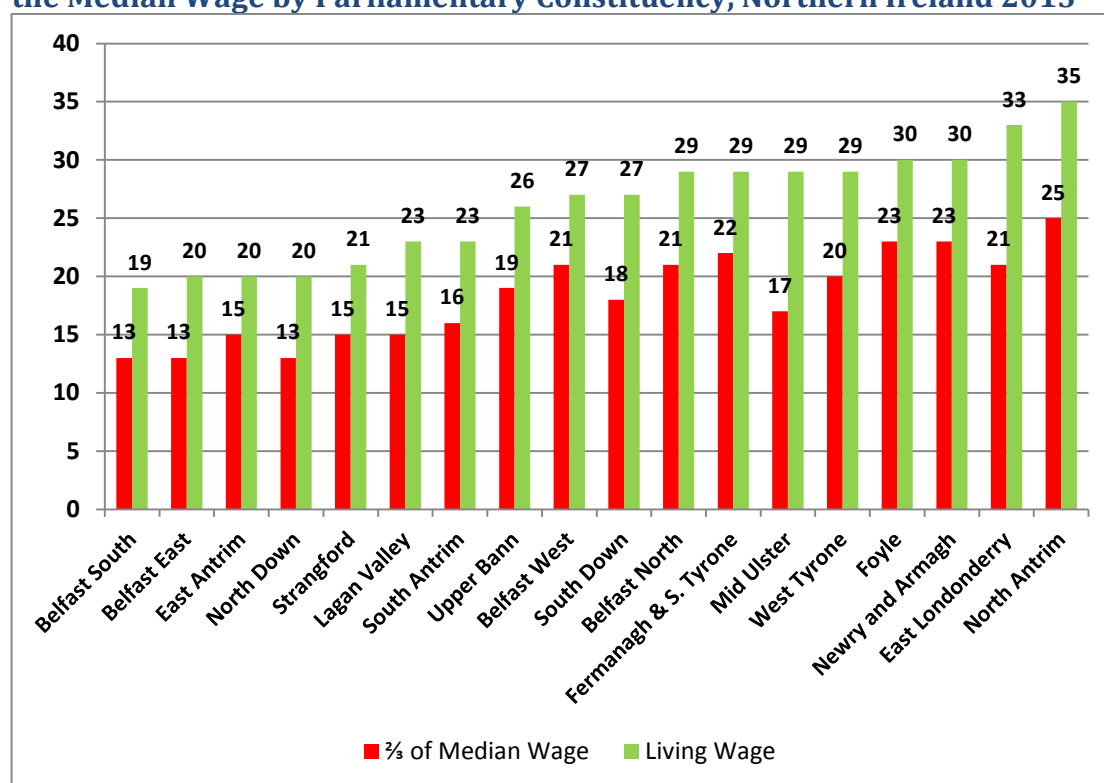


Source: Annual survey of Hours and Earnings 2013

Note: Minimum wage = £6.19

The geographical picture for those under $\frac{2}{3}$ of the median wage and the LW in Northern Ireland shows more variation, with much larger disparity between constituencies as shown in Chart 4.8. South Down, Mid-Ulster and West Tyrone are in the middle of the chart for percentage of below LW workers, but they have much fewer workers below $\frac{2}{3}$ of the median wage. Upper Bann, the constituency with the largest number of MW earners shows a much smaller proportion of below LW earners, but along with Foyle it reports 11,400, the second highest number of earners below LW. North Antrim shows the largest proportion of below LW earners at 35% and also the highest number of earners at 12,250.

Chart 4.8 Percentage earning below the Living Wage and at or below $\frac{2}{3}$ of the Median Wage by Parliamentary Constituency, Northern Ireland 2013



Source: Annual Survey of Hours and Earnings 2013

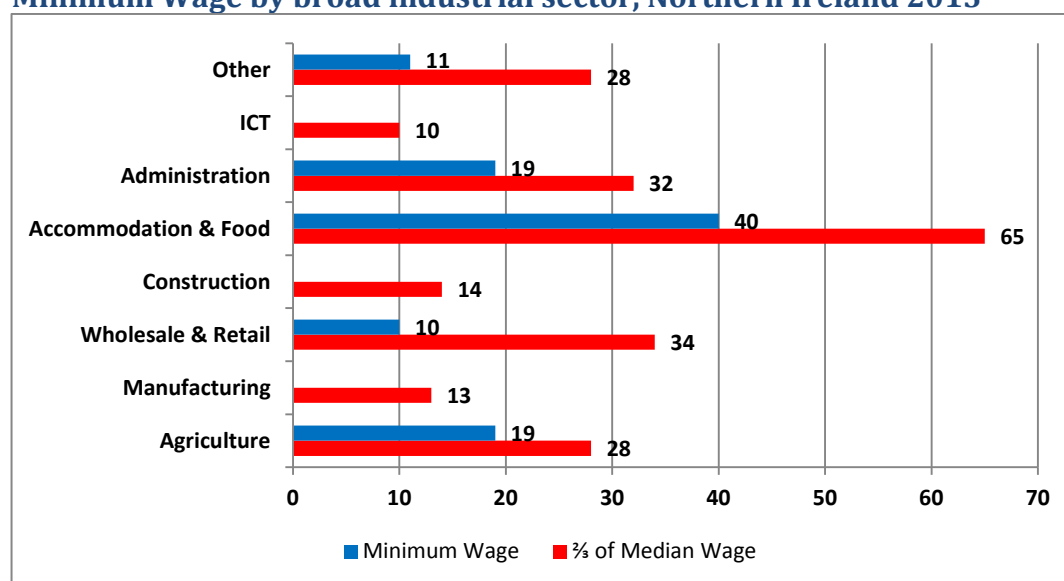
Note: Living Wage rates for April 2013 = £7.45; $\frac{2}{3}$ Median Wage = £6.79

Industries

The breakdown of low pay by industry is quite important for policy, especially when trying to understand how changes in employment patterns may affect wages. Chart 4.9 presents the broad industrial sectors that have substantial numbers at MW and the percentage earning below $\frac{2}{3}$ of the median wage in 2013.

