Quarterly Economic Observer

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NERI Nevin Economic Research Institute

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 eight 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 Winter 2013 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 early-December 2013. The final draft of this document was completed on 6th December 2013.

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.

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The Nevin Economic Research Institute

Quarterly Economic Observer

Winter 2013

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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 recent developments in the Republic of Ireland's labour market in particular focusing on the changes to employment patterns since the recession alongside the distribution of earnings (Section 4).

Economic Outlook

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

In the Republic, we anticipate small but positive economic growth in 2014 although concerns remains regarding the impact of contractionary fiscal measures in Budget 2014, a weakening outlook for our export markets, continuing high long-term unemployment, the continuing overhang of personal debt and the impact of changes in the pharmaceutical sector.

In the North, there are some positive economic signals, reflecting recent developments in the UK economy as a whole, although these positive trends are recent and at this stage any recovery is at best fragile.

Based on the assumptions and expectations outlined Section 3, our current projections for the Republic of Ireland include:

- Sluggish growth in 2013 and 2014, at 0.5% and 1.1% respectively; growth rates which are dragged down by approximately 0.5% of GDP in each year given the contraction of the pharmaceutical sector.

- Without the pharma-sector impact, we anticipate growth would still be relatively low given the impact of contractionary fiscal policies. As the impact of the pharma-sector's contraction fades, we anticipate a return to higher growth levels of 1.8% in 2015 and 3% in 2016.

- In 2013 we expect the year to record a notable increase of 2.3% in employment; an increase that we anticipate is 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 with rates of +1.1% in 2014, 1.2% in 2015 rising to 1.5% in 2016.

- Driven by job creation, increases to training places and emigration, we expect the rate of unemployment to fall to an average of 13.1% for this year (2013). We expect a continued steady decline in the unemployment rate out to 2016 when we expect the rate to be 10.4%. High structural unemployment remains a core problem.

- While we anticipate some increases in investment in the economy, 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 Funds (ISIF) within the auspices of the National Pension Reserve Fund (NPRF). It remains a regret that these funds have not be leveraged to support a stimulus to the weak domestic economy.

- The improvements in the labour market impact positively on exchequer finances with the General Government Deficit falling to 4.8% in 2014, reaching 3.1% in 2015 and 2.6% in 2016.

Trends and prospects for the Republic of Ireland's labour market

In section 4 of this Observer we look at the nature of the Republic of Ireland's labour market since the recession and find:

- Despite the large falls in employment since 2008, hourly wages have remained stable.

- 20.7% of workers are classified by the EU as low paid (with the cut-off point being €12.20 per hour).

- The low paid also generally work fewer hours per week, although they wish to work more.

In this edition we focus on how recent Irish labour market trends fit a global pattern:

- Globally there has been a 'polarisation' of the labour market with middle paying jobs being hollowed out.

- The construction boom masked this underlying trend in Ireland.

- During the recession managerial, professional, and technical jobs showed employment increases, while middle paying craft and secretarial jobs showed decreases.

- There is a need to both retrain unemployed former construction workers and also prepare administrative workers in employment for future changes in the labour market.

- As a domestic led recovery is unlikely, over the coming years it is probable that there will be a continued expansion of employment for the higher paid, stagnation or declines for those in middle paying occupations, and the fate of the lower paid will depend on a trickle down from those in higher paying jobs.

- Such an outlook underscores the need for policy to focus on initiatives such as:

    - in-work training;

    - methods of protecting and improving over time the living standards of low paid workers such as a 'living wage'; and

    - the retention and strengthening of a progressive income taxation system.

1 Introduction

Our economic outlook for both parts of the island of Ireland is positive but cautious. In the Republic, we anticipate small but positive economic growth in 2014 although concerns remains regarding the impact of contractionary fiscal measures in Budget 2014, a weakening outlook for our export markets, continuing high long-term unemployment and the impact of changes in the pharmaceutical sector. In the North, there are some positive economic signals, reflecting recent developments in the UK economy as a whole, although these positive trends are recent and at this stage any recovery is at best fragile.

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 nature of the Republic of Ireland's labour market since the recession and consider both recent changes to employment patterns and the distribution of earnings.

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 trends and prospects for the Republic of Ireland's labour market. 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 points towards initial signs of economic recovery although both regions face some uncertainties and risk regarding the sustainable emergence of further economic growth. Recent economic developments are summarised in Table 2.1.

Table 2.1 Some key economic trends in Ireland and the UK (2007-2012)

		2007	2008	2009	2010	2011	2012
Total Employment ***(% of the working-age population)***	ROI	69.2	67.6	61.9	59.6	58.9	58.8
	NI	68.4	67.8	64.7	66.0	67.4	67.3
	UK	71.5	71.5	69.9	69.5	69.5	70.1
Unemployment ***(% of labour force)***	ROI	4.7	6.4	12.0	13.9	14.7	14.7
	NI	4.0	4.5	6.5	7.1	7.2	7.5
	UK	5.3	5.6	7.6	7.8	8.0	7.9
Gross Domestic Product (% volume change over previous yr)	ROI	5.0	-2.2	-6.4	-1.1	2.2	0.2
	NI*	3.1	-2.1	-4.4	1.1	0.1	n/a
	UK	3.4	-0.8	-5.2	1.7	1.1	0.1

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 (2012) December.
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)

Indications suggest that the international economy is beginning to experience a fragile recovery. However, strengthening growth in the United States (US) and some other developed world economies is being offset by weaker prospects for emerging markets and developing economies including China and India (OECD, 2013b; European Commission, 2013 and IMF, 2013). Within Europe, recovery is tentative. The European Central Bank (ECB) noted that in the second quarter of 2013 Euro area economic output increased (quarter-on-quarter); an increase that followed six consecutive quarters of falling output although this growth was only 0.3% of GDP (ECB, 2013: 5). Within that area, a number of countries remain in recession, including Spain, Italy, Cyprus, Netherlands and Slovenia, although Eurozone monetary policy is beginning to assist small recoveries in domestic demand (Eurostat, 2013c:6, ECB, 2013:5, European Commission, 2013: 1-2)

All observers agree that the risks to the global economic outlook are weighed towards the downside. Cyclical and structural declines in the economic growth of emerging economies are feeding through to reduced demand and economic activity across a number of export orientated economies. For countries such as China, who maintained high growth rates over recent years, it appears they are experiencing an adjustment to a lower growth path. Others, like Brazil, India and Turkey, have been impacted by rising long-term interest rates as signals emerge regarding future 'tapering' of monetary easing policies, most particularly in the US. Collectively these emerging economies trends are diluting the positive growth effect these regions had on world economic output over recent years (OECD, 2013b: 10-23; IMF, 2013:11-18).

Alongside speculation regarding the gradual removal of central bank monetary supports, uncertainty on the US debt ceiling remains a risk to global recovery. Failure to resolve/reform the ceiling in early 2014 could have notable effects on economic output with the OECD estimating declines of 4.3% to US GDP, 1.3% to world GDP and 0.5% to Euro area GDP if the ceiling became binding in 2014 (OECD, 2013b: 45-47).

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 and household debt levels in a number of countries.

The UK economy returned to positive GDP growth in 2013, moving from -0.3% in Q4 2012 to +0.4%, +0.7% and +0.8% respectively over the first three quarters of 2013 (ONS, 2013). However, while growth is broad based with all major industry groups (services, production and construction) making a positive contribution, its scale reflects its fragility. The services sector continued its earlier gains and is now at a level above its pre-crisis peak. The construction and agricultural sectors posted strong growth while production industries made a more modest contribution to growth (ONS, 2013). The labour market in the UK also shows signs of continuing improvement with the unemployment rate falling to 7.6% in the three months to the end of September. However, falling unemployment could trigger a rise in interest rates due to the forward guidance policy issued by the Bank of England. The Bank has said that interest rates will not increase while unemployment remains above 7% (Bank of England, 2013). However many observers have anticipated that unemployment is decreasing faster than expected and that this may lead to an earlier than expected interest rate increase.

Taken together, the prevalence and scale of these possible negative growth effects underscores the fragility of the international outlook.

2.2 Republic of Ireland

As the Republic of Ireland's Troika (EC/ECB/IMF) programme of financial assistance comes to an end (formally on December 15th 2013), the economic outlook remains challenging. 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 mixed signals suggesting both emerging recovery and uncertain prospects. On the positive side, these include:

- The announcement that Ireland's programme of financial assistance from the Troika will end as planned on December 15th 2013. After that date, Ireland will be dependent on accessing funds from the international capital markets to finance budget deficits and debt renewals.[2]

- Strong growth in total employment in the year to Q3 2013 comprising 53,500 full-time jobs and 4,500 part-time jobs. 72.5% of this increase was for males with three sectors dominating the increases: *Agriculture, forestry and fishing* (+29.3% or 25,100), *Accommodation and food service activities* (+11.9% or 14,700), and *Professional, scientific and technical activities* (+10.8% or 10,900).[3] In sectors where there have been employment declines, these are generally related to public sector employment reductions. Among the overall increase, the growth in the numbers self-employed (+30,100) is of note and is greater than the increase in the number of employees (+27,300).

- A further decrease in the rate of unemployment to 12.8% of the labour force (seasonally adjusted rate) implying that there are now 282,900 individuals unemployed.[4]

- An increase in the labour force to 2.18 million people (+16,300 people).

- A 5.7% reduction in underemployment compared to Q3 2012 bringing the numbers underemployed (working but with less hours that they wish to have) to 139,300 people (6.4% of the labour force).

- An overall growth in exports (+1% in the year from Q2 2012), although the value of merchandise exports has fallen mainly due to reported declines in the pharmaceutical sector.

- A small decline in the total number of private dwelling houses in mortgage arrears (-1,373 to a total of 141,520 representing 18.4% of the total stock of mortgages). The data indicate a divergence between short-term and long-term arrears problems with numbers notably declining in the former category (numbers in arrears of less than 90 days -6% for Q3 2013) and increasing in

[2] The funds required for 2014 have been pre-borrowed by the NTMA.
[3] The CSO QNHS report (November 2013) 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 (2013d:2). However, even excluding these figures the employment growth is significant (+32,900).
[4] Based on ILO definitions of labour force status.

the latter (most notably for mortgages in long-term arrears of more than 1 year and more than 2 years).[5]

- A further reduction in the cost of Government borrowing as indicated by a yield of 3.53% on a Government 10-year bond in November 2013 compared to approximately 7% 18 months earlier.

- A 7.3% increase in the number of trips to Ireland in period January-October 2013 compared to a year earlier plus some evidence of an increase in domestic holidaying.[6]

On the negative side, these include:

- An annualised decrease of 0.4% in Gross National Product (GNP) between Q2 2012 and Q2 2013 (seasonally adjusted).

- A decline in domestic demand of −1.6% in the year to Q2 2013 (seasonally adjusted total domestic demand).

- A contractionary budget (Budget 2014) involving tax increases, expenditure reductions and other measures totalling €3.1 billion. The scale of the budget is likely to further supress domestic economic activity during 2014.

- A concern that given the risks to the international economy (see above), Ireland sought not to access a precautionary credit line as it exited the Troika programme of financial assistance.

- A decrease of 1.6% in the volume of retail sales (excluding motor trades) in the year to October 2013 (seasonally adjusted).

- Decreases in employment among those aged 25-34 (-9,200 or -9.2%) in the year to Q3 2013.

- Sustained high levels of youth unemployment (rate for 15-24 year olds at 26.5%) and long-term unemployment, with the latter accounting for 58.4% 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 decrease in average hourly earnings of 1.8% in the year to Q3 2013 and a 2.4% fall in weekly earnings over the same period.

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[5] Data from Central Bank of Ireland (2013b) *Residential Mortgage Arrears and Repossessions Statistics* (Q3 2013). Note, 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.

[6] A trend which may have been impacted by 'the Gathering' 2013.

- Marginally weaker than expected exchequer VAT and income tax returns in the year to date.
- Investment levels in the economy continue to sit at record low levels of close to 10% of GDP.
- No attempts to use the Ireland Strategic Investment Fund's (ISIF) €6.3bn which was allocated from the NTMA discretionary portfolio to fund commercial domestic investment opportunities.
- 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 Basel III capital reporting requirements.

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 268,000.

