



Equality
Research
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Winners And Losers?

The Equality Impact of the Great Recession in Ireland

*Frances McGinnity, Helen Russell, Dorothy Watson,
Gillian Kingston & Elish Kelly*



THE EQUALITY AUTHORITY
AN tÚDARÁS COMHIONANNAIS



WINNERS AND LOSERS?

THE EQUALITY IMPACT OF THE GREAT RECESSION

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Kingston and Elish Kelly*

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FOREWORD

Since its foundation in 1999, the Equality Authority has strongly promoted and supported the development of authoritative evidence on the nature and extent of discrimination and inequality across the nine grounds specified in the Equality Acts: gender, civil status, family status, sexual orientation, religion, age, disability, race and membership of the Traveller community. This commitment to evidence based policy will continue to be supported and built upon by the Irish Human Rights and Equality Commission which will shortly be established through the merger of the Equality Authority and the Irish Human Rights Commission.

“Winners and Losers?” examines the equality impact of the great recession. Recession and austerity have had highly negative effects on employment, incomes and living standards in Ireland. This report considers two labour market indicators – employment and unemployment – drawing on the CSO’s Quarterly National Household Survey (QNHS). It also examines two key indicators of living standards – poverty and deprivation – as measured in the CSO’s Survey of Income and Living Standards (SILC). The focus in each case is to investigate differences between groups across those of the equality grounds that are at least partially identified in these surveys - age, disability, nationality, gender civil and family status - and whether these differences changed over the period of recession to 2011 (SILC) or 2012 (QNHS).

I would like to thank the authors - Frances McGinnity, Helen Russell, Dorothy Watson, Gillian Kingston and Elish Kelly - for their expert report. This type of disaggregated analysis is essential to ensure that particular group related risks are identified and factored into policy. Obviously therefore it remains of some concern that data on a number of the nine grounds - religion, disability, sexual orientation, ethnicity including membership of the Traveller community - are not systematically collected in these important national surveys.

David Joyce B.L.
Acting Chairperson
Irish Human Rights and Equality Commission (designate)

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EXECUTIVE SUMMARY

Overview

Ireland has experienced a deep economic recession, with severe labour market consequences and widespread cuts to public expenditure. What are the consequences of this for individuals and their families? While almost all groups in Irish society have been affected, some may be more vulnerable than others. This report is an attempt to assess the equality impact of the recession by measuring the situation of key equality groups before (2007) and after the recession (2011/2012). Which groups experienced the greatest changes in their labour market fortunes and their household financial situation? The report assesses differences between men and women, older and younger age groups, different family types, Irish and non-Irish nationals, people with a disability and those without.¹ Do we see convergence or divergence across these equality groups? Are there winners and losers?

The report focuses on two core labour market outcomes, employment and unemployment, and two key indicators of standard of living, poverty and deprivation.² Labour market participation is included as a context for understanding group differences in employment and unemployment. The evidence is drawn from the best available data sources for these outcomes – the Quarterly National Household Survey (QNHS) and the Survey of Income and Living Conditions (SILC) carried out by the Central Statistics Office.

We investigate differences between groups and whether these differences have changed over time using statistical modelling. The results presented are derived from these models. The modelled results differ from the headline employment, unemployment and poverty figures because they hold constant other differences between groups such as education, region, nationality and estimate the ‘net’ effect of the characteristic of interest, such as gender.

This report examines a number of labour market and financial outcomes for a wide range of groups over two years: this summary brings together the key findings. It is challenging to identify any ‘winners’ in the current recession, at least in terms of equality groups. What we can say is that some groups have lost more than others.

Key Findings

Women and Men

The labour market crisis in Ireland has had a strong gender dimension. While employment fell for both men and women the drop was much steeper for men.

- The net employment gap between men and women narrowed from 17 per cent in 2007 to 10 per cent in 2012.

¹ The groups considered are based on the grounds defined by the equality legislation for which there is data – gender, age, marital status, family status, nationality and disability. These surveys do not include information on sexual orientation, religion or membership of the Traveller Community.

² These are fundamental indicators of quality of life or living standards, although there are many alternative indicators like household debt, health and life satisfaction that are not considered.

- There has been an increase in the male disadvantage in unemployment rates, with model-estimated unemployment rising from 5 to 17 per cent for men, and 4 to 12 per cent for women.

The report suggests a number of reasons for these gender patterns. Job losses have been particularly dramatic in male-dominated sectors of the economy, while some sectors with a higher proportion of female workers such as health and education have been better sheltered from unemployment. Other factors that have led to lower unemployment among women include higher educational qualifications, particularly among younger women. The narrowing gender gap in employment rates should be seen as 'levelling downwards' since it is due to a fall in male employment rather than a rise in female employment.

While the labour market models consider only individual outcomes, women and men often live together in the same households. The analysis of poverty and deprivation³ recognises the wider household context by measuring the income and deprivation of the individual's household.

- There was no difference in income poverty and material deprivation between men and women when we control for household type.
- Poverty and deprivation risks of lone parents, most of whom are women, were substantially higher in both periods.
- Basic deprivation more than doubled for both sexes while the levels of income poverty did not change.⁴
- Changes over the period 2007 and 2011 were the same for both sexes.

Age Groups

The employment and unemployment results show a clear disadvantage among the youngest age groups. While the employment rates of all age groups fell during recession, the situation of those aged 15 to 24 years were found to have deteriorated most relative to the 35 to 44 age group (holding characteristics such as education, nationality and family status constant).

- For 15–24 year olds the unemployment rate had grown significantly faster than for adults aged 35 to 54.
- No differences in labour market outcomes were detected between the two prime working age groups (35–44 years and 45–54 years).
- The 25–34 year old group experienced a greater decline in employment and rise in unemployment compared with those aged 35–44 years.
- Part of the lower unemployment rate enjoyed by the 55–64 age group was eroded between 2007 and 2012, but their employment was less severely hit than the employment of the 35–44 age group.

³ The deprivation measure is the one used in national anti-poverty policy and assesses whether persons were lacking at least two of eleven basic items (see Chapter 3 for details).

⁴ The stability of income poverty is due in part to the fact that this is a relative measure (60 per cent of median income) and that falling average income led to a lowering of the poverty threshold. See Chapter 3 for further discussion.

A somewhat similar pattern emerges in relation to poverty.

- Highest net rates of income poverty are recorded for the youngest age groups: children and young adults up to 19 years.
- There was some narrowing of the gap between the age groups over the recessionary period.
- Children and young adults experienced a higher risk of deprivation than older adults, and there was no shift in the relative positions of the different age groups over time.

Family and Marital status

The report finds significant differences between family/marital status groups in both labour market and poverty outcomes.

- Employment falls were greater for single adults and cohabiting adults, with and without children, than for married childless adults.⁵
- In 2012, employment rates were lowest among lone parents, those cohabiting with children, formerly married and single childless adults.
- In 2012, levels of modelled unemployment risk were highest among never married lone parents (25 per cent), formerly married without children (21 per cent) and those cohabiting with children (22 per cent).
- Formerly married people without children and cohabiting parents were found to have experienced a steeper rise in unemployment relative to the married childless adults between 2007 and 2012.

One possible reason for this is that both groups were more likely to be employed in construction in 2007. Unemployment also increased disproportionately among individuals married with children although this rise was from a low base. These trends mean that marital/family differences in labour market outcomes became more pronounced during the recession and groups not traditionally seen as disadvantaged, i.e. those cohabiting with children and the formerly married childless group, are emerging as disadvantaged groups.

Turning to standard of living measures we found that:

- Those with children – especially lone parents – and single or formerly married adults without children have a higher risk of income poverty than married childless adults.
- In both 2007 and 2011 income poverty and deprivation were highest for lone parents, among whom 30–32 per cent were in income poverty and 44–49 per cent were materially deprived.
- By 2011, cohabiting couples with children also had a relatively high income poverty (27 per cent) and deprivation risk (33 per cent), following a sharp rise in both.
- In 2011, formerly married without children had relatively high deprivation rates (29 per cent).

While there was a sharp increase in deprivation for all marital/family groups, in general many pre-recession patterns of advantage and disadvantage were maintained. Results also

⁵ Children are defined as children under 18 living in the household.

suggest that family and marital status are also linked to age and can have different effects depending on the gender of the respondent.