The Accommodation & Food sector has both the highest percentage of MW or below workers and the highest percentage of workers below $\frac{2}{3}$ of the median wage. Agriculture also records a very high percentage of both categories, as does Administration, but Wholesale & Retail has a higher proportions below $\frac{2}{3}$ of median rate (34%).

Chart 4.9 Percentage Earning at or below $\frac{2}{3}$ of the Median Wage and Minimum Wage by broad industrial sector, Northern Ireland 2013

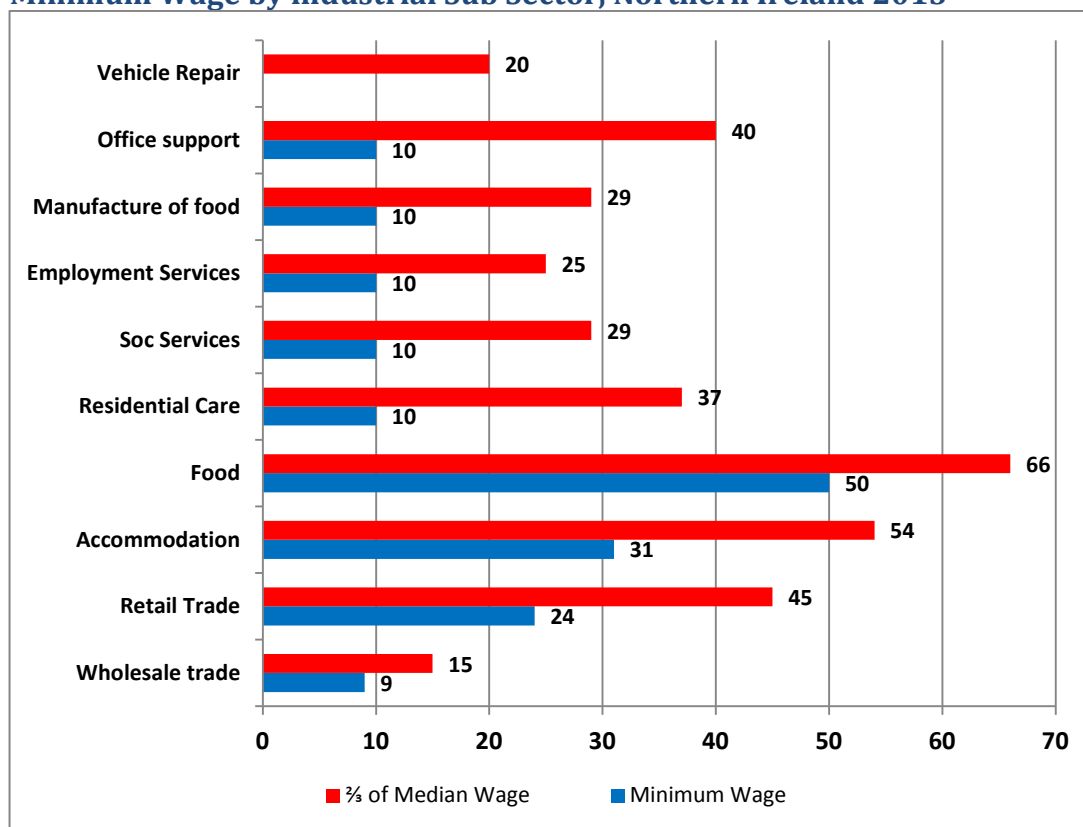


Source: Annual Survey of Hours and Earnings 2013
Note: Minimum wage = £6.19; $\frac{2}{3}$ Median Wage = £6.79

These are broad industrial sectors and there are sub sectors further within them that show more a precise picture of low pay. Chart 4.9 shows that while overall 10% of the Wholesale & Retail sector is at or below MW, Chart 4.10 shows within this 24% of workers are at or below MW in the Retail sector alone. Furthermore it is estimated that up to 45% of these workers could be below $\frac{2}{3}$ of the median wage.

Within Accommodation & Food the data show that over 31% of all Accommodation workers are at or below MW compared to nearly half in the food subdivision. The gap is slightly less on the $\frac{2}{3}$ of median wage measure with 54% of Accommodation workers compared to 66% of Food workers below this threshold. While the Food sector shows the biggest percentage of at or below MW earners, the actual numbers below this threshold are highest in the Retail sector. Indicative jobs figures show that 11,500 food workers are at MW or below, this figure is over 15,000 for the retail sector. The Health sector did not feature in the broad sector analysis as a low paying sector but as chart 4.9 shows within this group two subsectors, residential care and social care have at least 10% of workers at the MW level or below and 37% of residential care workers are below $\frac{2}{3}$ of the Median Wage.

Chart 4.10 Percentage earning at or below $\frac{2}{3}$ of the Median Wage and Minimum Wage by industrial Sub Sector, Northern Ireland 2013