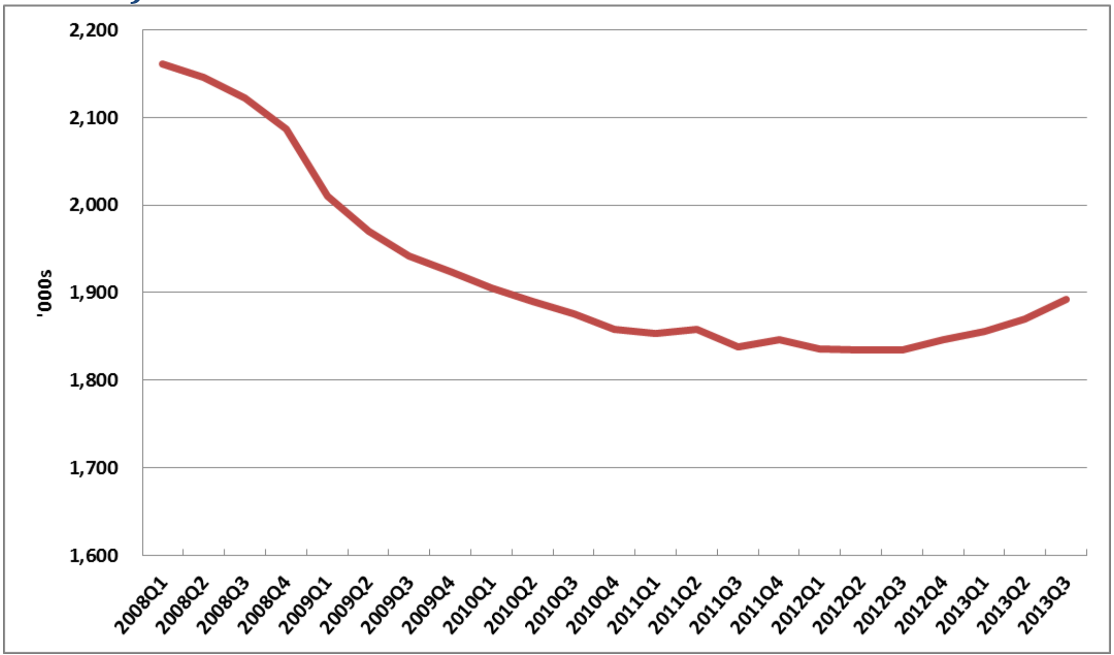
The retail sector experienced notable declines in employment in the early stages of the economic crash and since then has remained subdued.[7] As Chart 2.2 shows, retail sales have remained flat since early 2009, a phenomenon closely related to the decline and supressed nature of domestic demand over recent years (see Chart 2.4). Over that period average real weekly wages (a measure of the buying power of earnings) varied

[7] See Collins (2012) for a profile of the changes between 2007 and 2012 and Section 4 of this edition of the QEO.

given periods of inflation, deflation and pay reductions (see Chart 2.3). Section 4 of this edition of the QEO examines labour market issues, including trends in real wages, in further detail. The most recent data (Q3 2013) reflects a reduction in average real wages, a trend principally driven by public sector wage declines under the *Public Service Stability Agreement 2013-2016* (Haddington Road agreement).

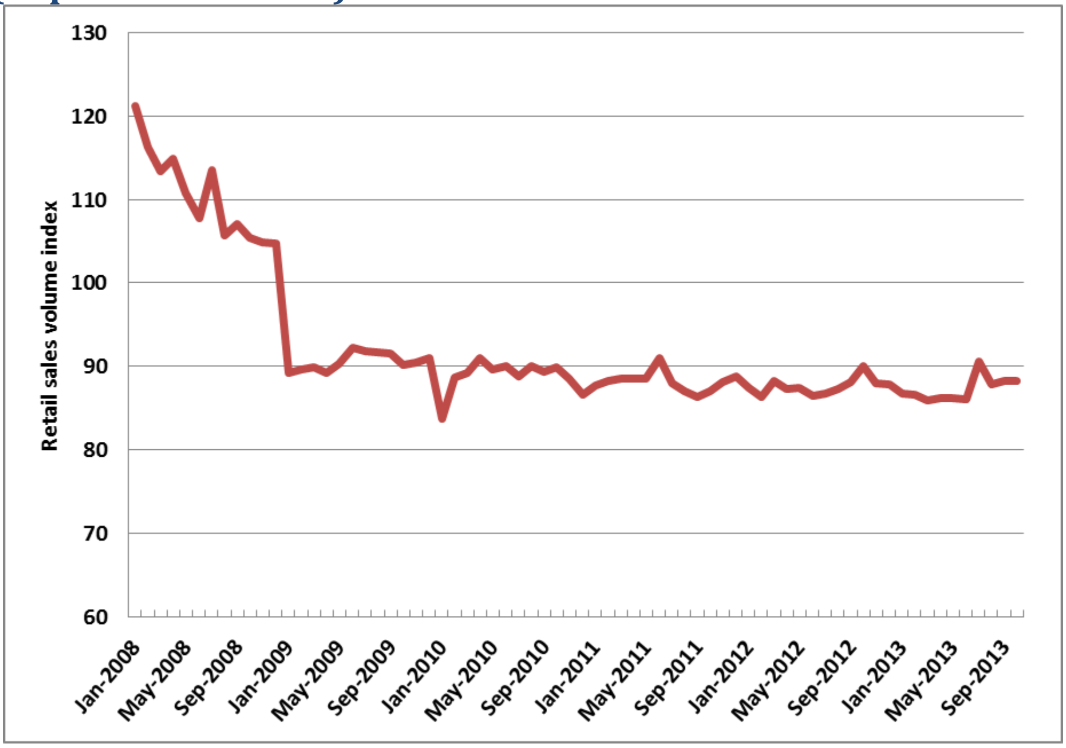
Finally, Chart 2.5 highlights the growth in exports which have been key to the Republic experiencing any positive economic growth over recent years. The aforementioned decline in late 2012, driven by a decrease in goods exports, remains a key concern and area of uncertainty.

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



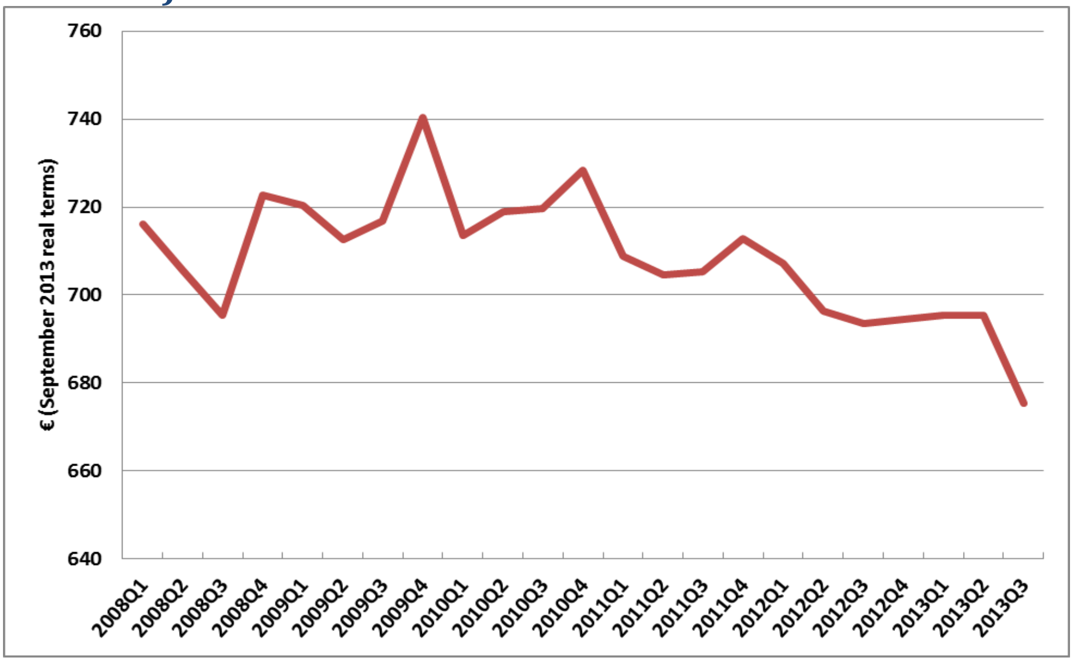
Source: CSO Quarterly National Household Survey (reference code from CSO StatBank is QNQ03)
Note: Total employment seasonally adjusted.

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



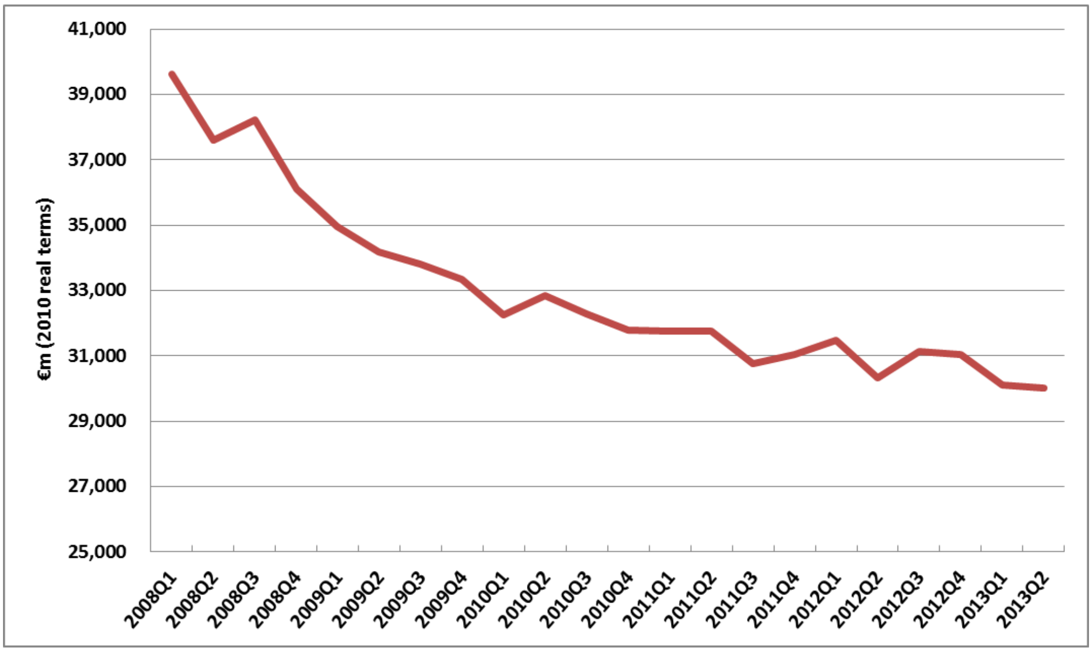
Source: CSO Retail Sales Index (StatBank code RSM03)
Note: Volume of retail sales (seasonally adjusted)

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 September 2013 prices.

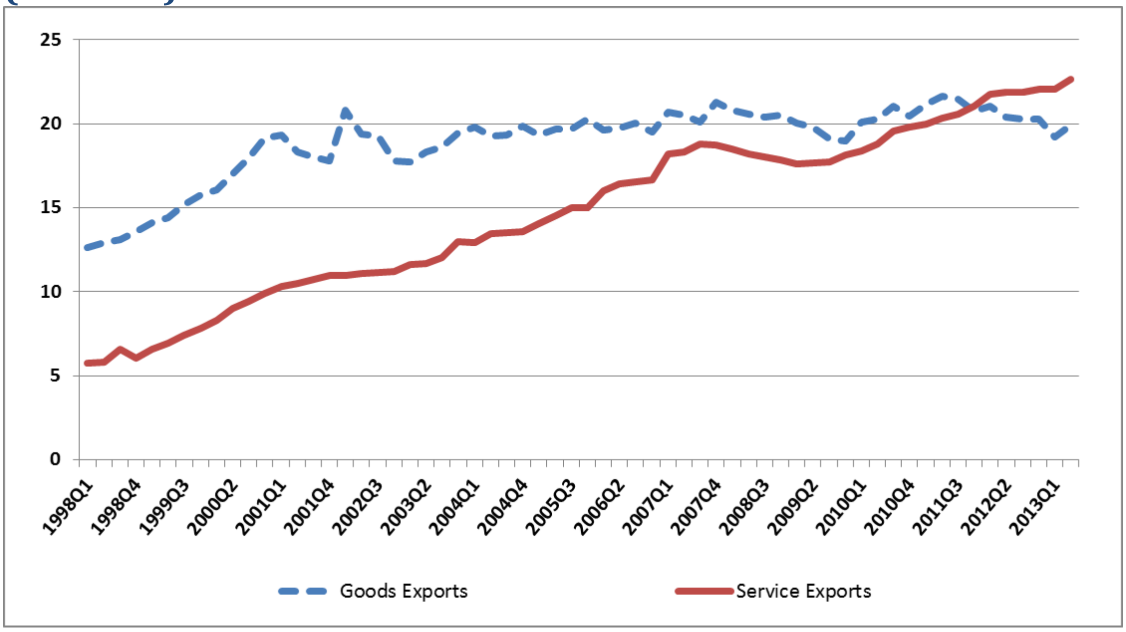
Chart 2.4 Trends in the Real Value of Domestic Demand (Republic of Ireland) (€ million)



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

Over the last quarter, the Northern Ireland (NI) economy has experienced both continuing signs of a recovery in the wider UK economy and employment in the local economy. The challenge over the next number of months is to see whether either of these trends is sustainable. The most recent Ulster Bank purchasing managers index (PMI) data indicate a sustained pick up in the private sector of the economy, most notably in the construction sector which has shown the fastest growth rate since 2009 (Ulster Bank, 2013). Job creation in Northern Ireland, according to the PMI, increased for the fourth consecutive month albeit at a slower rate than the rest of the UK.[8]

Northern Ireland has seen further positive news in job creation, with, for example, BT creating nearly 165 jobs in an expansion of customer care services in Belfast. Earlier this quarter significant investment was made by Terex Engineering in high skilled manufacturing in county Tyrone. Caterpillar, a machinery and engineering firm, also committed to making a £1.2m investment in Northern Ireland, however this announcement was somewhat overshadowed by the 750 job losses the company announced in county Antrim last year. Caterpillar had received significant funding from *Invest Northern Ireland* for its operations in county Antrim, but this did not prevent the firm from moving those operations to China just a few years later. This example underlines the need to use enterprise policy and resources to gain long term investment in Northern Ireland rather than short term announcements that can easily evaporate in subsequent years.