Non-Irish Nationals

The economic boom in Ireland was associated with large scale immigration of non-Irish nationals, which led to a significant increase in the proportion of non-Irish nationals in Ireland. With recession there has been a rapid increase in emigration, particularly of nationals of new EU member states (NMS) in the 2008–2010 period (McGinnity et al., 2013).⁶ The evidence is drawn from the population resident in Ireland at the time of the survey: the rise in emigration means that for some equality groups, in particular non-Irish nationals but also young Irish nationals, the impact of the recession on outcomes may be underestimated.

Employment rates are found to differ by national group.

- In 2007 migrants from NMS had higher modelled employment rates than Irish nationals, migrants from the EU13 had the same employment level as natives,⁷ and all other non-Irish nationals had lower employment rates.
- Between 2007 and 2012 employment fell significantly for all nationalities and in most cases resulted in the persistence of pre-recession differentials.
- There were two exceptions: NMS nationals experienced a greater decline in employment relative to Irish nationals and African nationals experienced a smaller fall, although the disadvantage faced by this group remained substantial.
- The unemployment rate of NMS nationals and African nationals increased more than for Irish nationals.
- In 2011 just under one-third of the non-Irish nationals experienced basic deprivation compared with one-quarter of Irish nationals, up from 22 per cent and 11 per cent in 2007 respectively.
- In deprivation terms the situation of both deteriorated equally during the crisis period.

Overall, these results do not suggest that migrants have suffered disproportionately during the economic crisis but rather that pre-recession disadvantages, which were very considerable for some migrant groups, were maintained. The exception to this is NMS nationals who experienced a higher than average fall in employment rates, a (somewhat) higher than average rise in unemployment

People with Disabilities

The association between disability and labour market outcomes could only be examined for the years 2004 and 2010.

- In 2010, people with a disability still had a much lower rate of labour market participation than those without a disability (36 per cent versus 77 per cent); a lower

⁶ New Member States that became members of the EU in 2004 and 2007: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

⁷ EU13 is EU15 excluding Ireland and the UK: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, and Sweden.

level of employment (28 per cent versus 65 per cent), and they faced a higher unemployment rate (22 per cent versus 16 per cent).

- Models estimated by Watson et al. (2013) show that the labour market disadvantage experienced by people with a disability remained fairly stable between 2004 and 2010 even though the unemployment risks increased substantially.
- Between 2007 and 2011 there was a narrowing in the income poverty differentials and deprivation gap between people with a disability and those without.
- Narrowing poverty differentials are due to a levelling downwards in conditions rather than an improvement for the disabled group.
- Even in 2011, poverty and deprivation rates were substantially higher for those with a disability than those without.

Policy Implications

This report finds exceptionally high unemployment rates among young people, even after controlling for education and other characteristics. As well as the current negative impact on the income and quality of life of young people, one concern is with scarring effects on later careers (Bell and Blanchflower, 2011). Other ESRI studies have highlighted a number of measures which could be considered. Firstly, there is the issue of early school-leaving. While rates of completion of upper secondary education have increased over the past decade (Department of Education and Skills, 2012), there is a need for continued efforts to retain those who are disengaged from schooling, as it is those who leave school early who are most vulnerable to unemployment (Byrne and Smyth, 2010). Secondly, there is the issue of training for those aged under 25 years. The objective of this would be to enhance the skills of young people in those areas where jobs are likely to emerge in the future (Kelly et al., 2013).

Social welfare policy in the recession emphasised maintaining levels of the main social welfare payments. This has been effective in protecting certain vulnerable groups from the income effects of the recession. This was particularly true for older adults (65+), though perhaps less true for those of working age. We do find evidence that those less dependent on the labour market experienced less of a change in their incomes than those dependent on the labour market, at least for the groups whose benefits were maintained. Whether this is maintained in later years of austerity – 2012 and 2013 – remains to be seen. The analysis in this report is based on the latest available income data (2011). The current research does not consider the effects of cuts in public services and it is likely that these too will have a differential impact across equality groups.

Conclusion

Which groups were hardest hit? In the labour market young people and men have seen labour market conditions deteriorate more significantly than for women, prime-age and older workers, though all groups have seen a decline in employment and a rise in unemployment. Employment rates of NMS nationals also fell sharply and unemployment might have risen more were it not for a rapid increase in emigration among this group. Among family types, lone parents remained disadvantaged in both years, but divorced/separated people without children and cohabiting parents emerge as disadvantaged groups in the labour market.

In terms of change over time in income poverty and deprivation, in general the living standards of those with a disability and older adults (65+) were less affected by the recession than other groups, at least by 2011. This is partly because of their greater

detachment from the labour market and greater reliance on social welfare incomes. This finding should be interpreted in light of the fact that people with a disability were one of the most disadvantaged groups pre-recession. Indeed for the most part, pre-recession group differences in income and deprivation were maintained.

1 THE EQUALITY IMPACT OF THE GREAT RECESSION: INTRODUCTION

1.1 Introduction

Ireland is experiencing a deep recession, with very severe labour market consequences and substantial cuts in public expenditure. In some ways everyone may be affected by economic recession, yet certain groups may be more vulnerable.

This report is fundamentally concerned with evidence of inequality between groups before the recession and how, if at all, it has changed over the course of the recession. These groups broadly follow the grounds covered by the equality legislation for which we have data – gender, age, marital and family status, nationality/ethnicity and disability.⁸ A body of work has established differences between these groups in terms of employment, unemployment, poverty and discrimination in Ireland (O’Connell and McGinnity, 2008; Barrett and McCarthy, 2007; Russell et al., 2008; Russell et al., 2009; Watson and Nolan, 2011; McGinnity and Lunn, 2011; Lunn and Fahey, 2011). The aim of this project is to map these differences before and after recession. Looking across society, has there been convergence or divergence across each of the equality grounds in recession? Have the gaps between the vulnerable and the privileged grown larger, remained the same or grown smaller in each group? Are there ‘winners’ and ‘losers’?

This chapter reviews some theoretical perspectives to guide expectations of outcomes (Section 1.2), then considers the labour market, migration and policy context (Section 1.3). Section 1.4 briefly reviews previous empirical literature, followed by an outline of the analytic strategy for investigating the questions posed (Section 1.5).

1.2 Theoretical Perspectives

This section develops a number of ideas on which groups are likely to be most affected by recession, drawing primarily, though not exclusively, on labour market theories. The role of policy, particularly regarding income maintenance, is also considered.

One influential idea about the differential effect of recession is the ‘Strength of Labour Market Connection’: those with weaker connections to the labour market will fare worst during recession. Applied to women for example, is the idea that women constitute a labour reserve that is discarded by employers when demand slows down and called out when demand is booming, acting as a labour market ‘buffer’ (Rubery,). An analogous argument has been applied to migrants too, with the assumption that in times of recession many migrants will go back to their home country, thus acting as a ‘shock absorber’ for the economy (Borjas, 2001; Barrett and Kelly, 2012). In a similar vein is the expectation that those with more tenuous labour market links, for example those with a disability or health problems, will be more easily dismissed and find it even more difficult to get a job when demand for labour is very low.

Typically in recessions the fall in vacancies far exceeds the rise in layoffs. Put simply, it is easier to keep a job than to get one. Thus while we might have a general expectation that employment falls would be sharper and unemployment higher among minority groups, this

⁸ In the equality legislation, the name and legal definition of the marital status ground was changed to ‘civil status’ in 2011 to take account of the introduction of same-sex civil partnerships in Irish law. However, the term ‘marital status’ is used in this report, reflecting the legal situation for most of the period under study.

might be particularly true of those returning to the labour market after a break or those who had never worked. In particular this would apply to young people leaving education, to a lesser extent those with a disability who had never worked and women returning to the labour market after a break for childrearing. It is beyond the scope of this report to investigate transitions in detail, but this perspective may inform expectations of labour market outcomes.

Segmentation within the labour market offers a related perspective as to how disadvantaged groups might fare in recession, linked to the jobs different workers do. According to labour market segmentation theory, the important divide is between primary and secondary jobs (Doeringer and Piore, 1971; Edwards et al., 1975). Primary jobs are secure, skilled, well-paid and with good prospects for advancement, often in capital intensive sectors. Secondary jobs by contrast are typically low quality and insecure, and there is little mobility between segments. Primary jobs are predominantly occupied by prime-age men, 'core workers'. Analysts have argued that women are part of the secondary job segment alongside ethnic minorities, young people and other groups (Bettio and Verashchagina, 2013). The secondary segment plays a buffer role in recession, with jobs being much more easily lost there and temporary contracts not being renewed, thereby protecting the primary jobs at the 'core' of the labour market.