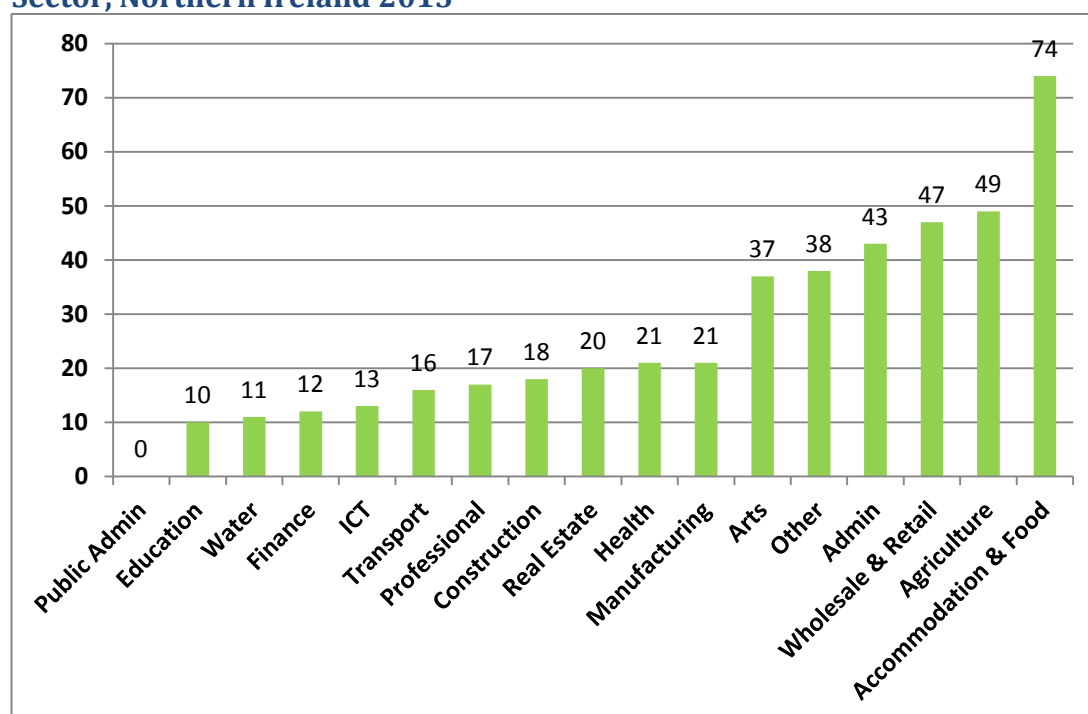
Source: Annual Survey of Hours and Earnings 2013

Note: Minimum wage = £6.19; $\frac{2}{3}$ Median Wage = £6.79

All but one of the broad industrial sectors in Northern Ireland records a substantial pool of workers at or below the LW (see Chart 4.11). The sectors with the largest percentages reflect the same sectors that appeared in the analysis of the MW with the Accommodation & Food sector reporting 74% of workers paid below the LW. There are also notable figures for Real Estate and the Construction sector, while almost 17% of those classed as professional earn the LW or below. No employees categorised as Public Administration were paid below the LW. While the Public Sector has fewer low paid workers than the private sector, but there are still many low paid public sector workers particularly in the Health sector.

While the Accommodation & Food sector records the biggest proportion of workers at or below LW, it is the Wholesale & Retail sector again which has the highest numbers indicated by the job count in this sector. Wholesale & Retail account for 47,470 below LW while the Health sector and Accommodation & Food sector report 26,670 and 24,420 respectively.

Chart 4.11 Percentage earning below Living Wage by broad industrial Sector, Northern Ireland 2013

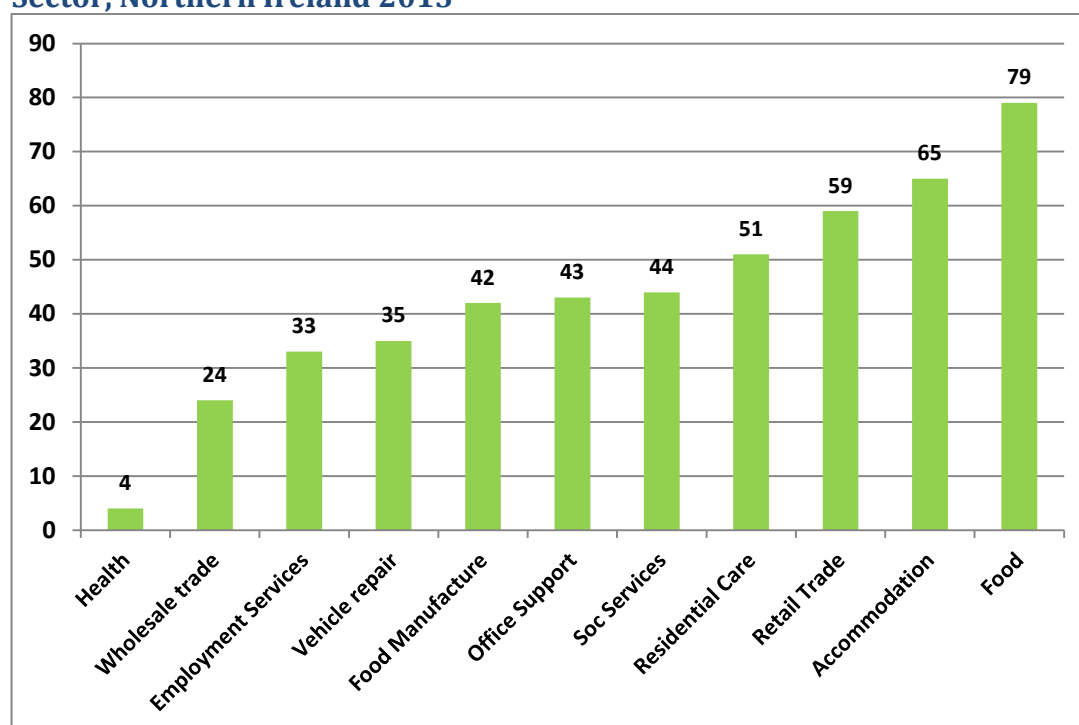


Source: Annual Survey of Hours and Earnings 2013

Note: Living Wage rates for April 2013 = £7.45

Once again, breaking down the numbers further shows some subsectors have particularly high percentages below this threshold. The stand out figure is obviously that nearly 80% of Food workers are at or below the LW. Accommodation and Retail workers have 65% and 59% of workers respectively.