House prices in Northern Ireland recorded their first consecutive across the board increase since mid-2007, growing by 2% between Q2 and Q3 in 2013 (NISRA, 2013). While this increase shows some signs of economic stability, it should be noted that the Residential Property Price Index for Northern Ireland remains 54% below its peak in 2007. While the increases are modest, the depth of the initial crash is still significant. It is also worth noting that these property price increases, and the accompanying tentative signs of increasing demand for construction services, have not produced any notable increase in construction sector jobs in Northern Ireland (ONS, 2013). Although the PMI data suggests increasing business for Northern Ireland construction firms,

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[8] PMIs provide a useful insight into possible future growth in the private sector, but must be treated with caution as they reflect both sentiments and intentions of employers and producers rather than actual output.

there remains no guarantee that such additional activity will be exclusively local to Northern Ireland; it may reflect additional activity in either Great Britain or beyond, a factor which would limit the boost that any recovery in construction might provide for the Northern Ireland economy.

Recent increases in UK GDP, as highlighted earlier, are welcome but concerns remain about the sustainability of this growth. The UK economy remains 2.5% below its pre-crisis peak, while economies like the US have long since recovered this ground. At a UK level, business investment has stagnated since the crisis and the balance of trade has deteriorated significantly. Both these trends are concerning as investment and increased exports were envisioned by the UK government as key drivers of economic renewal (ONS, 2013). Instead we have seen consistent increases in consumption amongst households. This increased consumption has not been met by increased wages. The latest data for Great Britain show that nominal wage growth in quarter 3 of 2013 was 0.7% on the previous year (ONS, 2013). Inflation however is still running consistently above 2% and so real wages are steadily decreasing (Bank of England, 2013).

The full extent of real wage trends in Northern Ireland will become apparent when figures from the *Annual Survey of Hours and Earnings* are presented toward the end of 2013. In the medium to long-term it should be remembered that the quality of growth matters as much as its quantity. In our last *Quarterly Economic Observer* concerns were raised at the extent to which UK consumption growth was also being driven by a wealth effect from increased house prices especially in London and the South East of England. We believe that attempts by government to increase demand for housing through schemes like "Help to Buy" should be treated with extreme caution, especially if there is no serious effort to increase housing supply in congested areas.[9]

Earlier this year the Northern Ireland Statistics and 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

[9] The OECD, in their recent *Economic Outlook*, express a similar concern stressing the need to "swiftly adjust" this scheme "if it risks triggering sharp increases in house prices as a result of supply rigidities" (2013b: 63).

Ireland.[10] The Index for Northern Ireland shows a contraction of -0.8% in the first quarter of 2013. This recent data and the trends in the NICEI since 2007 are summarised in Chart 2.6. The release of data for the second quarter of 2013 has been delayed until Regional Gross Value Added for Northern Ireland in 2012 is released. This is to allow for some methodological changes to be carried out on the index. However we do have quarter 2 figures available for the index of services and index of production. Both of these figures feed into the NICEI and give a further subsectoral breakdown of the economy.

UK Autumn Statement

On December 5th at Westminster, the Chancellor announced his *Autumn Statement*. In it, based on analysis from the Office for Budget Responsibility (OBR), he announced an upgrade of forecasts for growth in the UK economy from 0.6% to 1.4% for 2013. Furthermore the OBR have upgraded forecasts for 2014 and 2015 to 2.4% and 2.2% respectively. They also noted that the recent rise in UK consumer spending appears to have been driven by lower savings not higher real incomes, and that this is not sustainable in the long-term.

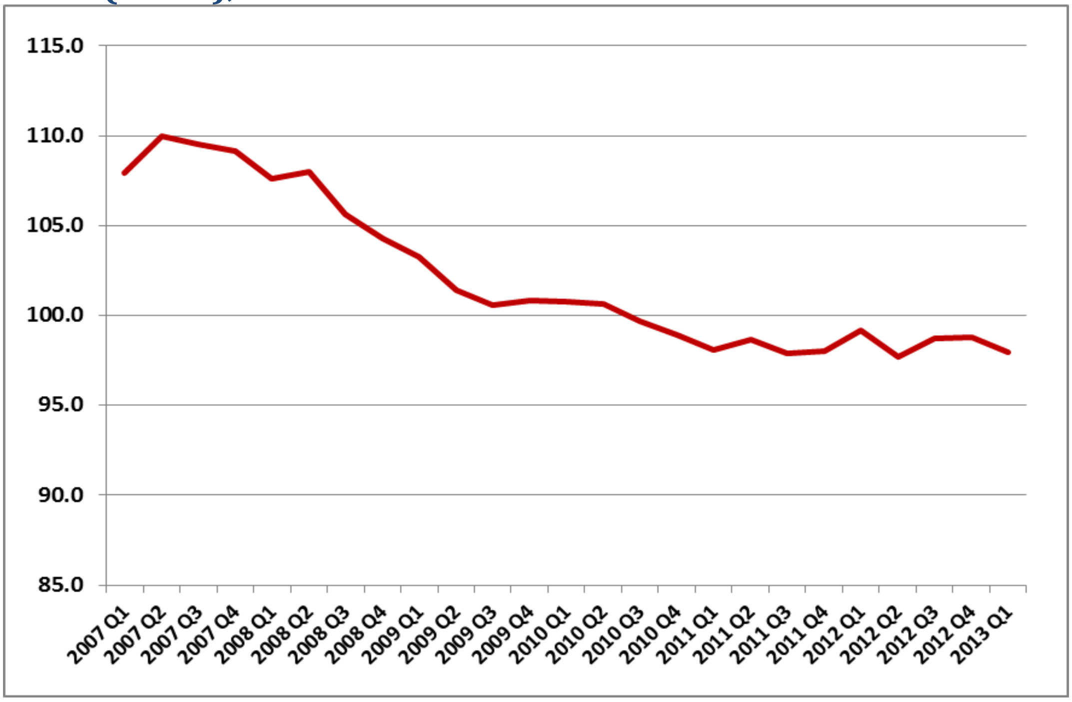
The Chancellor announced that owing to the Barnett Formula, Scotland, Wales and Northern Ireland will see net increases in expenditure over the next three years. This is because for departments like Health and Education spending decisions are made in Northern Ireland and the Chancellor announced that these departments are exempted from further cuts. The Ministry of Defence has seen substantial cuts but defence spending decisions are made at UK level (as it is deemed to be of benefit to the UK as a whole).

However, the proposed modest net increase in Northern Ireland Block Grant (NIO claim this is £136m over two years) must be seen against the backdrop of the cuts that have already taken place. As announced in the *Comprehensive Spending Review* in July, the real reduction in the block grant for Northern Ireland between 2014/15 and 2015/16 will be -1.7%; the largest of any region. The real reduction in the block grant over the period from 2010/11 to 2015/16 will be a reduction of 13.2%, also the largest of any region.

To tackle youth unemployment the abolition of employer National Insurance for the under 21's was announced. This may have some impact through a reduction in the cost of employing young people. However it could miss the policy objective by simply reducing overall labour costs for employers but create no additional youth employment. As the NERI's *Spring 2013 Quarterly Economic Observer* noted, a youth guarantee scheme coupled with investment and wage led demand is the only long-term solution to this issue (NERI, 2013a).

[10] In the absence of full national accounts data at a regional level, the Northern Ireland Composite Economic Index (NICEI) provides an overall measure of production. The NICEI is a quarterly measure of output similar to the production approach to calculating National income and making use of survey data where gaps exist. A similar index was constructed for the UK using the same methodology, and this index tracked UK GDP almost exactly over the last number of years.

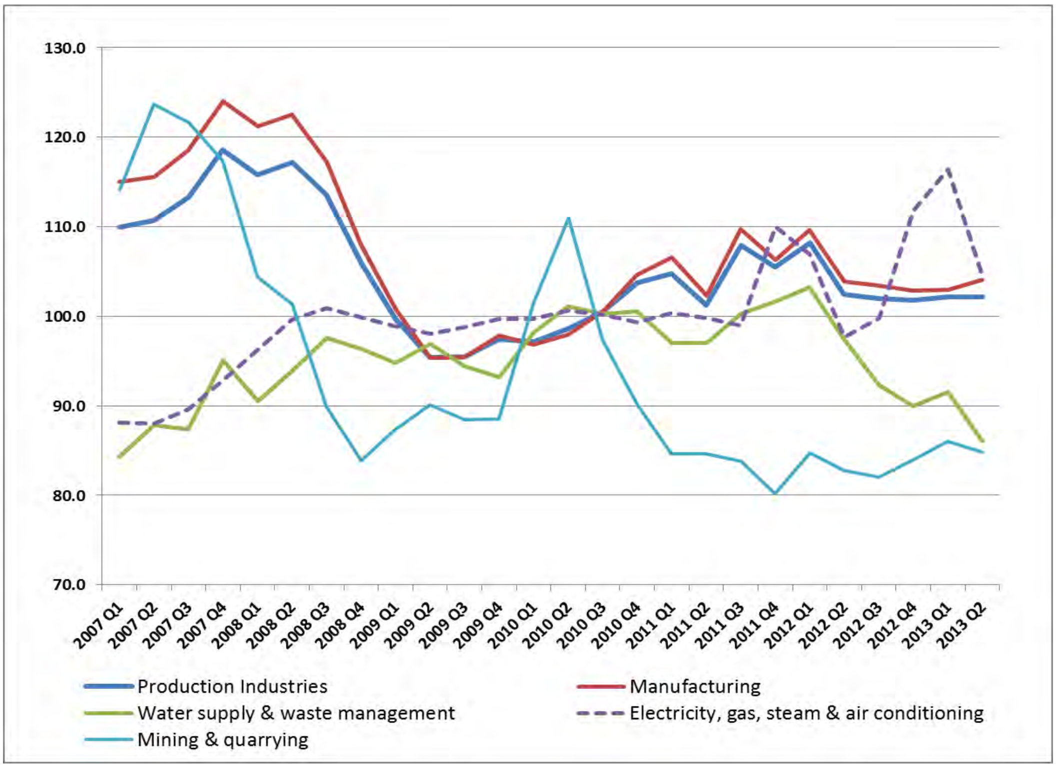
Chart 2.6 Trends in the Northern Ireland Composite Economic Index (NICEI), 2007-2013



Source: Northern Ireland Statistics and Research Agency (2013)