The segregation perspective draws attention to the concentration of workers in particular sectors or occupations. Most literature to date has focused on gender segregation in the labour market (Charles and Grusky, 2004). Authors analysing gender and recession have argued that the concentration of women in public sector employment and in services may protect women from job loss (Bettio and Verashchagina, 2013). Broadening this to a range of groups it is possible that job losses and income falls of groups in recession will be strongly affected by sectoral and occupational employment losses in recession (though sectors more than occupations, as crises tend to have a distinctive sectoral impact). This generates a number of general expectations. For example, to the extent that public sector employees may be shielded from large-scale job loss, at least in the early recession, groups with a high representation in the public sector may fare better (e.g. women rather than men and Irish rather than non-Irish nationals). In the private sector, industries more dependent on national demand (retail, construction) may fare worse than the export sector. The pattern of sectoral employment change is presented in more detail in Chapter 2, as well as the concentration of different groups by sector in the labour market pre-recession.

An alternative perspective on the labour market and economic outcomes of minority groups comes from the discrimination literature. Discrimination is typically understood as unequal treatment on the basis of group membership. While the extent of discrimination is challenging to quantify, there is now a body of evidence of discrimination in Ireland on a range of grounds (Bond et al., 2010). Whatever the underlying explanation, theories of discrimination would lead us to expect that discrimination against minority groups in the labour market (women, non-Irish, those with a disability) might increase in recession.⁹ When jobs and resources are plentiful, employers may be more likely to recruit from minority groups. In recession, when jobs are scarce, employers may have more scope to exercise their prejudice or act on stereotypical beliefs about group performance. Queuing theory suggests that employers in general prefer to employ men (or other 'in groups') so it is only when there are not enough male applicants that jobs are likely to be filled by women and minority groups (Reskin and Roos, 1990). There have been few empirical studies that test whether labour market discrimination varies with the economic cycle. Some research has found that high employment growth leads to a decline in sex-segregation suggesting that

⁹ See McGinnity and Lunn (2011) for a discussion of theoretical perspectives on discrimination and how they might apply to the Irish labour market.

strong demand reduces barriers (England, 2005). In Ireland the economic boom was associated with a rapid rise in employment among women (especially mothers), and sex-segregation in the labour market declined (Russell et al., 2009). Research has also found that there was an increasing proportion of non-Irish nationals in the labour market (O'Connell and McGinnity, 2008).

Evidence from field experiments on the relationship between discrimination and the economic cycle is uncommon but where it exists it tends to support the idea that discrimination is persistent, regardless of levels of labour demand (i.e. boom or recession) (McGinnity et al., 2012a). Comparing self-reports of discrimination between a wide range of groups in 2004 and 2010, McGinnity et al. (2012a) did not find evidence of an overall rise in reports of discrimination in the labour market in Ireland, but that discrimination had risen for the Black ethnic group, even after controlling for other factors. If discrimination towards any 'out' group has increased, one would expect to find an increased gap between employment, unemployment and participation rates between minority and majority groups.

Policy configurations and policy change are also likely to influence where the cost of recession falls. This applies to policies regarding income maintenance and labour markets, in relation to gender, age, nationality, disability, marital and family status.

One hypothesis is that those less dependent on the labour market and more reliant on welfare will experience less change in their economic circumstances during a labour market recession since they are already on a fixed income, at least to the extent that welfare benefits are maintained. This might include: people depending on fixed retirement incomes (pensioners) and people depending on social welfare (e.g. people with a disability who do not work).

Another policy-related hypothesis is that specific measures will impact certain groups more than others, and consequently we need to consider the nature of tax and social welfare changes. For example, cuts to Child Benefit may impact families with children. It is beyond the scope of this report to examine in detail how policy changes may have affected each group, but the next section (1.3) gives a broad overview of policy changes in Ireland.

1.3 Labour Market, Migration and Policy Context in Ireland: Boom to Bust

The period 1994 to 2007 was one of exceptional and sustained economic growth in Ireland. By 2007, Ireland's GNP per capita was among the highest in the European Union, having more than doubled over the previous twelve years (Nolan et al., 2014). Real median household incomes adjusted for household size increased by 116 per cent over the same period. The numbers employed almost doubled, from 1.2 million in 1994 to 2.1 million by 2007. Unemployment declined very rapidly, from 16 per cent in 1994 to around 4 per cent in the period 2000–2007. A key characteristic of the boom was the rise in female employment: the employment rate for women rose by 50 per cent – from 40 per cent in 1993 to 60 per cent in 2007. Inward migration also played an important part in the expansion of the workforce, first of returning Irish nationals, later non-Irish nationals from both EU and non-EU countries. Immigration from Eastern Europe increased rapidly following accession in 2004. Census data indicate that by 2006 around 10 per cent of the population was of non-Irish nationality. A key characteristic of the latter part of the economic boom was a property boom, which was associated with very high rates of (male) employment in construction, and a very rapid increase in levels of household debt.

The Irish economy went into crisis in 2008. The crisis was triggered by the global financial crisis and the bursting of the property bubble. This led to a banking crisis and subsequent

fiscal crisis for the state, as tax revenue plunged and the cost of guaranteeing the banks escalated, and culminated in the intervention of the IMF, European Central Bank and European Commission to 'bail out' the Irish economy. Private sector employers in Ireland have tended to respond to the crisis by cutting jobs, rather than wages or hours of work (e.g. Bergin et al., 2012), and job losses were particularly heavy in the early years of recession, especially in construction. Unemployment rose from 4 per cent in 2007 to 14.4 per cent in 2008.

Migration plays an important role in the Irish boom to bust story. While the boom was characterised by rapid immigration, soon after economic collapse, emigration rose rapidly, (McGinnity et al., 2013). Labour market statistics and poverty rates over the course of the recession are affected by emigration (Barry and Conroy, 2013; Duffy and Timoney, 2013). Moreover, rates of emigration were not evenly spread across the equality groups. A significant element of emigration consisted of non-Irish nationals, especially in the years following the crisis. In both 2008 and 2009, 73 per cent of emigrants were non-Irish nationals. Even as Irish emigration rose in 2011 and 2012, of the 87,100 people who emigrated in the year to April 2012, non Irish nationals accounted for 47 per cent. Among non-Irish nationals, the group most affected were new Member State (NMS) nationals. In 2008, 35 per cent of emigrants were NMS nationals, rising to 42 per cent in 2009. In 2009, approximately 30,000 NMS nationals left Ireland, while 20,000 came in (McGinnity et al., 2013).¹⁰

While a full profile of emigrants is not available, there is evidence that emigration is more common among men, younger age groups and non-Irish nationals. With regard to gender, pre-recession in 2007, 25,700 men and 20,600 women emigrated. By 2012 these numbers had risen steeply for both groups but the male–female differential was maintained: 48,900 men and 38,200 women were estimated to have emigrated (CSO, QNHS Population and Migration Estimates 2012). Using census data, Lunn (2013) suggests that there has been a greater gender difference in trends in net migration, that is the combination of immigration and emigration. He found that net inward migration among working-age men fell substantially, with those in their twenties becoming net emigrants, while net migration among women changed far less. Age differences in migration were also clear: among those who emigrated in the year up to April 2012, 86.5 per cent were in the 15 to 44 years age group (CSO, 2012). These underlying patterns of emigration mean that the figures on labour market participation, employment and unemployment will not reflect the full extent of the recession impact for the equality groups, in particular non-Irish nationals, younger people and men.

In the face of the fiscal crisis of the state, and the intervention of the IMF–EU–ECB 'Troika', the Irish government embarked on a severe austerity programme with the aim of reducing the gap between government revenue and expenditure, including changes in tax and welfare systems and cuts in the number and pay of public sector workers (O'Connell, 2013).

Prior to 2008 there was strong growth in public sector pay, with evidence suggesting that the public sector pay premium was at much higher levels in Ireland than elsewhere in Europe (O'Connell, 2013). The Government's immediate crisis response included pay cuts and a hiring moratorium (International Monetary Fund, 2012). A public sector pension levy, an effective wage cut, was imposed in March 2009. In January 2010, all public salaries were reduced with cuts ranging between 3 and 15 per cent, with typically – though not exclusively – higher cuts for higher incomes (O'Connell, 2013).