Chart 4.12 Percentage earning below Living Wage by industrial Sub Sector, Northern Ireland 2013



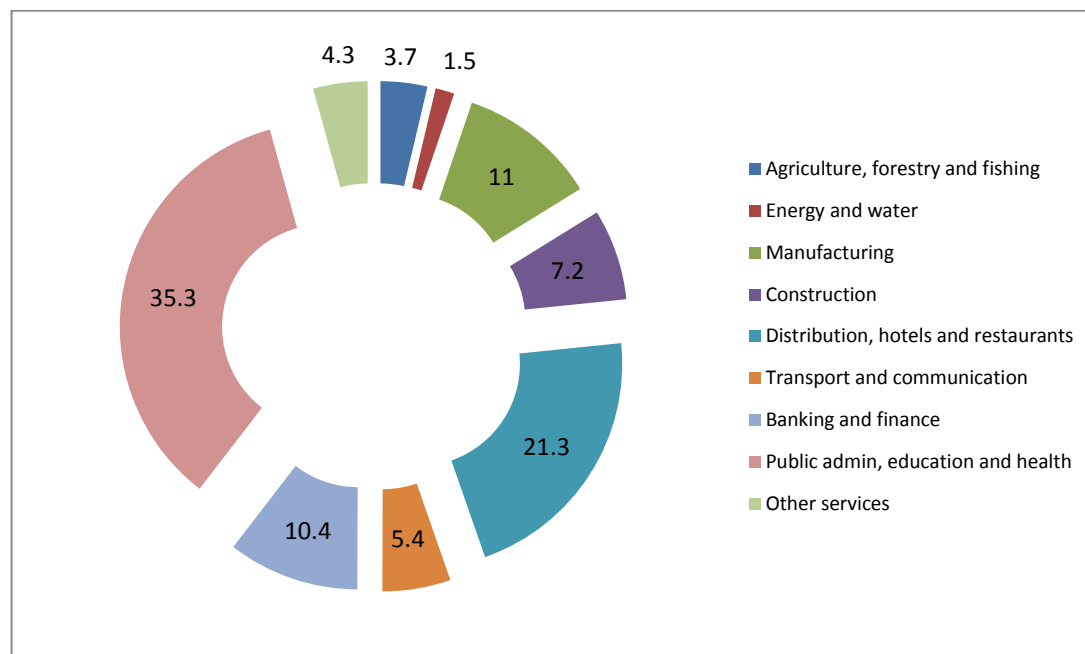
Source: Annual survey of Hours and Earnings 2013

Note: Living Wage rates for April 2013 = £7.45

Once again raw numbers differ in magnitude to the percentage figures. Job figures suggest that 18,170 Food workers fall at or below LW compared with 37,760 in the Retail sector. The dispersion of low pay in industries and groups should inform any policy response, particularly with relation to changes in employment.

In order to give some indication of the share of employment within these sectors, chart 4.13 gives the latest figures for Northern Ireland. The sector covering Accommodation, Retail and Hospitality - all low pay industries, accounts for a fifth of overall employment. While Public Administration remains the largest employer, industries like Residential Care and Social Services are contained within this sector.

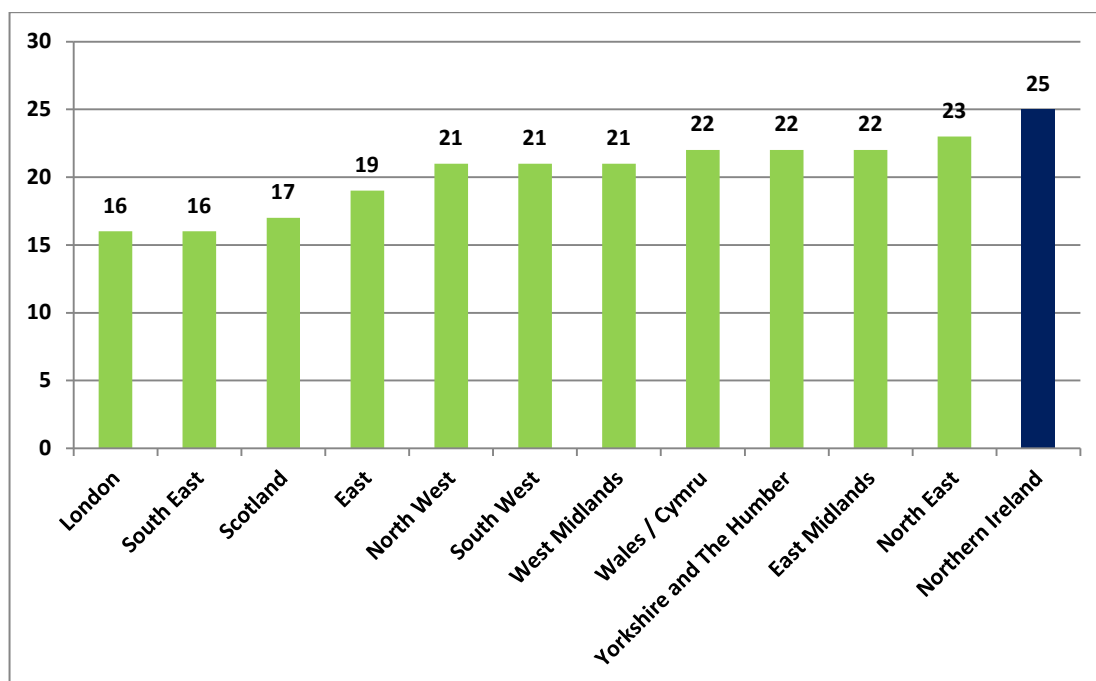
Chart 4.13 Employment by Industrial Sector October to December, Northern Ireland 2013



Source: Northern Ireland Labour Force Survey October – December 2013

4.4 Policy Implications

The data presented in the previous section displays the full extent of low pay at all levels throughout the Northern Ireland economy. Low pay should be concerning to policy makers in Northern Ireland not only because of links to poverty and deprivation but also because of its implications for the domestic economy. The LW is a rate of pay calculated to provide a basic standard of living. For a quarter of Northern Ireland employees to fall below this level raises serious doubts over the future economic prosperity of the region. Northern Ireland is the worst performing region for pay below the LW. The North East of England is a close second with 24%, but even Wales records a significantly lower figure at 22%. An overall UK figure would be skewed by figures for London, but even without it we can see that Northern Ireland is not above average for low pay it is top of the table.