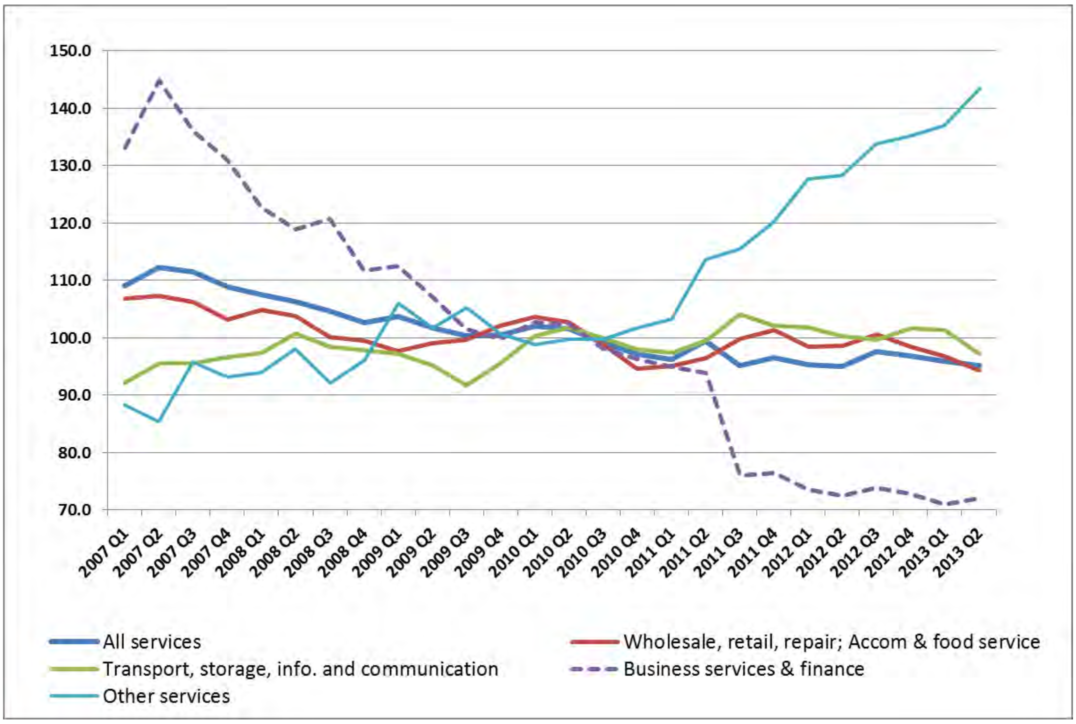
The index of production shows that manufacturing has remained broadly flat since 2010 and showed no overall increase in the last quarter (see Chart 2.7). Manufacturing accounts for 85% of Northern Ireland's production output and so closely reflects the trend of overall production. Within manufacturing there have been some gains, particularly among the pharmaceutical and skilled engineering subsectors. Mining and quarrying which staged a limited recovery in mid-2011 has returned to levels seen immediately after the crisis. Water and waste management remain in decline while electricity and gas production has fallen back from recent highs.

Chart 2.7 Northern Ireland Index of Production, 2007-2013



Source: Northern Ireland Statistics and Research Agency (2013)

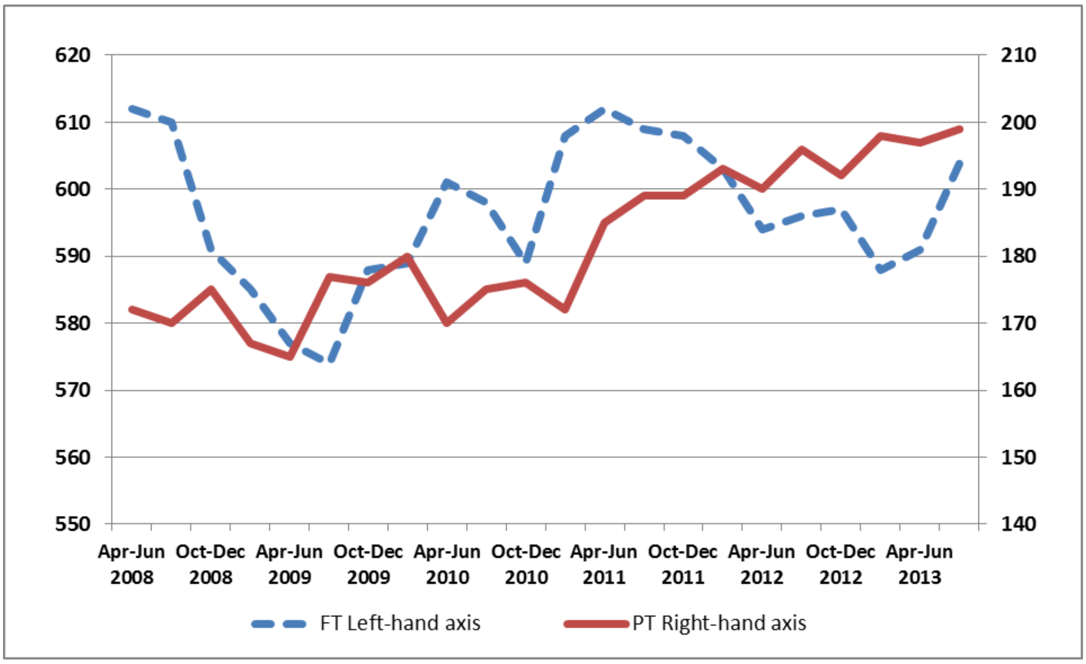
Chart 2.8 Northern Ireland Index of Services, 2007-2013



Source: Northern Ireland Statistics and Research Agency (2013)

As Chart 2.8 shows, the index of services declined marginally in the second quarter of 2013 (-0.7%) with the retail and accommodation sector (which accounts for 35% of the index) driving much of the decline. Northern Ireland was recently recorded as possessing the largest number of vacant shops of all UK regions further highlighting the fragility of this sector (British Retail Consortium, 2013). Business and financial services which account for 35% of service sector output have seen some of the most substantial declines over the six year period. This seems to have levelled out and this sector actually increased over the second quarter of 2013. Other services, which accounts for 18% of the sector, recorded further increases which supplements similar scale increases over the last two years. It is worth noting that the UK recorded increases in the production sector and substantial increases in the services sector in the second quarter of 2013 when overall growth was 0.7%. Based on these production and service sector figures it is difficult to see where an increase in the NICEI would come from. Second quarter figures for the Northern Ireland Construction Output Index have not yet been released.

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 an improvement in recent months. Previously, decreases in unemployment had been achieved through increasing economic inactivity. Figures for July to September of this year show modest decrease in the unemployment rate to 7.3% and indicate that this has been achieved through an increased employment rate. As chart 2.9 shows, Northern Ireland has also seen a significant increase in full-time employment. However we may be seeing a sustained drop in productivity if employment levels are maintained while growth in the economy stalls. Additionally we will have to await earnings data for Northern Ireland to see to what extent the recovery in employment may be impacting wages.

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 Autumn 2013) show 200 new businesses in Northern Ireland for 2012. However the number of business closures/deaths has increased by nearly 400 over the same year. As the table also shows, Northern Ireland is an economy dominated by small and medium sized enterprises so continued economic stagnation is likely to see a high level of turnover in enterprises.

In the labour market, the number of vacancies has begun to increase again, however it should be noted that the current level of vacancies was last seen in 2009 when labour market conditions were broadly similar to where they are now.

Research and development (R&D) spending in Northern Ireland continues to be a success story with Northern Ireland securing the third highest percentage increase in overall R&D spending in 2012. The largest increase was among businesses while the level of R&D performed by Higher Education sector continues to decline. Government R&D spending increased marginally while the share of R&D spending emanating from domestic firms increased.

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	19.0
% Working Age Pop. with Higher Ed (below degree)		7	8	5.3	7.4
% Working Age Pop. with A-level	-	26	25	20.8	25.0
% 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	20.0
% Employed with Degree	24	25	24	24.8	25.6
% Employed with Higher Ed(below degree)	9	8	9	6.9	9.0
% Employed with A-level	25	26	25	22.8	26.5
% Employed with GCSE	21	20	21	26.0	20.8
% 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)	16,117	15,635	16,203	16,531	-
Median Gross Weekly Pay	345.0	354.6	354.7	354.5	360.2
Real % change in Productivity	2.9	5.1	-0.5	0.3	-
Real % change in Median gross pay	1.3	0.5	-3.1	-2.4	0.1
Median Gross Pay Male Full time	439.8	460.0	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	150.0	132.4	139.2	139.0
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

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

	2008	2009	2010	2011	2012
Infrastructure					
Electricity Imported	545	1,937	2,297	1,769	-
% Electricity from renewables	5.0	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 2 2013 NISRA: Belfast Northern Ireland Statistics and Research Agency (2013) LFS Quarterly Supplement Northern Ireland Statistics and Research Agency (2012) Northern Ireland Research & Development Statistics 2011 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 (2012) 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: *Tourisim 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, employment growth, unemployment and Government finances. In the case of Northern Ireland our outlook is based on a review of the regions recent economic data (see section 2) and the policy and political context likely to impact on its performance. As in previous editions we compare our expectations to those from some other agencies in relation to output and employment.

Our review in section 2 of the tentative signs of economic recovery in the international and domestic economies sets the context for these assessments. Compared to our analysis in Autumn 2013, our expectations for economic growth in the Republic of Ireland have been revised to reflect the impact of ongoing changes in the pharmaceutical sector and the significant recent 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 Economy[11]

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 weak, weighed down by widespread fiscal contraction policies[12], 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 economy,

[11] More details on the international economy, including the UK, are outlined in section 2 of this QEO.
[12] See for example a recent European Commission study by in 't Veld (2013) which explored this issue.

significant for both parts of the island, has begun to report small but positive growth. However, the dependence of this growth on the Bank of England's monetary supports, and therefore its medium-term sustainability, remains in question.

More broadly, the slowing down of 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 is slowing, carrying possible implications for capital flows, trade and economic activity generally. As these emerging economies have fuelled much of the world's economic growth over recent years, their slowdown is significant. Added to this, uncertainly persists regarding the US debt ceiling and the structure and impact of the 'tapering' of the current US Federal Reserve's monetary interventions.

Collectively, this implies a fragile and sluggish 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 recent *Interim Economic Assessment* (September 2013) 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, 2013b).

Overall, our assumptions are built on an international economic outlook that remains weak but positive and fragile.

3.3 Macroeconomic Projections for the Republic of Ireland

Developments in the Republic of Ireland's labour market 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 Autumn (September), our expectation for GDP growth and the performance of its components have changed. Overall, we anticipate sluggish growth in 2013 and 2014, at 0.5% and 1.1% respectively; growth rates which are dragged down by approximately 0.5% of GDP in each year given the contraction of the pharmaceutical sector.[13] Without the pharma-sector impact, we anticipate growth would still be relatively low given the impact of contractionary fiscal policies. As the impact of the pharma-sector's contraction fades, we anticipate a return to higher growth levels of 1.8% in 2015 and 3% in 2016. The latter 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 contract this year (-0.4%) and remain flat in 2014 before slowly recovering as austerity policies are reduced. In the short term, household budgets remain under strain as a result of increases in living costs, real-value declines in wages and transfers and the introduction and increase in costs of mandatory household charges. Indications from retail turnover figures (generally weak) and exchequer VAT returns (below target) suggest that reductions in spending is one of the routes households have adopted to absorb these direct and indirect living cost increases. Elsewhere, households continue to deleverage – prioritising the reduction in debt over spending. As the major component of the domestic economy, this sustained weakness in personal consumption weighs heavily against greater activity within the domestic economy.

Investment: Uncertainty and the challenges of accessing credit have impeded growth in investment in 2013 (+0.8%). Ireland, like other advanced economies cited by the OECD earlier, continues to considerably under-invest relative to historical norms; a phenomenon explored earlier this year in an NERI paper by Duggan (2013). We anticipate increases in investment from next year with growth rates climbing from 4.1% in 2014 to reach 5.2% in 2016. We anticipate that these increases, from such low levels, will be driven by improvements in business confidence and expectations

[13] 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.

alongside the impact of the various Government investment programmes (stimulus) announced during 2012 and 2013.

While we anticipate that investment will play an important role to support 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 Funds (ISIF) within the auspices of the National Pension Reserve Fund (NPRF). 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 (2013a). 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 2013 and 2014 to take account of the 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.[14]

This contraction in exports, feeds through to an overall decline in GDP growth although we recognise that it 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,

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

underlying levels of growth, and a slow recovery in household consumption and investment will feed through to increase import levels from 2015.