¹⁰ Figures quoted are taken from the Population and Migration estimates, which always quote figures to end April of the reference year.

In June 2010 the 'Croke Park Agreement' was introduced. The government agreement with public sector unions protected workers against layoffs and further wage cuts in exchange for a validation of the 2009–10 pay cuts and cooperation on an early retirement scheme in the public sector, redeployments and other efficiency measures (International Monetary Fund, 2012). In January 2011, a 10 per cent additional reduction in salaries was introduced for new entrants to the public sector. Other measures introduced included a unified public service pension scheme, and a €200,000 salary cap (International Monetary Fund, 2012). The successor to this agreement, the 'Haddington Road Agreement', came into force in June 2013 bringing about further public service pay cuts and changes to working conditions (see Russell et al. (2014) for further details).

All workers – and, indeed, those not in employment – were affected by other tax and social welfare changes (see also Nolan et al., 2014; Callan et al., 2012). Income taxes were held stable, but other methods were used to generate income for the government, including a 'Universal Social Charge' (USC), introduced in 2011. This was a new form of income tax – with a progressive structure with rates set at 2 per cent, 4 per cent and 7 per cent.

The income ceiling above which no further social insurance contributions were payable was first raised substantially, and then abolished in 2011. In 2011 the standard rate band of income tax was reduced. A flat-rate 'household charge' or property tax of €100 was introduced in 2011. This was the precursor to a full scale value-related property tax which came into force in mid-2013. Tax relief on pension contributions was also reduced. Indirect taxes, such as VAT were increased. The statutory minimum wage has been frozen at pre-crisis levels of €8.65. The earnings disregard for the One Parent Family Payment was reduced, which may act as a disincentive for lone parents to engage in low hours part-time work and also reduce income for the group who withdraw. Carer's allowance for carers under 65s was cut from the peak in 2009 (by circa 7 per cent).

On the social welfare side, income support rates were actually increased in Budget 2009. However, the Budgets of 2010 and 2011 then reduced the rates of support provided by most social welfare schemes applicable to those of working age although the payment in respect of child dependents was increased. Regarding children, in 2009 the Early Childcare Supplement, payable with respect to each child under 6 and worth approximately €1,000 per year per child, was abolished.¹¹ Since 2009 there have been successive cuts to the universal Child Benefit payment, amounting to an average cut of 16 per cent of payment with respect to the first and second child, and 27 per cent cut of payments with respect to the third child between 2009 and 2012.¹² Payments to young unemployed people were reduced very substantially. Rates of payment for old age pensions have remained unchanged to date (Keane et al., forthcoming).

While Budget 2012 involved greater proportionate losses for those on low incomes, Callan et al (2012) argue that overall austerity measures since 2008 show a different pattern. In general the combined impact of tax and welfare changes, including VAT and carbon tax, and public sector wage cuts in the period 2008–2012 have imposed greater losses on high income groups in the population. More recent analysis finds that the impact of Budget 2014 involved greater proportionate losses for those on low incomes. This report notes that for the period 2009–2014, the greatest changes were for those in the top decile (15.5 per cent), and

¹¹ The Early Child Care and Education scheme was introduced at this time (see McGinnity et al., 2013 for further details of this scheme).

¹² Payments to fourth and subsequent children were cut by 21 per cent in total between 2009 and 2012.

those in the lowest decile (12.5 per cent), though this is later than the period investigated in this report (Callan et al., 2013).¹³

In terms of services, cuts to public services were widespread (see NESC (2013) and Keane et al. (forthcoming) for further details). While payments to those with a disability have been cut somewhat since 2009 (by circa 7 per cent), more generally the period between 2004 and 2010 was a period of concerted policy attention paid to the issue of disability (Watson et al., 2013). The policy initiatives included the National Disability Strategy, launched in 2004, which sought to co-ordinate action across government departments and put in place a combination of equality legislation (Disability Act 2005; Education for Persons with Special Educational Needs Act 2004), the introduction of a personal advocacy service (through the Citizens Information Act 2007) and a multi-annual investment programme for disability support services.

As noted above, one feature of the Irish boom was very high levels of personal debt. Debt has continued to be an issue in the recession, particularly for low-income families (Russell et al., 2013a). Gerlach-Kristen (2013) highlights the role of housing debt in understanding the fall in income and consumption among younger households in Ireland. Despite a number of initiatives such as the code of conduct on mortgage arrears and the new Personal Insolvency Act in December 2012, the numbers of mortgage holders in arrears continues to be a persistent issue.

1.4 Previous Evidence

What has recent literature found about how groups have fared in the current recession? In the following we give a brief overview of previous and recent research, mostly focusing on Ireland, but drawing on international comparisons where relevant. In cases where the evidence is very close to the empirical analysis of this report and enhances the interpretation of findings in Chapters 2 and 3, it is referred to there.

1.4.1 Age

One of the key features of the current recession is the differential impact across age groups. Recent studies in Ireland have highlighted the labour market difficulties the recession has caused for young people. Kelly et al. (2013) estimated that total employment for those under 25 fell by over half between the end of 2007 and the end of 2011, resulting in very high unemployment rates (around 30 per cent at the end of 2011) and also rising inactivity rates.

Kelly et al. (2013) found that the rate of transition to employment for unemployed youths fell dramatically between 2006 and 2011. Overall, the results showed that the fall in unemployed youths' transition rate was not due to changes in the characteristics of the unemployed group but rather because the penalties attached to certain characteristics became stronger over time. For example, there was a rise in the marginal impact of education and Irish nationality on the probability of a successful transition from unemployment to employment. This finding is consistent with an emerging international pattern in which the importance of education to labour market outcomes has increased in the course of the recession, and the penalty for having low education has risen (Bell and Blanchflower, 2011).

Recession can lead to increasing volatility in the transition from education to work, which is associated not just with extended periods of unemployment and non-employment but also

¹³ This later report also includes a more comprehensive range of indirect taxes such as Deposit Interest Retention Tax (DIRT) and Capital Gains Tax, as well as changes to some tax reliefs (see Callan et al., 2013).

repeated spells of temporary employment. Difficulty entering employment among young people can lead to longer term 'scarring effects'. Some studies have found that unemployment in the early career leads to an increased risk of unemployment in the future, increases the likelihood of precarious employment and results in poorer health and well-being (Bell and Blanchflower, 2011; Clark et al., 2001; De Vreyer et al., 2000; Cockx and Picchio, 2013).¹⁴

Poor labour market conditions at labour market entry can also lead to a greater mis-match between young people's skills and qualifications and the jobs they enter. There is also evidence that being mismatched in their first employment can have longer term impacts on graduates' career prospects (Dolton and Siles, 2003; McGuinness and Sloane, 2011).

Comparing European countries using labour force survey data, Tahlin (2013) argues that young people (20–29) have been hardest hit everywhere but the difference relative to prime-age workers (30–54) is largest in high-unemployment countries like Ireland, Spain and Estonia. This is a point echoed by Bell and Blanchflower (2011) in their analysis of the change in unemployment rates between 2008 and late 2010 for those under 25 and older than 25.

Research on expenditure in Ireland has also found that younger households tend to fare worst in recession. Gerlach-Kristen (2013) draws on consumption data from the Household Budget Surveys (1994/5 to 2009/10) to show that there was a steady increase in the income levels and consumption levels of households headed by a person over age 44. However, for younger households, real disposable income decreased by 14 per cent and real consumption dropped 25 per cent between 2004/05 and 2009/10 (pp. 1–2). It is unusual for consumption to decline by more than income. Gerlach-Kristen attributes the drop in consumption among younger households to their greater exposure to credit constraints linked to unemployment, debt (typically mortgage debt) and negative equity.

In both Northern Ireland and the Republic of Ireland, the income effects of recession were somewhat cushioned for retired people because state pensions have not been cut (Hillyard et al., 2010; Callan et al., 2012).

1.4.2 Gender, Marital and Family Status

Gender differences in the impact of recession may be related to gender differences in both paid employment rates, differences in occupation or to differences in family or caring roles. The rise in female employment was a very marked feature of the economic boom (Russell et al., 2009). Employment rates have fallen for women but much more sharply for men, so the gender gap in employment fell in the early years of recession, particularly between 2007 and 2009. The convergence in employment rates between men and women in recession is perhaps best described as 'levelling down', as it is mostly accounted for by the fall in male employment rather than by an increase in female employment. This has also been found in other European countries (Bettio and Verashchagina, 2013).