Chart 4.12 Percentage of earners below Living Wage by UK Region 2013

Source: ONS Annual survey of Hours and Earnings 2013

Of course low pay is not simply a matter of exploiting employers and hapless workers; there are structural problems within the Northern Ireland labour market which have given rise to the current distribution of earnings. Structural problems require longer term solutions, and these are policy questions for future research. Low pay is the most egregious consequence of these structural issues and given the current wage stagnation, it requires immediate action.

The Minimum Wage

Policy options are available to both the UK government and the Northern Ireland Executive in these areas. For the UK government the first such option would be to further raise the MW. The introduction of the Minimum Wage was not an uncontroversial issue. At the time it raised objections from those who claimed it would cost thousands of jobs through lost competitiveness, and from those who felt that a MW would prevent further upward pressure on wages by creating a lower bound of earnings. It remains unclear whether the latter of these concerns has been borne out by experience but certainly most research to date finds no adverse employment effects

from the introduction of the MW (Stewart, 2002) and companies with low paid workers tended to experience lower profits rather than pass on higher prices (Metcalf, 2007). The MW is a statutory legal obligation and so enforceable, but as outlined earlier, the rate set by the LPC must not endanger overall employment and so can fall victim to higher levels of inflation. This has been a particular problem over the last number of years.

Using the consumer price index the MW has reduced by 5.2% from 2007/08 to 2013/14. The Low Pay Commission recommended in February 2014 that the MW should increase by 3% from its current £6.31 to £6.50 and the government have accepted this recommendation. This is significant in that it would be the first above inflation increase in the MW since 2009. While it could certainly be considered a move in the right direction, it only begins to reverse the cumulative real losses faced by workers over the last five years.

The MW also needs to be enforced. At present the fine for non-payment of the national MW is a maximum of £5,000 plus 50% of wages not paid. Proposals have been brought forward to increase the maximum fine to £20,000 plus 100% of wages not paid. This is a welcome policy change but enforcement is just as important as deterrents especially for more vulnerable groups such as young workers and migrants.

The Living Wage

The Northern Ireland Executive and local government should lead by example and implement the Living Wage across the public sector, including contracted service providers. They could also lead a campaign to encourage the private sector to take up the LW, but all this would be voluntary.

The LW is a significant improvement from the MW, but it also has its limitations. Research points out that the LW cannot guarantee a minimum standard of living. Calculation of the LW assumes an adequate number of hours worked and the full take-up of in-work benefits (Lawton & Pennycock, 2013). This emphasises that earnings are no guarantor of income as differing circumstance such as family size mean that no wage rate can substitute for adequate in work welfare provisions. The second drawback at present is that the LW is non-statutory and determined by research units

in the Greater London Authority and the University of Loughborough, not government. The LW campaign has sought to provide accreditation services for employers who want to advertise that all their employees earn above the LW. This kind of voluntary campaign has been useful in bringing the concept of a LW to the fore, but the vast majority of companies that have signed up so far are not operating in sectors with particularly large incidences of Low Pay.

An obvious course of action for the UK government would be to abandon the MW and put the LW on a statutory footing. Once again the arguments against such a proposal would be that it would endanger employment or damage competitiveness, by setting a rate without due regard to wider macro impacts. Research from the National Institute for Economic and Social Research (NIESR) uses labour demand elasticities to calculate the effect on labour demand from introducing a mandatory LW. Their calculations suggest job losses of up to 160,000 in the UK (Riley, 2013). It also finds that there would be significant labour for labour substitution with younger workers losing out to older experienced workers.

The NIESR research only models the effect of the increase in wages for firm level demand, it does not factor in spill over effects from increased economic activity. Low paid workers are likely to have a high marginal propensity to consume so most of what is awarded in higher wages is likely to flow directly back into the domestic economy. Reed (2013) calculated the size of demand stimulus created from increased wages and how this extra economic activity would translate into jobs using an IMF employment multiplier. When these figures were combined with the NIESR job loss figures a net increase of 7,000 jobs was estimated from introducing the LW.

A net increase in jobs is not surprising as the NIESR research mentions that if the same labour demand model were used to model the impact of the introduction of the current MW, it would still forecast significant decreases in employment. Given that these employment effects were not borne out by experience, the figures provided by Reed seem plausible. The NIESR research also emphasised that while they forecast job losses, these losses would only represent 4% of the estimated 4 million workers who would see an average wage increase of 15%.

Sectoral Wage Minimums

There are policy options beyond a LW that could be adopted by the Executive in Northern Ireland. As the previous section showed, low pay is concentrated in certain industries, and these industries are least likely to take up the voluntary LW. Unsurprisingly the same NIESR research found these sectors would bear the brunt of job losses from the introduction of the LW. Another structure that could be adopted is to recognise the vast differences between sectors of the economy and form wage rate groups for different industries. This would allow employers and employees to set industry standards for minimum pay that could account for productivity and competition. This need not come from the UK government as the wage groups would be formed locally among industry representatives and trade unions. The sectors in Northern Ireland with the highest proportion of low wage earners such as hospitality and retail are the least exposed to external wage competition. Wage groups would allow employers to agree minimum wage standards for a sector and apply that rate without fear of being undercut by a competitor. This would not be dissimilar to the system of Joint Labour Committees that have been recently resurrected in the Republic of Ireland. That system of agreements could provide a model for Northern Ireland.

4.5 Conclusion

Nearly every government document and every economic plan produced by the Northern Ireland Executive cites ambitious aims to close the gap in prosperity between Northern Ireland and the rest of the UK. This is a noble aim, but too often it is only concerned with levels of exports or output. In order to develop a more prosperous economy work is also needed to close the gap in earnings. In the medium term, work needs to focus on structural issues like skills development and enterprise policy that rewards long term investment. In the short term however policy needs to concentrate on stemming the growth of a large low paid sector in Northern Ireland. A quarter of workers earn a wage below what is deemed to be a decent standard of living (the LW). Women and those in part time employment continue to bear the brunt of these low wages. There is also a danger of employment becoming concentrated in industries that can largely be categorised as low paid.