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 2013 we expect the year to record a notable increase of 2.3% in employment; an increase that we anticipate is partially related to the re-emergence of activity in a number of labour intensive industries (e.g. accommodation and food; tourism). Our projections for employment growth are based on an expectation of GDP increases without the effect of the pharma-contraction i.e. 1% in 2013 and 1.6% in 2014. Subsequently, as we outline in table 3.1, we anticipate growth of 1.8% in 2015 and 3% in 2016.[15]

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

	2012 values	2012	2013	2014	2015	2016
National Income		*Percentage real change over previous year*				
Gross Domestic Product	€163.9bn	0.2	0.5	1.1	1.8	3.0
Personal Consumption	€82.6bn	-0.3	-0.4	0.0	0.9	1.7
Investment	€17.4bn	-1.0	0.8	4.1	4.5	5.2
Government Consumption	€25.1bn	-3.7	-0.9	-1.9	-1.5	0.2
Exports	€176.7bn	1.6	0.5	1.9	3.0	3.5
Imports	€136.9bn	0.0	0.4	1.3	2.6	2.7
Government Finances*		*Percentage of GDP*				
General Government Deficit		-8.2	-6.8	-4.8	-3.1	-2.6
Gross Debt	€192.4bn	117.4	123.7	120.8	119.9	116.0
Labour Force		*Percentage change over previous year*				
Employment	1,837,800	-0.6	2.3	1.1	1.2	1.5
		Percentage of Labour Force				
Unemployment	316,000	14.7	13.1	12.3	12.0	10.4

Notes: 2012 data from CSO National Accounts and Eurostat Labour Force Survey. 2013-2016 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.

[15] Our labour market projections are based on assumptions regarding population growth, migration trends, external labour market conditions, labour force participation rates and labour force productivity.

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.

Unemployment: Driven by job creation, increases to training places and emigration, we expect the rate of unemployment to fall to an average of 13.1% for this year (2013). Over the year from 2012, unemployment will have fallen by almost 1.6%, approximately 35,000 individuals. Reflecting the earlier growth and employment projections, and developments in community employment and other active labour market policies, we project further decreases in unemployment out to 2016. At that point, our expectation is for an unemployment rate of 10.4% - 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.

Our expectation is for an end-of-year budget deficit of 6.8% of GDP in 2013 – better than the Government's Budget 2014 projection of 7.3% of GDP. While we are not as optimistic as the Department of Finance regarding reductions to the budget deficit out to 2015, given current policy plans, we expect a deficit of 4.8% in 2014, 3.1% in 2015 and 2.6% in 2016 (Department of Finance (2013a) project 2014=4.8%, 2015=2.9% and 2016=2.4%). The 2015 figure is marginally above the Troika budget deficit target.

The Republic's gross debt will climb to exceed €200 billion by the end of 2013; we expect an end-of-year figure of €206 billion or 123.7% of GDP. We expect the 2013 figure to represent the peak of the debt-GDP ratio and anticipate this falling out to 2016. Indeed, given the cash reserves built up by the NTMA in advance of Ireland's exit from the Troika programme, we expect that in 2014 both the nominal and real (% GDP) debt figures for Ireland will decrease reaching €205 billion (120.8% GDP).

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

	2011	2012	2013	2014	2015	2016
Outcomes	**2.2**	**0.2**				
Projections						
NERI	-	0.3	0.5	1.1	1.8	3.0
Department of Finance	1.7	0.9	0.2	2.0	2.3	2.8
Central Bank	2.4	0.5	0.5	2.0	-	-
EU Commission	0.9	0.4	0.3	1.7	2.5	-
IMF	2.3	0.4	0.6	1.8	2.5	2.5
OECD	1.5	0.5	0.1	1.9	2.2	-
ESRI (QEC)	1.4	1.3	0.5	2.6	-	-
Ernst and Young	1.1	0.0	0.1	1.7	1.8	2.6
Investec (formerly NCB)	1.0	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, 2013a); Central Bank: Quarterly Bulletin (October 2013a); European Commission European Economic Forecast: Autumn 2013 (November 2013); International Monetary Fund: World Economic Outlook (October, International Monetary Fund, 2013); OECD: Economic Outlook (November 2013b); ESRI: Quarterly Economic Commentary (Autumn 2013) (Duffy et al. 2013); Ernst and Young (2013); Investec: Irish Economy Monitor (October 2013).

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

Table 3.2 compares our projections to those of other agencies. Projections of GDP growth in 2014 vary between a low of 1.1% (NERI) and a high of 2.6% (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 joint lowest with Ernst and Young. Conversely, our figure for 2016 is the highest reflecting our view that a moderation in fiscal austerity in 2016 is likely to have a beneficial impact in that year.

Various projections for the rate of unemployment are compared in Table 3.3. The better-than-expected improvements in the numbers unemployed during 2013 has 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 projection is the lowest at 10.4%.

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

	2011	2012	2013	2014	2015	2016
Outcomes	**14.7**	**14.7**				
Projections						
NERI	-	14.9	13.1	12.3	12.0	10.4
Department of Finance	13.2	14.9	13.5	12.4	11.8	11.4
Central Bank	13.3	14.8	13.6	13.0	-	-
EU Commission	13.5	14.8	13.3	12.3	11.7	-
IMF	13.0	14.8	13.7	13.3	12.8	12.4
OECD	13.6	14.8	13.6	13.2	12.3	-
ESRI (QEC)	13.5	14.8	13.6	13.1	-	-
Ernst and Young	12.7	14.9	13.5	12.9	12.2	11.4
Investec (formerly NCB)	13.0	14.2	13.6	12.9	11.8	10.5

Sources: See table 3.2.
Notes: See table 3.2.

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, energy prices increases, international political tensions (particularly in the Middle East) and expectations of the withdrawal of central bank monetary supports. Political tensions surrounding fiscal debt ceilings in the US may also impact.

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 remain static 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 drag overall household spending lower. In previous years, there has been a pronounced negative effect on household spending and domestic activity (post-Christmas) in the early part of the year. 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.[16]

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 numbers will depend on factors including the performance of new airline/shipping routes in 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 this 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

The outlook for the Northern Ireland economy is closely tied to developments in the broader fiscal, trade and monetary circumstances of the UK economy. Northern Ireland faces uncertainties over the short and medium term.

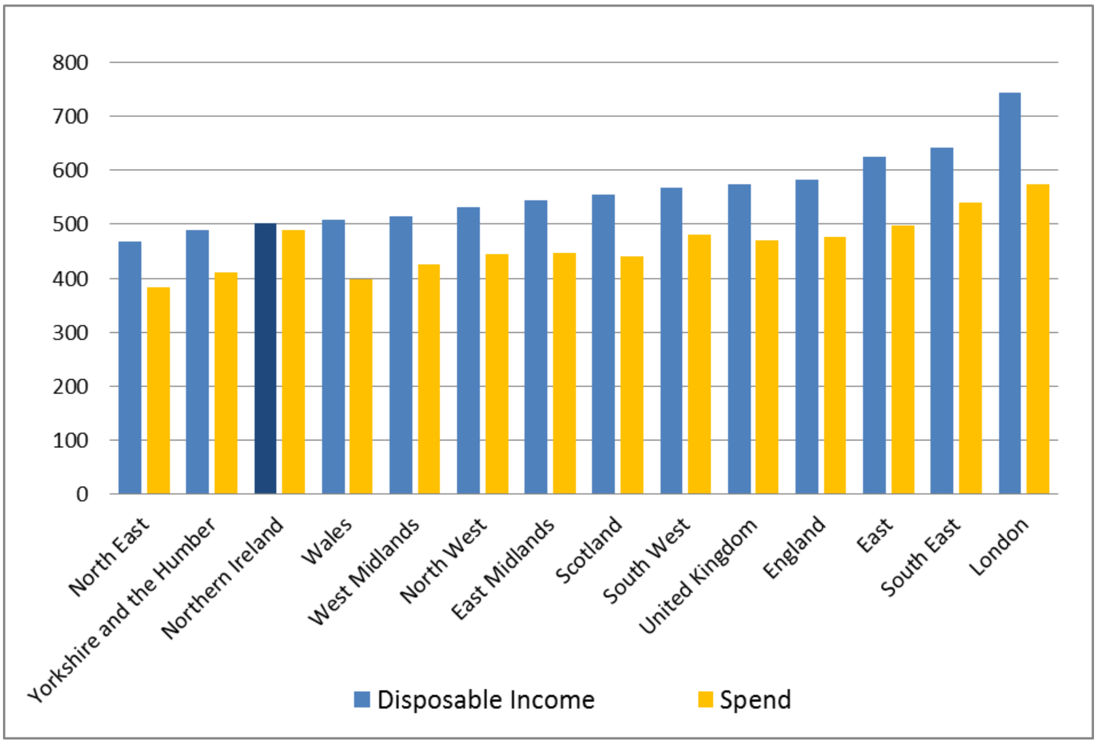
In the short term Northern Ireland faces the possibility that UK GDP growth will not be regionally balanced and will bypass peripheral regions. As discussed earlier in section 2, current trends for the second quarter (Q2) of 2013 show static or decreasing output in the private sector. Whilst the PMI data show a more positive possible outcome in Q3, Northern Ireland growth could still be well behind that of the rest of the UK. The

[16] Our pre-Budget Autumn 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.

official data for the second half of 2013 (due in mid-2014) will tell whether growth will be delayed or absent in Northern Ireland.

Another uncertainty, as discussed in section 2, is the composition of growth in the UK economy. Consumption lead growth in Northern Ireland without significant wage/income led growth could lead to a very precarious financial position. As Chart 3.1 shows, Northern Ireland already spends more of its income than any other region of the United Kingdom.[17] Any increase in consumption that is not driven by increased income has the potential to lead to increases in private debt which would pose a threat to future growth.

Chart 3.1 Average Disposable Income and Spend for NI and regions in the UK, 2009-2011



Source: ONS Family Spending (2013)

In the medium term, Welfare Reform poses a significant risk to the Northern Ireland economy. Northern Ireland must implement reforms to its welfare system similar in scale to those implemented in the UK as a whole. The NI Executive has not yet agreed

[17] Data from the ONS Family Spending Report shows that NI households spend on average 98% of their disposable income, compared to an average of 82% for the UK as a whole.

what those reforms will be, but the government in Westminster have said that they must be introduced as a matter of urgency. A recent report by Beatty & Fothergill (2013) highlighted the proportion of the Northern Ireland population that is dependent on welfare payments for some or all of their income. Therefore, indications are that Northern Ireland as a population stands to lose more than any other UK region for the reforms as they are currently configured. The report found that the reforms as a total package could extract £750m annually from the domestic economy in Northern Ireland. This would pose a significant threat to any recovery in the economy over the medium term (Beatty & Fothergill, 2013).

Similarly, over the medium term any premature increase in interest rates could pose difficulties for mortgaged households and businesses across Northern Ireland. Loose monetary policy in the form of low interest rates and quantitative easing, has contributed disproportionately to the recovery in the UK economy in contrast to tight fiscal policies. If this monetary support is withdrawn, or 'tapered' in some way, there remains a risk that the recent UK recovery could quickly become much more fragile.

Table 3.4 brings together a number of recent projections for economic activity, employment and unemployment in Northern Ireland. Using the gross value added (GVA) measure, expectations are for small increases in economic activity in 2013 and 2014.

Within the labour market, Table 3.4 outlines expectations for small changes to both employment and unemployment. Impacting on the unemployment numbers has been recent trends in the number of people classified as economically inactive – see Chart 3.2.[18] It is worth noting that if this trend continues there is a possibility that it will drive down headline unemployment rates although limited progress would be made in achieving additional employment and activation.

[18] The ONS define the economically inactive people who are not in work and do not meet the internationally agreed definition of unemployment. They are people without a job who have not actively sought work in the last four weeks and/or are not available to start work in the next two weeks. The numbers include those fulfilling other roles outside the paid labour market such as carers.