Watson et al. (2012, pp. 25–26) examined how the pattern of working (full-time or part-time) changed for men and women living with partners between 2004 and 2010. There was a dramatic fall in male full-time employment after 2007 (from 80 per cent to 64 per cent by 2010) and a more modest increase in male part-time working (from 4 per cent in 2007 to 8 per cent in 2010). The male 'inactivity' rate (including unemployment and being outside the

¹⁴ De Vreyer et al., (2000) found entry into the labour market in a period of high unemployment increased future unemployment probabilities in France, Italy and to lesser extent in the Netherlands but not in the UK.

labour market) increased from 16 per cent in 2007 to 28 per cent in 2010. The changes for women were more evident for part-time than for full-time work. There was little change in female full-time working (34 per cent in 2007 and 35 per cent in 2010) but a sizeable fall in female part-time working (from 28 per cent in 2007 to 22 per cent in 2010). The female inactivity rate (which includes unemployment as well as being outside the labour market) was 37 per cent in 2007 and rose to 43 per cent in 2010.

As a result of these changes, there was a significant shift in the work pattern in couple households. If we think of the male breadwinner model as a couple where the man works full-time with the woman either not at work or working part-time, there was a sizeable decline in this model after the onset of the recession. This pattern accounted for 52 per cent of couples in 2004. By 2010, it had declined to 38 per cent of couple households. There was a substantial increase in the percentage of couples where neither partner works, from 9 per cent in 2004 to 15 per cent in 2010 (Watson et al., 2012). There was less change over time in the pattern where both partners worked full-time (29 per cent in 2004 and 26 per cent in 2010) (Watson et al., 2012, pp. 26–27).

1.4.3 Nationality and Disability

Barrett and Kelly (2012) found a higher rate of job loss among immigrants in Ireland than among native-born. The annual rate of job loss was close to 20 per cent for immigrants in 2009 compared with about 7 per cent for Irish-born. McGinnity et al. (2012b, 2013) found variations between national groups in terms of the labour market impact of recession, with particularly high unemployment rates among New Member State nationals, and low participation and high unemployment among African nationals. Unemployment rates among EU13 ('Old EU') nationals were lower and incomes higher than Irish nationals. By 2010, overall poverty rates were somewhat higher for non-Irish nationals than for Irish nationals; there was a much more marked difference in consistent poverty rates between Irish and non-EU nationals (McGinnity et al., 2013). There has been a dramatic drop in immigration flows since the peak in 2007, and a rapid rise in emigration of non-Irish nationals, particularly by New Member State nationals in the early part of the recession (McGinnity et al., 2013).

In the 2004 to 2010 period, working-age people with a disability experienced a reduction in discrimination and were less impacted by the recession in terms of labour market participation than those without a disability (Watson et al., 2013). Before the recession, people with a disability were most likely to experience discrimination (Russell et al., 2008) and had a much lower labour market participation rate than those without a disability (Watson et al., 2013). The percentage of people with a disability who reported discrimination dropped from 26 per cent to 19 per cent (Watson et al., 2013). Although they remained at higher risk of discrimination than those without a disability, the gap had narrowed. Rather than attributing this to the recession, however, the authors point to a number of important changes in the period, including the concerted policy attention paid to the issue of disability (Watson et al., 2013, pp. 2–3).

1.5 Analytic Strategy and Report Outline

What distinguishes this report from earlier work is the wide range of groups examined and the consideration of outcomes in terms of both labour market and living standards. Individual chapters present the data sources used – the Quarterly National Household Survey (QNHS) for labour market outcomes (Chapter 2) and the Survey of Income and Living Conditions (SILC) for poverty/deprivation (Chapter 3). In each chapter the groups were chosen to reflect the groups broadly covered by the equality legislation, where these are measured in the

survey data, and were defined consistently across chapters.¹⁵ As disability is not measured in the QNHS but is in the SILC the evidence is supplemented using findings from previous work on disability using special modules of the QNHS.

In order to present a clearer picture of change over time and reduce the amount of data presented, outcomes are compared for the groups at the peak/pre-recession period with the latest available data as the indicator of recession. The end of 2007 is taken as the labour market 'peak', with Q4 2012 for the latest available labour market data, 2011 for the poverty/deprivation data. This has the advantage of giving an up-to-date picture of the position of groups, though of course does not describe changes within the period. If there had been significant labour market recovery between 2010 and 2012, this strategy would be problematic, but there is no evidence of this (Duffy and Timoney, 2013). It should also be noted that while 2007 was certainly the labour market peak, for the most part social welfare benefits were maintained or even increased until 2009.

The main purpose of the report is to investigate differences between groups in a number of key outcomes in the boom and recession periods and whether these differences have changed over time. We do this using statistical modelling. The purpose of statistical models is to identify the characteristics that were important in accounting for outcomes like unemployment and poverty, particularly when several characteristics of the individuals tend to be interrelated. For instance, we know that non-Irish nationals are likely to be younger, on average, than Irish nationals. When we find that non-Irish nationals are more likely to participate in the labour market than Irish nationals, we would like to be able to comment separately on the effects of nationality and age. The statistical model allows us to do this. This kind of 'what if' analysis is based on a multivariate probit model run in STATA on the weighted data with standard errors adjusted for sample weighting.

To make the group differences detected in the models more accessible, the model results are presented as charts. These charts show, for example, the expected level of unemployment (for instance) among Irish nationals and non-Irish nationals if both groups had the same age distribution as the entire population. The methodology for calculating the expected level of outcomes is described in more detail in the Methodological Appendix. The interested reader can refer to the full model results presented in the chapter appendices. In some cases the group differences in outcomes before modelling are also presented in the text, but for the most part these are also presented in the chapter appendices, to simplify the presentation in the chapters.

Statistical modelling requires that we select one category as a reference or comparison group, with which all others are compared. In general this reference group is chosen to be the majority and/or (potentially) advantaged category for each ground – men for gender differences; 'prime age' (aged 35–44) for age differences; married and childless for marital/family status; Irish for nationality, and those without a disability for disability. Education level and region are also used as control variables, to account for changes in the composition of the groups which may affect outcomes.¹⁶ The charts also indicate whether the differences between each category and the reference category are statistically significant in 2007, indicated by a * symbol.

As a final step we also test whether these net group differences in outcomes have changed between the two periods, i.e. has the gap widened or narrowed. There may be large

¹⁵ These surveys do not include information on sexual orientation, religion or membership of the Traveller community.

¹⁶ Social class of origin (parents' social class) would be an excellent indicator of background which would explain group differences, but this is not captured in the data used.

differences between groups in both periods, but if the extent of this difference does not change, then the change will not be statistically significant. If the change over time is significantly different from the change over time for the reference category, this is indicated in the charts by a Δ symbol. That said, we also discuss the situation where one group has high rates of disadvantage in both years: their position may not have deteriorated more than the reference or comparison group in the recession, but this group was highly disadvantaged in both years. Note that the data sources used are both high-quality and representative of the population, but they do differ substantially in terms of the sample size. The smaller sample size of the SILC limits what we can say about group differences compared with the QNHS.

There are many alternative indicators, both objective (e.g. consumption, household debt, health, mortality rates) and subjective (e.g. life satisfaction, work–family conflict, psychological distress, depression) that have not been addressed here but which are also influenced by economic crisis (see Russell et al., 2013b; McGinnity and Russell, 2013; Walsh 2011; Gerlach-Kristen, 2013; NESC, 2013). The outcomes that are considered are fundamental to and closely linked to quality of life. In addition, readers should note that the measures of financial well-being used – income poverty and deprivation – focus on low income and deprivation, rather than inequalities across the income distribution.

Chapter 4, the conclusion, summarises the findings for the labour market and for poverty and deprivation for each equality ground and reflects on policy implications. The depth and rapidity of the recession has had a serious impact on many facets of Irish life. This report considers which groups have lost most for the outcomes considered.

2 LABOUR MARKET OUTCOMES

2.1 Introduction

The recent global recession has had a major impact on the labour markets of those economies that have been worst affected by the downturn. Ireland is one such country where real GDP fell by 10 per cent between 2008 to 2010 (Barrett and McGuinness, 2012). The labour market consequences from this steep fall in economic activity have been severe: the country's overall unemployment rate increased from 4.4 per cent in 2006 to 14.7 per cent in 2012 (CSO, 2013) and the numbers employed fell by 14 per cent.