In the first instance the MW should be strengthened both by increased enforcement and above inflation increases to make up ground lost during the recession. Secondly

the Northern Ireland Executive should take the lead in implementing the Living Wage across all government services and sub contracted services. Local government has a key role to play here given that almost 117 councils across the UK have introduced the Living Wage, and a proposal has already been tabled for Belfast City Council to follow suit. Whilst the LW remains voluntary it may struggle to reach those industries and sectors that need it most. The NI Executive should look toward establishing sectoral wage agreements that would bring upward pressure on wages without damaging internal competition. The National Minimum Wage has to a large extent achieved its aim of eradicating extreme low pay, but not low pay altogether.

The policy proposals presented here would build on the success of the MW in constructing a more robust floor for earnings and guaranteeing decent wages. In order to build a successful and rewarding economy that same pressure will need to be exerted much further along the spectrum of earnings.

5 Conclusion

The outlook we present for the two economies on the Island of Ireland is positive but uncertain. In the Republic the continuing improvement in the labour market is welcome, but should not distract from persistently high long-term unemployment and youth unemployment. Additionally figures for domestic demand and service exports are positive, but there is as of yet no recovery in investment and EU bank stress tests could produce further fiscal and economic challenges. For Northern Ireland trends in UK output and the labour market in particular are positive, but political instability can create uncertainty, and positive headwinds from the UK can be easily blown off course.

Looking to the future, for the Republic we have updated our projections to take into account the positive news on the labour market, and less positive news for goods exports. For Northern Ireland the employment projections are intended to demonstrate how positive trends in the UK labour market might affect Northern Ireland.

Our analysis of earnings and low pay in Northern Ireland points to a significant problem for wage earners in 2013 and beyond. Wages across the UK have substantially underperformed since the crisis, and in Northern Ireland this has led to sustained levels of low pay. We conclude that the minimum wage needs to be strengthened, as does the idea of a Living Wage but there is no one, silver bullet policy. A Living Wage should be a starting point, but in the medium term we believe there is a need to build the infrastructure for higher wages and higher productivity and abandon the race to the bottom.

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7 Appendix

Appendix 7.1. Overview of recent economic trends– Republic of Ireland

	2009	2010	2011	2012	2013
Total Expenditure					
Consumption €m	83,294	82,200	82,380	82,634	83,061
Investment: private and public €m	26,096	19,293	17,266	17,434	18,385
Government current spending €m	29,304	26,196	25,701	25,096	25,052
Exports €m	146,369	157,810	166,964	176,736	177,142
Imports €m	-120,352	-128,326	-131,840	-136,990	-138,734
Domestic Demand €m	137,205	127,122	126,332	125,164	126,498
Total Income					
GDP €m	162,284	158,097	162,600	163,938	164,050
GNP €m	133,919	131,812	130,662	132,649	137,917
Income from Agriculture €m	2,066	2,580	3,179	2,876	n/a
Income non-Agriculture: Wages €m	74,454	69,221	68,315	68,390	n/a
Income non-Agriculture: Other €m	43,042	48,840	54,073	52,885	n/a
Employment					
Labour Force	2,242,400	2,196,700	2,173,700	2,165,800	2,182,100
Labour Force Participation Rate %	62.3%	61.0%	60.4%	60.2%	60.7%
Employment	1,953,600	1,886,100	1,845,600	1,841,300	1,899,300
Employment full-time	1,530,800	1,459,700	1,411,300	1,395,000	1,448,600
Employment part-time	422,700	426,400	434,300	446,300	450,700
Underemployment	112,900	112,500	140,800	147,600	139,300
Unemployment	288,900	310,600	328,100	324,500	282,900
Unemployment %	12.9%	14.1%	15.1%	15.0%	13.0%
Long-term Unemployment	80,600	152,600	191,700	193,000	165,100
Long-term Unemployment %	3.6%	6.9%	8.8%	8.9%	7.6%
Migration					
Immigration	41,800	53,300	52,700	55,890	n/a
Emigration	69,200	80,600	87,100	88,989	n/a
Net Migration	-27,500	-27,400	-34,400	-33,099	n/a

	2009	2010	2011	2012	2013
Public Finances					
Total General Gov. spending €m	78,128	103,547	76,556	69,811	n/a
Total General Gov. revenue €m	55,963	55,149	55,332	56,524	n/a
General Gov. Balance €bn	-22.2	-48.4	-21.2	-13.3	n/a
General Gov. Gross Debt €bn	104.5	144.2	169.2	192.5	n/a
General Gov. Gross Debt % GDP	64.4%	91.2%	104.1%	117.4%	n/a
Earnings and Prices					
Average earnings € per week	699.10	693.70	687.67	691.93	677.13
Average earnings % change	0.3%	-0.8%	-0.9%	0.6%	-2.1%
Private sector av. earn. % change	3.6%	-2.4%	-2.5%	1.0%	-1.3%
Public sector av. earn. % change	-2.4%	-0.8%	0.7%	1.2%	-1.2%
Inflation CPI %	-4.5%	-1.0%	2.6%	1.7%	0.5%
Inflation HCPI %	-1.7%	-1.6%	1.1%	2.0%	0.5%
Inequality and Poverty					
Gini coefficient	29.3	31.6	31.1	n/a	n/a
Quintile ratio	4.3	4.9	4.9	n/a	n/a
Relative poverty %	14.1%	14.7%	16.0%	n/a	n/a
Consistent poverty %	5.5%	6.3%	6.9%	n/a	n/a
Deprivation rate %	17.1%	22.6%	24.5%	n/a	n/a

Sources: CSO Quarterly National Accounts; CSO National Income and Expenditure; CSO Quarterly National Household Survey; CSO Population and Migration Estimates; CSO Earnings and Labour Costs; CSO Consumer Price Index; CSO SILC Reports; and Eurostat online database.