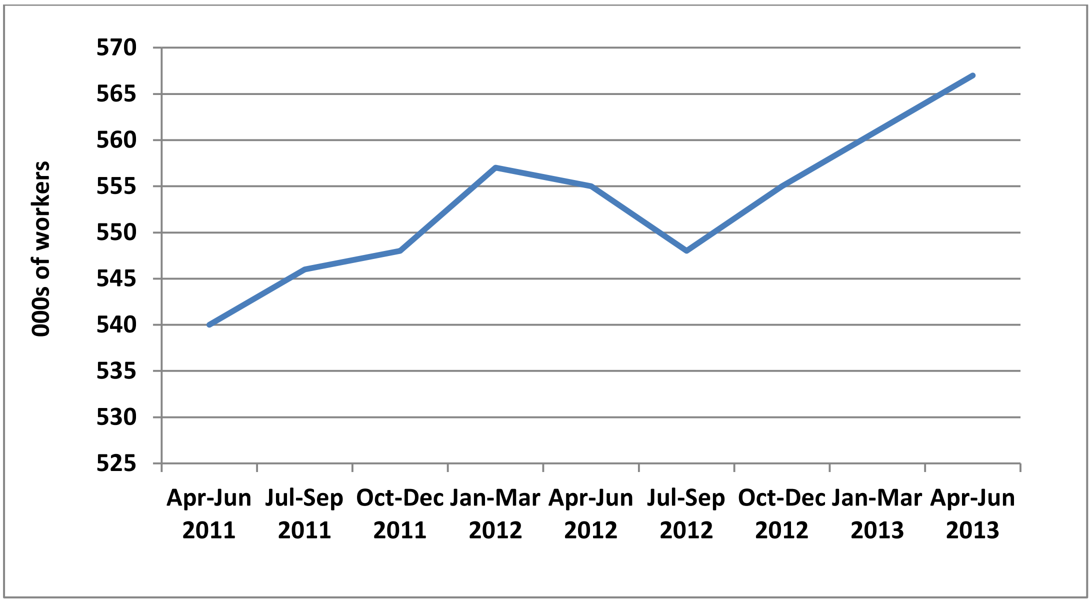
Table 3.4 Overview of recent projections of Economic Activity and employment/unemployment (Northern Ireland)

	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	1.7	-
Employment					
Ernst & Young	-2.6	-1.7	0.6	0.3	0.3
Unemployment % Labour Force					
Danske Bank	7.3	7.6	7.5	7.5	-
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 Q3 2013 (September 2013)

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

Chart 3.2 Trends in the numbers of Economicaly Inactive People in Northern Ireland, April 2011-June 2013



Source: Labour Force Survey (April- June 2013) DETI

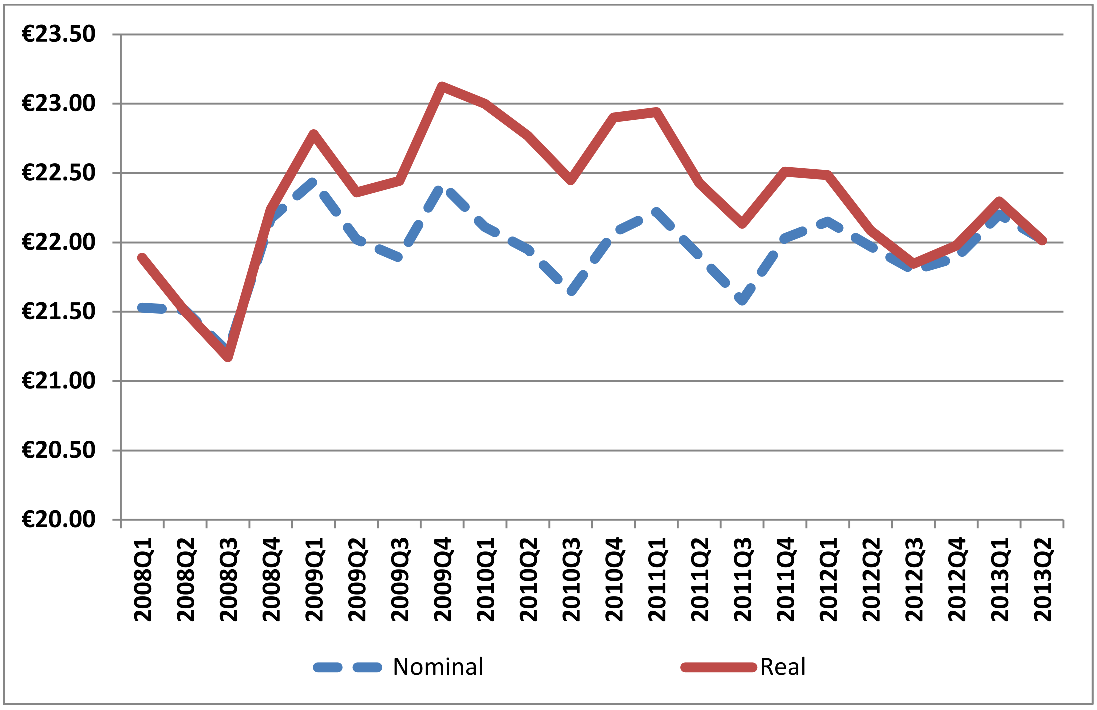
Note: Age 16+

4 The Republic of Ireland's Labour Market since the Recession: Trends and Prospects[19]

4.1 Introduction

The current recession involved a massive adjustment in the Republic of Ireland's labour market. From peak to trough 15.2% (328,700) jobs were lost (Chart 2.1). During the same time nominal hourly wages remained remarkably stable (Chart 4.1).

Chart 4.1: Average hourly pay rates, 2008-2013



Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03), EU HICP (CPM05) and own calculations. Earnings data was divided by a price index.

Notes: The EHECS dataset commenced in Q1 2008.
Real wages are in September 2013 prices, which by coincidence is the same price level as in October 2008.
The data are presented in Appendix 7.3.

The changes in employment are usually discussed with relation to two causes. One is the extent to which changes were due to a once off adjustment (mainly to employment in the construction sector) as an unsustainable construction bubble collapsed. A second aspect is the extent to which jobs were lost due to the general impact of the

[19] This section is based on a forthcoming working paper by O'Farrell (2013a). The data used was the most recent as of 22nd November 2013. More recent data has since been released (see section 2 of this QEO), but this does not affect the conclusions of the section.

recession (with the expectation being that these jobs will be recovered once the economy expands). A further (third) aspect, which has been somewhat neglected in the public discourse, is the extent to which changes in the labour market represent long term underlying trends (sometimes referred to as 'secular' trends). It is this third aspect, and the policy implications which follow, that form the focus of this section. The rest of this section is presented as follows. In Section 4.2 an overview of international trends is presented, in Section 4.3 pay across the economy is examined while Section 4.4 looks at changes during the recession. Section 4.5 concludes.

4.2 International trends in pay and employment

Globally there has been an increase in inequality, and labour has been getting a smaller share of economic output. However, there is also a substantial international literature regarding growing inequality within the labour market, amongst wage earners. This literature has mainly focused on trends in the US examining how the demand for labour has changed, but research has also been conducted for European economies. Two main trends have occurred, though to different extents in various countries. One is a pattern of higher employment growth and wage increases for top wage earners. The other pattern which is common is one of 'polarisation'. With polarisation there is greater job growth for those at the top of the wage distribution, and for those at the bottom, with a hollowing out of middle paying jobs.[20]

Various hypotheses have been put forward to explain why these trends might happen. One explanation for why wages and employment may increase for those at the top is 'skill biased technical change'. Technological change (such as the development of computers) may increase the productivity of higher educated workers more than other workers, leading to a higher demand and higher wages for the more highly educated (Acemoglu, 2002). Also, export orientated firms and multinationals tend to be associated with more highly educated workers (Helpman et al., 2010), so an increase in globalisation (or an industrial policy that is export orientated) can lead to a higher demand for the more highly educated. While this can explain why wages for those at the top can pull away from the rest of the workforce, it does not explain polarisation.

[20] Less commonly polarisation can refer to greater wage growth for those at both the top and bottom than in the middle.

Polarisation (in terms of jobs, rather than wages) could happen as middle-paying jobs (such as clerical work) tend to be more routine in nature and can be more easily computerised or off-shored than low paying jobs (such as cleaning) or high paying jobs (such as legal advice) (Autor et al., 2003). Therefore job growth at the bottom could be due to formerly middle paid workers being pushed into lower paid occupations, while others manage to upgrade and gain better paid employment. In a form of 'trickle down' theory it has also been suggested that a combination of technical change and higher incomes for those at the top can lead to an increase in demand for services such as house-cleaning, which tend to be low paid (Autor and Dorn, 2013). While there is no consensus as to why wages are changing for those at the top[21]; it is generally accepted that it is happening internationally. However, there is consensus that wages for the lower paid are largely influenced by institutional factors (such as the minimum wage and unionisation), but this does not explain changes in employment.

During the 2000s Ireland was unusual in not showing this pattern, with employment and wage increases for those in middle paying occupations[22]. However, the construction boom may have masked the underlying changes in the structure of the labour market. The following section looks at which jobs are low paid, and the subsequent section looks at the changes during the recession, and at what underlying changes were masked by the construction bubble.

4.3 Who is low paid?

Table 4.1 outlines average hourly pay for various jobs in the Irish economy in the first quarter of 2010. Within that table red colouring refers to low paid jobs, while green refers to relatively high paid jobs. Though there have been some changes in wages since then, these are not likely to have greatly affected the ranking of the different jobs.[23] Unsurprisingly, as is seen from Table 4.1 "managers, professionals and associated professionals" are the highest paid group. Workers in the education sector get the highest hourly pay (though this may be exaggerated by an underestimation of hours worked in the Education sector) followed by the Financial, insurance and real

[21] Explanations include a deceleration in those entering third-level education (Card and Lemiuex, 2001), technical change (Acemoglu, 2002), and new pay practices such as performance related pay (Lemieux, et al., 2009)

[22] This is explored further in Section 4.4.

[23] Studies of wage changes since the recession include Bergin et al. (2012) and Walsh (2012).

estate sector. Being in the top group is not enough to ensure a high wage however. Managers, professionals and associated professionals in the Accommodation and Food sector earn an average of €18.88 per hour which is below the economy's average hourly wage of €22.11. The Accommodation and Food sector is clearly the lowest paid sector of the economy, with hourly pay for clerical, sales and manual workers in this sector roughly half the national average. It should be noted that working hours tend to be measured more accurately for waged workers than salaried workers, so the reported hours worked for some high paid workers may be unreliable (and are likely underestimated).

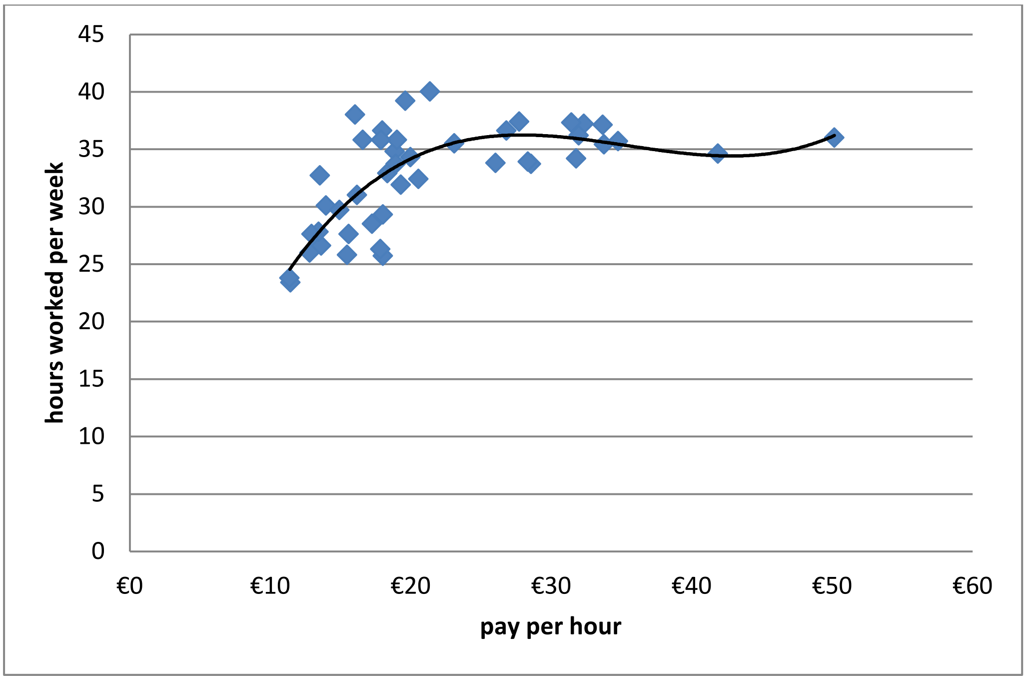
Table 4.1 Hourly pay by broad occupation and sector, Q1 2010

Sector	All employees	Managers, professionals and associated professionals	Clerical, sales and service employees	Production, transport, craft and other manual workers
All NACE economic sectors	€22.11	€32.77	€16.50	€15.80
Mining and quarrying (B)	€21.65	€32.34	€19.03	€19.62
Manufacturing (C)	€21.50	€33.68	€20.00	€16.61
Construction (F)	€20.36	€27.74	€18.03	€17.98
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	€16.44	€26.82	€13.63	€13.54
Transportation and storage (H)	€19.19	€34.78	€18.35	€16.06
Accommodation and food service activities (I)	€12.69	€18.88	€11.46	€11.39
Information and communication (J)	€25.87	€31.44	€18.94	€20.56
Professional, scientific and technical activities (M)	€26.53	€33.77	€17.26	€16.18
Administrative and support service activities (N)	€16.30	€31.97	€13.99	€12.95
Public administration and defence; compulsory social security (O)	€26.42	€31.79	€23.11	€17.90
Education (P)	€35.62	€42.57	€18.04	€15.49
Human health and social work activities (Q)	€23.46	€28.57	€17.85	€15.60
Electricity, water supply and waste management (D,E)	€29.91	€50.16	€28.35	€21.39
Financial, insurance and real estate activities (K,L)	€30.57	€41.88	€19.32	€14.93
Arts, entertainment, recreation and other service activities (R,S)	€16.04	€26.06	€13.46	€12.81

Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03)
Notes: Red colouring refers to low paid jobs, while green refers to relatively high paid jobs.
The values represent mean hourly pay.
Letters refer to NACE codes, the standard EU method for classifying economic sectors.