Yet the labour market impacts of the recession have not fallen evenly across the population. In this chapter we consider how exposure to employment and unemployment risks vary across six of the equality grounds, namely age, gender, family status, marital status, nationality and disability.¹⁷ Regularly collected labour market statistics do not include information on sexual orientation, religion or membership of the Traveller community.

As outlined in Chapter 1, vulnerability during a recession is influenced by a range of factors at both the individual and structural level. A number of equality groups face greater labour market risks by virtue of being entrants or re-entrants. This includes young people searching for their first job, migrants entering the Irish labour market and women re-entering employment following a period of full-time caring. Lack of recruitment in both the private and public sectors means that such individuals spend an increasingly long period of time in unemployment or inactivity, settle for poor quality jobs or jobs that are a poor match for their skills, or withdraw from the labour market (Cho and Newhouse, 2011). Recent entrants also face a greater risk from 'last in first out policies', and the lower security that comes with shorter tenure and lack of job experience.

Individual characteristics can also increase vulnerability due to employer discrimination. During a recession, when there are a high number of surplus workers/applicants, employers have a greater opportunity to exercise taste-based preferences and statistical discrimination to the detriment of 'outsider' groups. In Ireland, the tight labour market during the boom period led to strong increases in employment among women, especially mothers (Russell et al., 2009), people with disabilities (Watson et al., 2013) and migrant workers (Barrett and McCarthy, 2007). There is already some evidence that migrant groups in Ireland faced a greater unemployment risk during the recent recession (Barrett and Kelly, 2012).

In addition, theories of segmentation highlight that individual characteristics can mark certain groups out for poorer treatment because of perceptions of their dispensability and lack of suitability for core jobs; however, institutional characteristics, such as lack of trade union organisation, are also seen to play a role.

At a structural level, the key issue is the extent to which minority groups are located in sectors, occupations and organisations that are more vulnerable to the recession. This issue is addressed in Section 2.3, which examines the sectoral distribution of employment across the equality grounds before the recession.

In this chapter, we focus on two main labour market outcomes – employment and unemployment – and examine how these outcomes have changed across the equality grounds pre and post the recent recession. Have some groups fared worse since the

¹⁷ Disability status is not contained in the QNHS datafile; therefore, we draw on previous research carried out by Watson et al. (2013).

economic downturn? Have the differences between the disadvantaged and advantaged groups widened over time or have they narrowed due to a levelling downwards of conditions/opportunities? Alternatively, have pre-recession patterns been preserved despite the economic crisis? Only those who are active in the labour market can be exposed to employment and unemployment; therefore, in Section 2.4 we discuss patterns of labour market participation. Before presenting the results, we next describe the data and methodology applied (Section 2.2).

2.2 Data and Methodology

The data used in this chapter come from the Quarterly National Household Survey (QNHS) longitudinal data file, which is compiled by the Central Statistics Office (CSO).¹⁸ The main objective of the QNHS is to provide quarterly data on labour market indicators, such as employment and unemployment. The survey is continuous and targets all private households: 3,000 households are interviewed per week, with the total sample for each quarter being approximately 39,000. Households participate in the survey for five consecutive quarters. In each quarter, one-fifth of the households surveyed are replaced and the QNHS sample involves an overlap of 80 per cent between consecutive quarters and 20 per cent between the same quarters in consecutive years. Participation in the QNHS is voluntary; however, the response rate is high (approximately 85 per cent in recent years).¹⁹

For this chapter, data from Quarter 4 (Q4) of the 2007 and 2012 QNHS were used, with the sample consisting of all individuals aged between 15 and 64. This gave us a sample of 52,438 individuals for 2007 and 36,853 for 2012; however, the data was grossed-up to ensure that it was representative of the population in Ireland in Q4 2007 and 2012 respectively.²⁰ In this chapter we refer to different groups of EU countries: EU13 refers to the 'older' Member States (prior to enlargement in 2004) excluding Ireland and the UK,²¹ while New Member State (NMS) refers to the ten Member States that joined the EU in 2004, plus Bulgaria and Romania, which joined in 2007.²²

As well as including information on a person's economic status, the QNHS also contains information relevant for five of the equality grounds, i.e. gender, age, nationality, marital status and family status.²³ The distribution of the weighted sample across these groups is shown in Table 2.1. Further socio-demographic information including educational attainment and geographic location is also used in the analyses as well as labour market information. The QNHS includes two measures of a person's economic status: the International Labour Organisation (ILO) measure, which is the official measure that is used in the published QNHS report to identify the numbers in employment, unemployment and inactivity, and a self-defined Principal Economic Status (PES) measure. For the purposes of the work

¹⁸ The CSO is Ireland's national state statistical collection organisation.

¹⁹ Information provided by the CSO.

²⁰ This reflects the fall in the sample size of the QNHS. In Q4 2007 the total sample size was 78,528; in Q4 2012 the total sample size was 57,879.

²¹ EU13: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden.

²² New Member States: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

²³ Children are defined as children under 18 living in the household. If respondents have adult children, or children who are not living in the household, these do not count as children.

undertaken in this chapter, the official ILO measure was used to define the employed, unemployed and labour market participant samples used in our analyses.²⁴

Table 2.1 Equality Groups – Measurement in QNHS Data and Group Size

		2007 (Q4)	2012 (Q4)
		%	%
Gender	Male	50.4	49.6
	Female	49.6	50.4
Age Group	15–19	9.6	9.1
	20–24	12.2	8.9
	25–34	25.2	23.8
	35–44	21.4	23.2
	45–54	17.7	19.5
	55–64	14.0	15.5
Nationality:	Irish	84.8	85.2
	Non-Irish	15.2	14.8
Marital/Family Status:	Never married, no children	36.6	32.1
	Formerly married, no children	3.1	3.1
	Never married, lone parent	2.7	3.6
	Formerly married, lone parent	2.7	2.9
	Cohabiting, no children	4.9	4.6
	Cohabiting, children (under 18)	3.6	5.2
	Married, no children	11.6	11.8
	Married, children (under 18)	34.9	36.8
Total		100.0	100.0
N		52,438	36,853

Source: QNHS microdata, 2007 and 2012 (base = all persons aged 15 to 64 years).

In terms of methodology, we began by estimating separate binary probit models to identify the characteristics associated with i) participation in the labour market, ii) employment and iii) unemployment in both Q4 2007, our pre-recession time point, and Q4 2012, which was when Ireland had begun to record modest economic growth. The participation model includes all individuals of working age (15–64 years). The dependent variable is given a value of 1 if the person is either employed or unemployed and 0 if they are economically inactive. The dependent variable for our employment model was set to 1 if the respondent was employed and 0 for the rest of the working age population (including the inactive population), while the dependent variable for our unemployment model was set to 1 if the respondent was unemployed and 0 if he or she was employed. The unemployment model is estimated only for those participating in the labour market, following convention. In interpreting the unemployment model we also take account of differences in participation for certain groups, where relevant.

²⁴ The ILO regards an individual as being in employment if he/she worked in the week before the survey for one hour or more for payment or profit, and includes all persons who had a job but were not at work in the week before because of illness, holidays, etc. An individual is defined as unemployed if, in the week before the survey, he or she was without work but was available for work and had taken specific steps in the preceding four weeks to find work (i.e. was looking for a job). Labour market participants include those who are unemployed or employed on these definitions. Those who have not worked for at least one hour and who have not been actively seeking work are defined as non-participants or 'economically inactive'.

The equality grounds investigated were gender, age, nationality, family status and marital status. Disability could not be included in the models as this information is absent from the regular QNHS; however, we make reference to previous research that was carried out on disability in the Irish labour market by Watson et al. (2013). As indicated above, we could not examine the three remaining equality grounds – sexual orientation, religion and membership of the Traveller community, as membership of these groups is not recorded in the QNHS. We also controlled for educational attainment and geographic location in our models. After these initial binary probit analyses, we ran a series of probit models where we included year interaction terms to test for significant differences in the coefficients between the pre recessionary (Q4 2007) and the economic recovery (Q4 2012) time points. As discussed in Section 1.5, the charts present the expected or model-estimated level of participation, employment and unemployment, once other factors have been accounted for (see Methodological Appendix for how this was conducted). The charts also indicate, using symbols, both whether the difference between groups is statistically significant in 2007 (* symbol) and whether the change over time is significantly different from the change for the reference group (Δ symbol). The focus is on the model-estimated results, as discussed in Section 1.5. The descriptive results for employment and unemployment for different groups are presented in the appendix to this chapter (in Figures A2.1, A2.2 and A2.3).