Notes: Earnings and labour market data are for Q3 in all years.
Domestic Demand is Total Domestic Demand.
National accounts data reported at current market prices.

Appendix 7.2 Overview of recent economic trends– Northern Ireland

	2009	2010	2011	2012	2013
Total Expenditure					
Personal consumption £m	-	-	-	-	-
Investment: private and public £m*	7,918	7,268	-	-	-
Government consumption £m	-	-	-	-	-
Exports £m	5,270	5,438	5,910	5,627	5,987
Imports £m	5,152	5,417	5,774	5,690	5,807
Domestic Demand £m	-	-	-	-	-
Total Income					
GVA £m	28,447	28,945	29,063	29,410	-
GNP £m	-	-	-	-	-
Income from Agriculture £m	116	356	381	-	-
Income non-Agriculture: Wages £m	17,157	17,111	17,624	-	-
Income non-Agriculture: Other £m	11,175	11,477	11,058	-	-
Employment					
Labour Force	808,000	834,000	859,000	864,000	866,500
Labour Force Participation Rate	58.5%	59.9%	61.1%	61.0%	60.7%
Employment	750,500	773,500	794,000	797,500	795,000
Employment full-time	581,000	593,500	609,000	597,500	596,000
Employment part-time	171,250	175,000	184,000	193,000	198,000
Underemployment	25,500	27,000	32,000	41,500	43,000
Unemployment	52,500	59,500	62,000	65,000	65,000
Unemployment rate %	6.5%	7.1%	7.2%	7.5%	7.6%
Long-term Unemployment	17,500	26,000	27,500	33,000	35,000
Long-term as % of Unemployed	33.3%	43.7%	44.4%	50.8%	53.5%
Migration					
Immigration	25,261	24,544	23,724	23,255	-
Emigration	21,604	23,394	25,218	24,570	-
Net Migration	3,657	1,150	-1,494	-1,315	-

	2009	2010	2011	2012	2013
Public Finances					
Total General Gov. spending £m	17,807	18,860	19,001	19,273	-
Total General Gov. revenue £m	-	-	-	-	-
General Gov. Balance £m	-	-	-	-	-
General Gov. Debt nominal £m	-	-	-	-	-
General Gov. Debt % GDP	-	-	-	-	-
Nominal earnings and Prices					
Average earnings £ per week	354.60	354.70	354.50	360.80	366.80
Average earnings % change	2.8%	0.0%	-0.1%	1.8%	1.7
Private sector av. earn. % change	-	-	-	-1.6%	1.4
Public sector av. earn. % change	-	-	-	5.0%	0.8
Inflation CPI %	-	-	-	-	-
Inflation HCPI %	-	-	-	-	-
Inequality and Poverty					
Gini coefficient	-	-	-	-	-
Quintile ratio	-	-	-	-	-
Relative poverty %	-	-	-	-	-
Consistent poverty %	-	-	-	-	-
Deprivation rate %	-	-	-	-	-
Sources:	HMT Public Expenditure Analysis 2013; HMRC RTS; ONS Gross Value Added (Income Approach); LFS Quarterly Supplement; NISRA Northern Ireland Migration Flows; NISRA Annual Survey of Hours and Earnings.				
Notes:	Where cells are blank the data are unavailable. *Investment as Gross Fixed Capital Formation (estimated)				

Appendix 7.3 Methodology Notes for Section 4

Shift share model for projecting Employment in Northern Ireland by sector

Northern Ireland is a small region of a much larger economy and so it seems more efficient to assume a central UK forecast of employment (in this case from NIESR) and calculate what the expected outrun of these projections would be in Northern Ireland.

In section 2 an augmented shift-share model is used to translate overall UK growth down to a Northern Ireland projection. There are many different derivatives of shift share models, most of which chart differences between performances of industries regionally and nationally. This allows the model to use national forecast of employment growth to then apply the peculiarities of the region and see how regional employment would be driven by national trends, and how national sectoral trends would augment the growth at regional level.

The statistical shift share model comprises three basic parts in all versions

1. The National Effect – the amount of regional growth explained by national employment growth. If the national economy grows, some of this would flow to the region. (rising tide lifting all boats)
2. The Sectoral Effect – isolates the percentage of national employment growth explained by each sector and applies this to the sectors in the region
3. Regional Competitive effect – isolates sectors where growth is not explained by national trends, but regional effects.

The formula for the basic shift share model is

$$E_{ir}^{t+1} - E_{ir}^t = \Delta E_{ir} = \underbrace{E_{ir}p}_{(NE)} + \underbrace{E_{ir}(p_i - p)}_{(SE)} + \underbrace{E_{ir}(p_{ir} - p_i)}_{(RCE)}$$

Where E_{ir} = employment in industry i ($i=1, \dots, s$) in region r ($r=1, \dots, p$) at time t or $t+1$ (forecast date)

$$p = \frac{\sum_{i=1}^s \sum_{r=1}^p (E_{ir}^{t+1} - E_{ir}^t)}{\sum_{i=1}^s \sum_{r=1}^p E_{ir}^t}$$

$$p_i = \frac{\sum_{r=1}^p (E_{ir}^{t+1} - E_{ir}^t)}{\sum_{r=1}^p E_{ir}^t}$$

$$p_{ir} = \frac{E_{ir}^{t+1} - E_{ir}^t}{E_{ir}^t}$$

Put simply the model isolates sectoral and regional trends from the national trend. Once there is a national forecast, we can build a regional forecast based on those differentials. Shift share models differ on how regional impacts are specified and how convergence in regional disparities is accounted for. Some models assume no regional disparities and so national sectoral employment growth rates are applied to sectors in the regional economy. Some assume constant regional competitive effect, which assume no change over the forecast period.

The projections in Section 2 use a classic shift share model as outlined above with one significant change. As sectoral employment forecasts are not available for the UK we have amended the sectoral component so that it compares sectoral differences in t and $t-1$ as opposed to $t+1$ and t . This substitution is not ideal but it represents the same relationship between sectors, based on historical rather than forecast associations.