Low pay is officially defined as two thirds of the median gross hourly wage (Eurostat, 2013a). In 2010 20.7 percent of the workforce was low paid, with the cut-off point being €12.20 per hour (Eurostat, 2013a). If someone were to be working full time (39 hours per week) this equals an annual income of just under €25,000 per year.

Chart 4.1: Low pay rates are associated with low working hours



Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03) and own calculations.

Notes: More information is available in O'Farrell (2013a).
Dots represent the hourly wage and average hours worked of specific jobs. Jobs are as in final three columns of Table 4.1.
Hours are listed in Table 7.3.2
The fitted line is a third order polynomial.

However, the issue of low pay is compounded by the fact that low paid workers also tend to have a shorter working week[24], with the issue being particularly noticeable in the service sector. As can be seen from Chart 4.1, for pay rates between approximately €10 per hour and €20 per hour there is a strong relationship between low paid workers having a shorter working week. The effect tails off at about €20 per hour with such workers tending to work fulltime. Also, in the manufacturing sector both low paid and high paid workers tend to work fulltime. The cause of this can likely be attributed to managers in the service sector wishing to have a 'pool of workers' to choose from as this boosts their bargaining position when trying to get workers to work flexible hours. This phenomenon tends to be less pronounced for higher paid workers. It is more

[24] A discussion of this phenomenon is given in O'Farrell (2013b).

expensive to hire such workers, so the cost to employers of maintaining such a pool would be prohibitive. Table 4.2 shows how these two factors interact leading to stark differences in weekly wages.

Table 4.2 Weekly pay by broad occupation and sector, Q1 2010

Sector	All employees	Managers, professionals and associated professionals	Clerical, sales and service employees	Production, transport, craft and other manual workers
All NACE economic sectors	€686.02	€1,080.86	€469.20	€516.47
Mining and quarrying (B)	€828.56	€1,202.61	€680.21	€769.74
Manufacturing (C)	€771.93	€1,248.36	€685.99	€594.99
Construction (F)	€722.17	€1,036.40	€528.81	€657.35
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	€482.62	€981.22	€362.11	€442.15
Transportation and storage (H)	€683.27	€1,240.83	€604.25	€610.29
Accommodation and food service activities (I)	€316.07	€656.35	€268.56	€271.29
Information and communication (J)	€915.94	€1,172.50	€638.53	€667.17
Professional, scientific and technical activities (M)	€856.90	€1,195.06	€492.59	€502.24
Administrative and support service activities (N)	€488.24	€1,156.73	€420.73	€356.71
Public administration and defence; compulsory social security (O)	€923.22	€1,088.86	€820.39	€640.08
Education (P)	€845.59	€981.31	€464.10	€400.29
Human health and social work activities (Q)	€706.36	€963.84	€469.00	€431.20
Electricity, water supply and waste management (D,E)	€1,112.25	€1,807.07	€959.85	€854.93
Financial, insurance and real estate activities (K,L)	€1,013.75	€1,449.24	€617.00	€443.36
Arts, entertainment, recreation and other service activities (R,S)	€454.62	€881.29	€374.41	€332.74

Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03)
Notes: Red colouring refers to low paid jobs, while green refers to relatively high paid jobs.
Letters refer to NACE codes, the standard EU method for classifying economic sectors.
The values represent mean annual pay.
Corresponding data on average hours worked per week is presented in table 7.3.2 in the appendix.

Three factors that have an important effect on workers hourly earnings are age, gender, and education. Wages initially tend to increase with age, as workers gain more experience, and the effect then tends to taper off. As Table 4.3 shows, those under 30 are the lowest paid, with average pay peaking for those in their 50s. This holds for both male and female workers. As can also be seen, the gender pay gap increases with age. Women tend to be paid less than men. However, up to the age of 30 hourly pay is relatively similar, but it is after this age that the gap opens. This can be linked to women playing a larger role in child care (the average age of mothers having their first child is just over 30 years). However, the effect on weekly income is compounded by the fact that women also tend to work less hours than men. Finally, as is to be expected, those with higher education also tend to be paid more. According to the 2010 *European Structure of Earnings Survey* the average hourly wage (excluding agriculture and activities of households as employers, and extraterritorial organisations) was €21.64. Those who only have an education up to primary level were paid an average of €15.34 per hour, while those who completed a third level degree were paid almost double (€30.23 per hour).

Table 4.3 Hourly pay by Age Group, 2010

	Total	Under 30	30-39	40-49	50-59	60+
Total	€21.64	€14.82	€20.78	€24.27	€24.91	€21.24
Male	€23.19	€14.82	€21.54	€26.14	€27.66	€23.41
Female	€20.12	€14.82	€20.00	€22.40	€22.27	€18.83

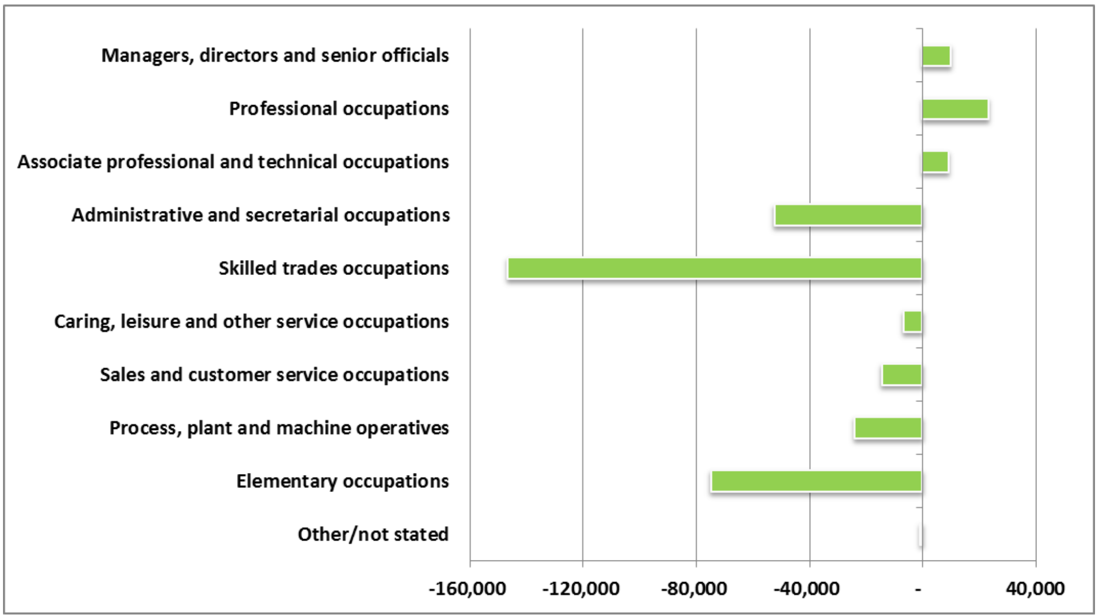
Source: Eurostat: Structure of Earnings Survey (earn_ses10_13)
Note: The values represent mean hourly pay.

4.4 Changes during the recession

A recession can cause job losses in three different ways. It is commonly understood that unsustainable jobs can be lost due to the bursting of a bubble, or that jobs can be lost due to a general downturn in the economy. There is a third way in which a recession can cause job losses. During a boom firms may be able to ignore new trends in technology or work practices (such as towards computerisation), and stay profitable. However, in a recession the firms that have previously adopted new methods and technologies are more likely to survive, some firms that have not tend to close down, and other firms scramble to catch up with new methods and technologies. The disruptive effects of a recession may stop resistance to underlying trends. The transition to new technologies or work practices does not have to be a smooth process, but can happen in a jolting fashion.

In the decade running up to the 2008 financial crisis, a Eurofound study finds that the pattern across Europe was one of 'slightly polarised upgrading' (Hurley et al., 2013) whereby both low-paying and high-paying jobs were created (though slightly more high paying jobs were created, leading to the term upgrading). Job gains for middle paying jobs were smaller in scale. It should be noted that what was classed as a highly specialised task in 1998 (such as web-design) may not need the same level of training by 2008. Between 2008 and 2010 (the latest year covered by the Eurofound study) the pattern of polarised upgrading continued, but this time in a context of job losses (with the greatest job losses amongst middle paying jobs). A change in employment does not necessarily mean a change in the demand for labour. An increase in labour supply (such as due to migration) can also lead to an increase in employment. However, if the changes are driven by a change in labour demand, then we would expect wage developments to follow the same pattern as employment. The evidence that is available (Christopoulou, et al. 2010 look at the years 1995 to 2002) suggests that this is the case. For most countries wage increases have tended to benefit either those at the top, or both the top and bottom, with the middle left behind.

Chart 4.2: Change in employment by occupation, Q2 2008 to Q2 2013



Source: CSO Statbank: Quarterly National Household Survey (QNQ14)
Notes: Occupations defined as per SOC2010. Data includes employees and self-employed. The occupations are ranked according to occupation classification, which approximates average earnings

Ireland is different. Between 1995 and 2007 job growth occurred across most job types (Hurley et al., 2013). Also, there was a strong increase in demand for labour for those at the bottom, with these workers gaining strong wage increases between 1995 and 2002 (Christopoulou, et al. 2010). However the local Irish construction boom masked the underlying changes occurring in the economy. Between 2008 and 2010 employment for those at the top was relatively stable, while those in the middle were hit hardest, and those at the bottom also losing employment, but relatively less than those in middle paying jobs. This is as construction jobs tend to be middle paying. This is shown graphically in Chart 4.2. The occupations are ranked according to occupation classification, which approximates average earnings. As can be seen the employment of those in the three top paying occupations actually increased between 2008 and 2013.

The top three occupations (Managers, directors and senior officials; Professional occupations; and Associate professional and technical occupations) have increased their share of employment from 31.8% to 38.7%. While an increase in employment in relative terms could be due to a collapse in the construction bubble, or cyclical factors (during recessions the lower paid are more likely to lose their jobs (see Devereux, 2004)). The fact that the increase is in the number employed, and not just the share of employed shows that this is due to the long-term underlying shift in the Irish economy, and not just due to the recession. Also, it is implausible that the shift is due to a change in the supply of such workers. The limited data on wage developments is also supportive of it being driven by a change in demand. However, the increase in employment of 42,400 in these categories is not enough to offset the fall in other sectors. Unsurprisingly, the occupation with the largest fall in employment is the 'Skilled trades occupations', which includes many construction workers, and the decline in employment is largely due to the bursting of an unsustainable bubble. Part of the decrease is also due to cyclical factors. Across Europe in 2012 7.2 per cent of those in employment are employed in the construction sector (compared to 4.7 percent in Ireland), and a recovery of employment to this level can be expected. This would mean job growth in the sector of roughly 50,000 to 60,000 jobs.

It is notable that secretarial and clerical employment suffered heavily, with 20% of such jobs being lost (compared to 13% for the economy as a whole). This shows that the decline in this occupation group is due to more than just the recession, but it represents the unmasking of a long-term trend. According to the routinisation hypothesis of Autor et al. (2003), it is such jobs that are most easily computerised or outsourced. In contrast, sales and customer service jobs fell by 14,400 (about 8% of such jobs) and the decline can be attributed to the recession. Unfortunately accurate information on changes in hourly wages by occupation is unavailable. However, CSO data from the Earnings Hours and Employment Costs Survey (EHECS) shows that in nominal terms weekly pay for the top three occupation groups increased by 0.5% from the first quarter of 2008 to the same period in 2013, decreased by 1.9% for Production, transport, craft and other manual workers, and decreased most (by 4.7%) for Clerical, sales and service employees (CSO, 2013f). It should be noted that part of the decrease is due to a decrease in working hours rather than hourly pay, but the data is consistent with a fundamental shift in demand away from middle paid clerical and administrative jobs.