2.3 Sectoral Location Across Equality Grounds

The recession in Ireland, as elsewhere in Europe, has had a strong sectoral dimension. The property bubble led to a disproportionate share of (male) employment becoming concentrated in the construction sector, and its subsequent collapse led to a sharp drop in employment in that sector. More than 162,000 construction jobs were lost between 2007 and 2012 (see Table 2.2). Manufacturing and agriculture were also hard hit by the recession, as were sectors driven by domestic demand, such as wholesale and retail, and accommodation and food, which were affected by the fall in household income and consumer spending. Organisations providing administrative and support services also experienced a strong contraction (22 per cent). Employment in the public sector dominated. The health sector continued to grow, and employment in education increased from 2007 to 2009, and then saw a smaller than average decline between 2009 and 2012. Employment in public administration and defence declined by 8 per cent over the period 2007 to 2012: as with the health and education sectors, this change was concentrated in the 2009 to 2012 time period.

These sectoral patterns of employment loss are important as the members of the equality groups are not randomly distributed across these sectors, leading to greater exposure for some groups and protection for others. In Table 2.3 we present the sectoral distribution for three equality grounds – gender, age and nationality – pre-recession in 2007.

In terms of gender, it is clear that immediately prior to the recession that men were over-represented in three sectors with a high subsequent level of job loss: agriculture, manufacturing and, in particular, construction. Women, on the other hand, were over-represented in wholesale and retail and in accommodation and food. These two sectors also experienced steep falls in employment, but this was counter-balanced by females' greater concentration in health and in education, two sectors that continued to grow for much of the recessionary period as the sectors were not exposed to competitive conditions.

Table 2.2 Employment by Sector (NACE revised), 2007 and 2012

	2007	2012	Change 2007–2012	% Change 2007–2012
Agriculture	114,285	89,999	–24,286	–21.3%
Manufacturing	285,411	237,182	–48,229	–16.9%
Construction	266,174	103,212	–162,962	–61.2%
Wholesale & retail	316,797	273,394	–43,403	–13.7%
Transport	97,997	88,956	–9,041	–9.2%
Accommodation & food	132,186	118,263	–13,923	–10.5%
Information & communication	70,746	83,173	12,427	17.6%
Financial services	105,434	102,796	–2,638	–2.5%
Professional, scientific & technical	114,568	102,225	–12,343	–10.8%
Administrative & support	81,478	63,233	–18,245	–22.4%
Public administration & defence	104,548	95,975	–8,573	–8.2%
Education	141,496	145,310	3,814	2.7%
Health & social work	222,111	245,696	23,585	10.6%
Arts & other services	95,515	96,241	726	0.8%
All	2,148,746	1,845,655	–303,091	–14.1%

Source: Constructed using QNHS microdata Q4 2007 and Q4 2012.

Note: Analysis based on all employed aged 15 and over.

Table 2.3 Pre-Recession Sectoral Distribution of Employment by Gender, Age and Nationality, 2007

	Men	Women	15–24 years	25–34 years	35–54 years	55–64 years	Non- Irish	Irish	All
Agriculture	7.1	1.2	1.8	2.1	5.6	11.0	1.8	5.1	4.5
Manufacturing	17.4	8.4	9.8	14.5	14.5	12.0	15.0	13.2	13.5
Construction	21.2	1.5	17.3	13.6	10.7	10.5	14.0	12.3	12.6
Wholesale & retail	13.0	17.2	25.9	14.4	12.0	11.6	16.9	14.5	14.9
Transport	6.7	1.9	2.0	3.6	5.5	7.0	3.8	4.7	4.6
Accommodation & food	4.5	8.4	11.5	7.0	4.4	3.8	14.2	4.7	6.2
Information & communication	4.1	2.3	2.5	4.3	3.4	1.5	4.2	3.2	3.3
Financial services	3.6	6.7	4.9	6.6	4.4	3.0	3.0	5.4	5.0
Profess, scientific & technical	5.4	5.3	4.2	6.7	5.2	4.0	3.6	5.7	5.3
Administrative & support	3.4	4.3	3.8	4.1	3.6	3.8	6.1	3.4	3.8
Public administration & defence	4.4	5.7	1.7	3.8	6.8	5.3	.5	5.8	4.9
Education	3.1	11.2	3.3	5.9	8.0	7.8	2.9	7.3	6.6
Health & social work	3.1	19.7	5.2	9.3	12.0	13.9	9.4	10.6	10.4
Arts & other services	2.8	6.4	6.0	4.1	3.9	4.7	4.6	4.3	4.4
All	100	100	100	100	100	100	100	100	100

Source: Constructed using QNHS microdata Q4 2007 and Q4 2012.

Note: Analysis based on all employed aged 15 to 64 years.

Young people also had a high level of exposure to the declining construction sector: in 2007, construction accounted for 17 per cent of employment among the under 25s, and for almost one-third of employment for young men aged under 25 years. Young people were also more highly concentrated in the wholesale and retail sector (26 per cent). In this case, it was predominantly young women making up the employment numbers in this sector, with 32 per cent of women aged under 25 years employed in wholesale and retail. Relative to young people, older workers aged 55 to 64 years were less exposed to the job losses in the construction sector. Nevertheless, over 30 per cent of this older age group were employed in three sectors that experienced large job losses over the recession – agriculture, manufacturing and construction. Older workers were also somewhat over-represented in the public sector, particularly in health and in education, which were two sectors that had smaller or no employment losses between 2007 and 2012.

Compared with natives, non-Irish nationals faced a slightly greater threat from job losses in the construction, the manufacturing, and the wholesale and retail sectors, but they were particularly exposed to job losses in the accommodation and food sector, which accounted for 14 per cent of their employment compared with 5 per cent of natives. The differences in sectoral location by nationality are less pronounced than those for gender and age groups,

which suggests that sectoral segregation is likely to play a greater role in the employment and unemployment experiences of the latter two groups.²⁵

In the models of employment and unemployment that follow, it is not feasible to control for sector of employment because in the employment model such information is only observed for those in employment, while previous sector of employment is poorly observed for the unemployed and inactive groups. Given this, the sectoral distribution of jobs in 2007 is considered as part of the explanation of the patterns observed in the models.

2.4 Labour Market Participation

Employment and unemployment rates are key indicators of labour market outcomes; however, in order to be exposed to unemployment or employment one must first be participating in the labour market. Patterns of participation in the labour market are also influenced by the economic cycle and form an important part of the total picture. As a background for interpreting the models of employment and unemployment in the following sections, we analyse labour market participation across the equality groups.

Non-participation in the labour market (or 'inactivity') can take a variety of forms. Young people may postpone entry to labour market through extended participation in education and training. Others become 'discouraged', give up on active job search and become economically inactive (in labour market terms) even though they are still available for work. A blurring of the boundary between unemployment and inactivity may also occur among those involved in unpaid caring and those with disabilities, who are deterred from (re)entering the job market in periods of high unemployment.

Within the wider group of the inactive, there has been a particular policy focus on young people defined as NEETS – 'not in employment, education or training'. Across the EU27, the NEET rate for men aged under 30 rose from 10.2 per cent in 2007 to 13.4 per cent in 2011, while for women the rate grew from 16.3 to 17.3 per cent (Plantenga et al., 2013). The specific NEET rates for Ireland, for those aged 15 to 19 and 20 to 24, are discussed below.

Figure 2.1 presents the trends in labour market participation in 2007 and 2012 for the equality groups. We can see from this chart that men have higher participation rates than women in both 2007 and 2012. Prior to the economic crisis, female participation was on a long upward trajectory from the early 1990s (Russell et al., 2009) but the recession put a halt to this growth. Between 2007 and 2012 participation rates fell at a faster rate for men than women resulting in a downward levelling in terms of the gender gap in participation rates (this is confirmed in a model controlling for other characteristics – see Table A2.2 in the appendix to this chapter).