Calculating Percentiles from ASHE data

Section 4 calculations for the living wage, minimum wage and $\frac{2}{3}$ of median income measure are based on data from the 2013 Annual Survey of Hours and Earnings. The sample used comprises approximately 1% of all employees in Northern Ireland who were covered by Pay As You Earn (PAYE) schemes, and therefore is subject to an associated level of sampling error.

ASHE data is published for Northern Ireland by NISRA and for 2013 includes breakdowns by gender, type of worker (full-time/part-time), industry, occupation, age, public or private sector, skill level as well as parliamentary and local government district based on place of residence and place of work.

ASHE presents median, mean and percentile bands for all these breakdowns to illustrate the broad distribution of earnings. The reports however do not present percentiles, but percentile bands ranging from 5 to 10 percentiles. In order to calculate percentiles that occur within these bands we have assumed a linear trend between percentile bands.

This methodology has been used before to determine figures from ASHE data including a KPMG report on the Living Wage in the UK released in November of 2013. The KPMG analysis did not find any clustering around a particular wage point or erratic hourly earning spreads across the percentile bands.

Percentiles are established between bands to determine what percentage of earners fall below each of the three thresholds presented.

Appendix 7.4 Further Data to accompany Section 4

Table Appendix 7.4.1: Percentage Earning at or below Minimum Wage or $\frac{2}{3}$ of Median Wage 2007-2013

Year	%MW or below	% $\frac{2}{3}$ or below
2007	7	15
2008	6	17
2009	6	17
2010	7	15
2011	9	17
2012	9	17
2013	9	17

Source: Annual Survey of Hours and Earnings 2007-2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.2: Percentage earning below the Living Wage, Minimum Wage & $\frac{2}{3}$ of the Median Wage by Gender & Type of worker in Northern Ireland 2013

Gender/Type of worker	%MW or below	% $\frac{2}{3}$ or below	%LW or below
Male	8	14	22
Female	9	22	29
Full-time	5	11	16
Part-time	10	32	43

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.3 Percentage earning at or below the Minimum Wage and $\frac{2}{3}$ of Median Wage by Age Group, Northern Ireland 2013

Age Group	%MW or below	% $\frac{2}{3}$ or below
Age 18-21	10	67
Age 22-29	10	28
Age 30-39	6	12
Age 40-49	5	11
Age 50-59	4	9

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.4: Percentage earning below Living Wage by Age Group, Northern Ireland 2013

Age Group	% LW or below
Age 18-21	82
Age 22-29	39
Age 30-39	18
Age 40-49	17
Age 50-59	16

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.5: Percentage Earning at or below Minimum Wage by Parliamentary Constituency, Northern Ireland 2013

Constituency	% MW or below
Belfast East	6
North Down	6
Belfast South	7
South Antrim	7
Lagan Valley	8
West Tyrone	8
South Down	8
Belfast West	9
East Antrim	9
Mid Ulster	9
Strangford	9
Belfast North	10
East Londonderry	10
Fermanagh & S. Tyrone	10
Foyle	10
Newry and Armagh	10
North Antrim	10

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.6: Percentage earning at or below $\frac{2}{3}$ of the Median Wage by Parliamentary Constituency, Northern Ireland 2013

Constituency	% $\frac{2}{3}$ or below
Belfast South	13
Belfast East	13
East Antrim	15
North Down	13
Strangford	15
Lagan Valley	15
South Antrim	16
Upper Bann	19
Belfast West	21
South Down	18
Belfast North	21
Fermanagh & S. Tyrone	22
Mid Ulster	17
West Tyrone	20
Foyle	23
Newry and Armagh	23
East Londonderry	21

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.7: Percentage earning below the Living Wage by Parliamentary Constituency, Northern Ireland 2013

Constituency	% LW or below
Belfast South	19
Belfast East	20
East Antrim	20
North Down	20
Strangford	21
Lagan Valley	23
South Antrim	23
Upper Bann	26
Belfast West	27
South Down	27
Belfast North	29
Fermanagh & S. Tyrone	29
Mid Ulster	29
West Tyrone	29
Foyle	30
Newry and Armagh	30
East Londonderry	33

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.8 Percentage Earning at or below $\frac{2}{3}$ of the Median Wage and Minimum Wage by broad industrial sector, Northern Ireland 2013

Sector	%MW or below	% $\frac{2}{3}$ or below
Agriculture	28	19
Manufacturing	13	-
Wholesale & Retail	34	10
Construction	14	-
Accommodation & Food	65	40
Administration	32	19
ICT	10	-
Other	28	11

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.9: Percentage earning at or below $\frac{2}{3}$ of the Median Wage and Minimum Wage by industrial Sub Sector, Northern Ireland 2013

Sector	%MW or below	% $\frac{2}{3}$ or below
Wholesale trade	9	15
Retail Trade	24	45
Accommodation	31	54
Food	50	66
Residential Care	10	37
Social Services	10	29
Employment Services	10	25
Manufacture of food	10	29
Office support	10	40
Vehicle Repair	-	20

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.10: Percentage earning below Living Wage by broad industrial Sector, Northern Ireland 2013

Sector	%LW or below
Public Admin	-
Education	10
Water	11
Finance	12
ICT	13
Transport	16
Professional	17
Construction	18
Real Estate	20
Health	21
Manufacturing	21
Arts	37
Other	38
Admin	43
Wholesale & Retail	47
Agriculture	49
Accommodation & Food	74

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Table Appendix 7.4.11: Percentage earning below Living Wage by industrial Sub Sector, Northern Ireland 2013

Sector	%LW or below
Health	4
Wholesale trade	24
Employment Services	33
Vehicle repair	35
Food Manufacture	42
Office Support	43
Soc. Services	44
Residential Care	51
Retail Trade	59
Accommodation	65
Food	79

Source: Annual Survey of Hours and Earnings 2013

Notes: Percentages are based on calculations made from percentile bands

Notes

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