This evidence of the recession unmasking an underlying trend of polarisation is also supported by evidence from Eurofound (Hurley et al., 2013). Excluding the construction sector, 1995 to 2007 showed a pattern of polarisation, with the greatest job gains for those in the top 20% (in terms of wages) with the second biggest gains for those in the bottom 20%. For the period 2008 to 2010 the bottom 40% suffered the greatest job losses. So this could be a combination of the long term loss of middle paying clerical jobs, and also the more temporary loss of low paid service sector jobs due to the general down turn in the economy.

4.5 Conclusion

There are three factors that explain the change in the labour market in Ireland during the recession 1) job losses due to the general downturn in the economy, 2) a once-off adjustment due to the bursting of a construction bubble, and 3) a long-term underlying shift that is hollowing out middle paying jobs. The policy implications differ depending on the cause of the job losses. For jobs that are lost due to the general down-turn in the economy (such as in retail and hospitality) a recovery in employment can be expected as the economy as a whole recovers. In particular, many lower paid jobs depend on a recovery in the domestic economy. Hopefully this will occur if austerity policies are reduced over the coming years.

For the other two causes, more long term structural policies are required. It is likely that construction employment has undershot a balanced level of employment. An investment stimulus (such as that proposed in NERI, 2013b) would help to restore construction employment to a sustainable level, and help reduce structural unemployment caused by 'hysteresis effects' (whereby long-term unemployment corrodes a workers skills, and makes it more difficult for them to find employment). For other former construction workers, retraining for potential growth areas of the economy is required. Many construction workers that have an aptitude for working in technical occupations or pursuing further education were attracted to the construction sector by the good opportunities then available. Complementary to the general upgrading of unemployed and under-employed former construction workers is the need to up-skill those in clerical and administrative occupations. As the loss of such jobs are due to long term trends, a strong recovery of such jobs is not likely, and continued job losses can be expected into the future. While much focus has been put into retraining unemployed workers, thought should be put into forming a national training programme for those currently in employment. Government policy should focus on normalising continuous training. Government could subsidise training during working hours, rather than rely on night-courses, in order to train people for upcoming challenges in the labour market.

The effect of government industrial policy on the demand for different types of labour should not be ignored. Current government policy is one of promoting export orientated growth. Export orientated firms tend to employ higher skilled and higher paid workers. While this is welcome, industrial policy should also be examined in light of how it could promote other middle paying jobs, with a strong link between training policies and industrial policies likely to be beneficial. It is impossible to predict what trends in technology will occur in the future. It is possible that new jobs (such as web design) may emerge as middle paying jobs. However, even if this is to occur, training will be required so that people are in a position to take up such jobs.

As a domestic led recovery is unlikely, over the coming years it is probable that there will be a continued expansion of employment for the higher paid, stagnation or declines for those in middle paying occupations, and the fate of the lower paid will depend on a trickle down from those in higher paying jobs. Such an outlook underscores the need for policy to focus on initiatives such as in-work training; methods of protecting the living standards of low paid workers such as a 'living wage'; and the retention and strengthening of a progressive income taxation system.

5 Conclusion

Our economic outlook for Ireland North and South is cautious but optimistic. In both cases domestic economic activity remains weak; although improvements in the labour market signal some optimism and signs of stability. However, the legacy of fiscal retrenchment over the past few years continues to persist. Similarly, exports remain under pressure, investment is unsustainably low, unemployment is high and growth is positive but limited.

Looking to the future, we are optimistic for the Republic's labour market, but caution that any 'improvements', driven by job creation and migration, should be considered in the context of ongoing high levels of unemployment, youth unemployment and long-term unemployment. Public policy needs to be formed in a way which addresses these challenges alongside encouraging investment, broader economic activity and recovery.

Our analysis of the Republic of Ireland's labour market in Section 4 points towards its likely direction in the years to come. The construction boom of the 2000s masked an international pattern of labour market 'polarisation' with a hollowing out of middle paying jobs. These trends imply further public policy challenges such as in-work training; methods of protecting and improving the living standards of low paid workers such as a 'living wage'; and the retention and strengthening of a progressive income taxation system.

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7 Appendix

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

	2008	2009	2010	2011	2012
Total Expenditure					
Consumption €m	94,162	83,294	82,200	82,380	82,634
Investment: private and public €m	39,620	26,096	19,293	17,266	17,434
Government current spending €m	30,371	29,304	26,196	25,701	25,096
Exports €m	150,181	146,369	157,810	166,964	176,736
Imports €m	-133,877	-120,352	-128,326	-131,840	-136,990
Domestic Demand €m	163,822	137,205	127,122	126,332	125,540
Total Income					
GDP €m	180,249	162,284	158,097	162,600	163,938
GNP €m	154,933	133,919	131,812	130,662	132,649
Income from Agriculture €m	2,708	2,066	2,580	3,179	2,876
Income non-Agriculture: Wages €m	81,856	74,454	69,221	68,315	68,390
Income non-Agriculture: Other €m	48,427	43,042	48,840	54,073	52,885
Employment					
Labour Force	2,300,100	2,242,400	2,196,700	2,173,700	2,165,800
Labour Force Participation Rate %	64.2%	62.3%	61.0%	60.4%	60.2%
Employment	2,136,400	1,953,600	1,886,100	1,845,600	1,841,300
Employment full-time	1,735,300	1,530,800	1,459,700	1,411,300	1,395,000
Employment part-time	401,100	422,700	426,400	434,300	446,300
Underemployment	95,200	112,900	112,500	140,800	147,600
Unemployment	163,700	288,900	310,600	328,100	324,500
Unemployment %	7.1%	12.9%	14.1%	15.1%	15.0%
Long-term Unemployment	42,000	80,600	152,600	191,700	193,000
Long-term Unemployment %	1.8%	3.6%	6.9%	8.8%	8.9%
Migration					
Immigration	73,700	41,800	53,300	52,700	55,890
Emigration	72,000	69,200	80,600	87,100	88,989
Net Migration	1,600	-27,500	-27,400	-34,400	-33,099

	2008	2009	2010	2011	2012
Public Finances					
Total General Gov. spending €m	77,070	78,128	103,547	76,556	69,811
Total General Gov. revenue €m	63,762	55,963	55,149	55,332	56,524
General Gov. Balance €bn	-13.3	-22.2	-48.4	-21.2	-13.3
General Gov. Gross Debt €bn	79.6	104.5	144.2	169.2	192.5
General Gov. Gross Debt % GDP	44.2%	64.4%	91.2%	104.1%	117.4%
Earnings and Prices					
Average earnings € per week	696.72	699.10	693.70	687.67	691.93
Average earnings % change	n/a	0.3%	-0.8%	-0.9%	0.6%
Private sector av. earn. % change	n/a	3.6%	-2.4%	-2.5%	1.0%
Public sector av. earn. % change	n/a	-2.4%	-0.8%	0.7%	1.2%
Inflation CPI %	4.1	-4.5	-1.0	2.6	1.7
Inflation HCPI %	3.1	-1.7	-1.6	1.1	2.0
Inequality and Poverty					
Gini coefficient	30.7	29.3	31.6	31.1	n/a
Quintile ratio	4.6	4.3	4.9	4.9	n/a
Relative poverty %	14.4%	14.1%	14.7%	16.0%	n/a
Consistent poverty %	4.2%	5.5%	6.3%	6.9%	n/a
Deprivation rate %	13.8%	17.1%	22.6%	24.5%	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.
Underemployment calculation - new series from 2008.

Appendix 7.2 Overview of recent economic trends– Northern Ireland

	2008	2009	2010	2011	2012
Total Expenditure					
Personal consumption £m	-	-	-	-	-
Investment: private and public £m*	8,881	7,918	7,268	-	-
Government consumption £m	-	-	-	-	-
Exports £m	6,443	5,347	5,531	6,008	5,725
Imports £m	5,747	5,152	5,417	5,774	5,710
Domestic Demand £m	-	-	-	-	-
Total Income					
GVA £m	28,607	27,969	29,155	29,870	-
GNP £m	-	-	-	-	-
Income from Agriculture £m	306	323	330	-	-
Income non-Agriculture: Wages £m	16,477	16,766	17,291	-	-
Income non-Agriculture: Other £m	11,823	10,881	11,537	-	-
Employment					
Labour Force	821,000	810,000	835,000	862,000	871,000
Labour Force Participation Rate	59.9%	58.5%	59.9%	61.2%	61.4%
Employment	786,000	752,000	777,000	799,000	804,000
Employment full-time	610,000	575,000	597,000	609,000	596,000
Employment part-time	170,000	177,000	174,000	189,000	196,000
Underemployment	18,000	27,000	25,000	33,000	42,000
Unemployment	34,000	58,000	58,000	62,000	67,000
Unemployment rate %	4.2%	7.1%	7.0%	7.2%	7.6%
Long-term Unemployment	14,000	19,000	27,000	26,000	36,000
Long-term as % of Unemployed	41.2%	32.8%	46.6%	41.9%	53.7%
Migration					
Immigration	30,402	25,261	24,544	23,724	23,255
Emigration	22,688	21,604	23,394	25,218	24,570
Net Migration	7,714	3,657	1,150	-1,494	-1,315

	2008	2009	2010	2011	2012
Public Finances					
Total General Gov. spending £m	19,495	20,092	19,728	19,563	-
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	345.00	354.60	354.70	354.20	360.20
Average earnings % change	4.4%	2.7%	0.0%	-0.1%	1.7%
Private sector av. earn. % change	-	-	-	-	0.2%
Public sector av. earn. % change	-	-	-	-	3.8%
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 Further Data to accompany Section 4

Table 7.3.1: Average hourly pay rates, 2008 -2013

Year	Nominal	Real
2008Q1	€21.53	€21.89
2008Q2	€21.51	€21.50
2008Q3	€21.21	€21.17
2008Q4	€22.17	€22.24
2009Q1	€22.44	€22.78
2009Q2	€22.02	€22.36
2009Q3	€21.89	€22.44
2009Q4	€22.42	€23.12
2010Q1	€22.11	€23.00
2010Q2	€21.95	€22.77
2010Q3	€21.64	€22.45
2010Q4	€22.07	€22.90
2011Q1	€22.22	€22.94
2011Q2	€21.90	€22.43
2011Q3	€21.58	€22.13
2011Q4	€22.03	€22.51
2012Q1	€22.15	€22.49
2012Q2	€21.97	€22.08
2012Q3	€21.80	€21.85
2012Q4	€21.89	€21.98
2013Q1	€22.20	€22.30
2013Q2	€22.02	€22.01

Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03), EU HICP (CPM05) and own calculations. Earnings data was divided by a price index.

Notes: The EHECS dataset commenced in Q1 2008.
Real wages are in September 2013 prices, which by coincidence is the same price level as in October 2008.

Table 7.3.2: Average hours worked per week, Q1 2010

Sector	All employees	Managers, professionals and associated professionals	Clerical, sales and service employees	Production, transport, craft and other manual workers
All NACE economic sectors	31.0	33.0	28.4	32.7
Mining and quarrying (B)	38.3	37.2	35.8	39.2
Manufacturing (C)	35.9	37.1	34.3	35.8
Construction (F)	35.5	37.4	29.3	36.6
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	29.4	36.6	26.6	32.7
Transportation and storage (H)	35.6	35.7	32.9	38.0
Accommodation and food service activities (I)	24.9	34.8	23.4	23.8
Information and communication (J)	35.4	37.3	33.7	32.4
Professional, scientific and technical activities (M)	32.3	35.4	28.5	31.0
Administrative and support service activities (N)	29.9	36.2	30.1	27.6
Public administration and defence; compulsory social security (O)	34.9	34.2	35.5	35.8
Education (P)	23.7	23.1	25.7	25.8
Human health and social work activities (Q)	30.1	33.7	26.3	27.6
Electricity, water supply and waste management (D,E)	37.2	36.0	33.9	40.0
Financial, insurance and real estate activities (K,L)	33.2	34.6	31.9	29.7
Arts, entertainment, recreation and other service activities (R,S)	28.3	33.8	27.8	26.0

Source: CSO Statbank: EHECS Earnings Hours and Employment Costs Survey Quarterly (EQH03)
Notes: Red colouring refers to low paid jobs, while green refers to relatively high paid jobs.
The values represent mean hours per week.
Letters refer to NACE codes, the standard EU method for classifying economic sectors.

Notes

Nevin Economic Research Institute (NERI)

31/32 Parnell Square
Dublin 1
Phone + 353 1 8897722

Carlin House
4-6 Donegall Street Place
Belfast
BT1 2FN,
Northern Ireland
Phone +44 28 902 46214

Email: info@NERInstitute.net
Web: www.NERInstitute.net