Labour market participation is also strongly patterned by age. The youngest age groups have the lowest participation rates and also display the sharpest drops in activity over the crisis period. Participation among those aged 15 to 19 fell from 27 per cent in 2007 to 16 per cent in 2012. Those aged 20 to 24 also recorded a drop in activity rates of 14 percentage points in a 5-year period. Modelled results (Table A2.2) confirm the greater decline in

²⁵ We present sectoral distribution by marital/family status in Table A2.1 in the appendix to this chapter. The patterns observed here are likely to be associated with the gender and age profile of those in different family/marital categories. For example, lone parents are predominantly female which will at least partly account for their over-representation in retail and in health & social work, although they appear even more concentrated in these areas than women in general.

participation among the under-25 age group and also for those aged 45 to 54 years compared with the 35–44 year reference group.²⁶

Given the reduced employment opportunities that arise during a recession, young people often choose to remain on in education. Therefore we need to consider whether the fall in labour market participation rates among young people translated into increased participation in education and training. The NEET rates would suggest that this process has occurred for the 15- to 19-year age group, whose NEET rate remained stable at 5 per cent between 2007 and 2012 despite the steep drop in labour market participation. However, this has not been the case for those aged 20 to 24 whose NEET rate has almost doubled from 12 per cent in 2007 to 23 per cent in 2012.²⁷ These NEET figures suggest that problematic non-labour market participation is a greater concern for the 20 to 24 age group.

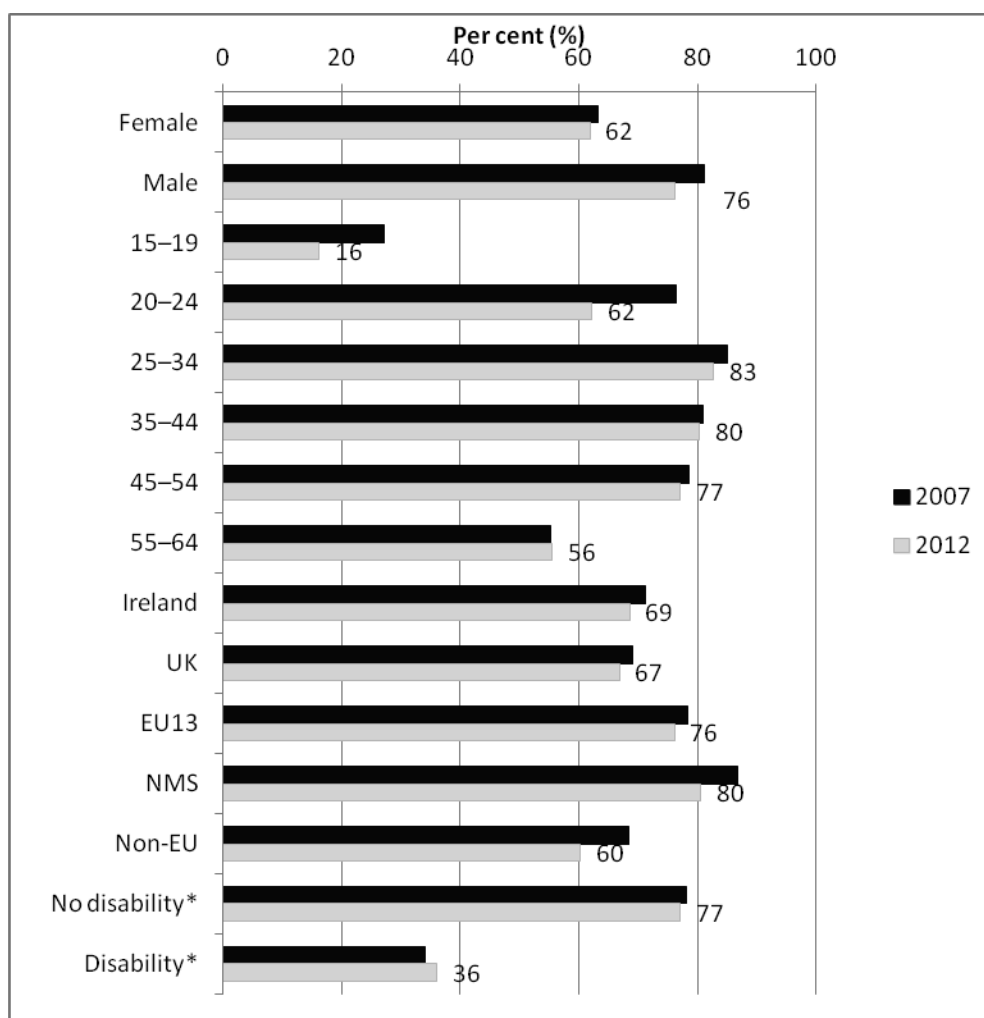
In 2007, modelled participation rates show that participation was lower for women than men in all age groups. Gender difference in participation were widest in the under-25 age groups and the oldest age group, both in terms of the absolute difference in rates and the ratio of male to female rates (see Figure 2.2). Despite the significant falls in participation over time, this pattern of gender difference by age was maintained in 2012. Male to female participation ratios among the youngest age groups were identical in 2012 and 2007 though the absolute gap had narrowed.

In terms of participation among nationality groups, in 2007 individuals from the New Member States (NMS) had the highest participation rate, while the non-EU group had the lowest participation rate (see Figure 2.1). Further analyses, which controlled for age, education and other compositional difference between groups, confirmed from those the NMS have a significantly higher participation rate than Irish nationals, that those from the EU13 have the same participation rates and all other non-Irish nationality groups have lower participation rates (see Table A2.2 in the appendix to this chapter).

²⁶ This negative year effect for the 45–54 age group becomes non-significant when the 3-way interactions are added to the model, but the model shows there is no gender difference in this effect. The only significant 3-way interaction between age, gender and year is that women in the 24–34 age group fare somewhat better over time than men in that age group (results available on request from the authors)

²⁷ NEET figures based on Q4 2007 and Q4 2012 QNHS data.

Figure 2.1 Labour Market Participation for Equality Groups in 2007 and 2012



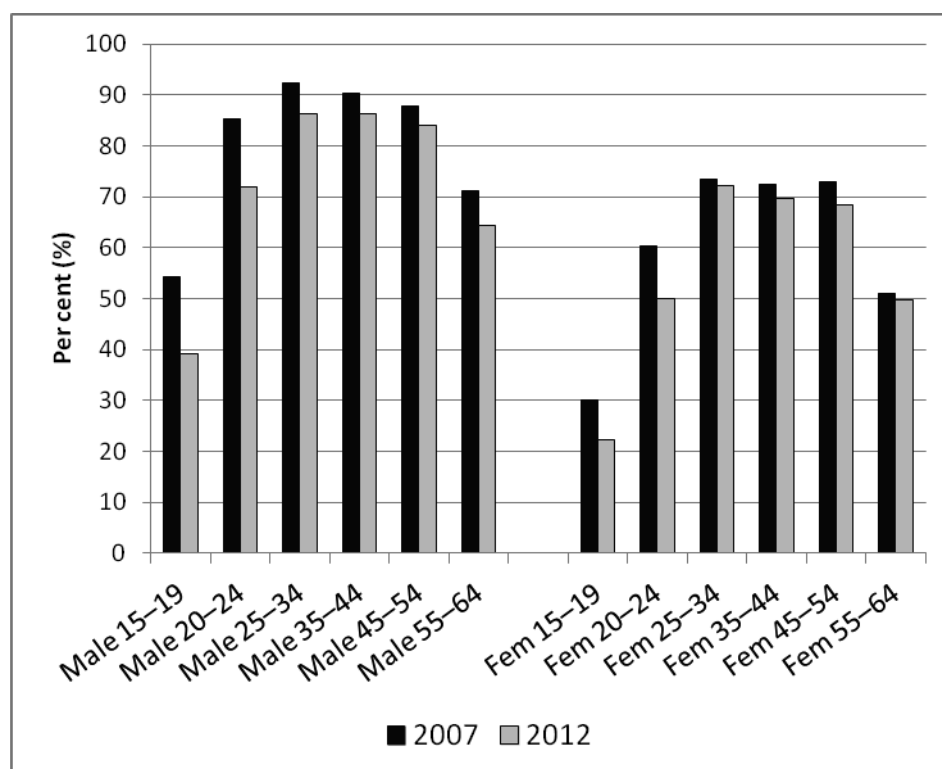
Source: Constructed using QNHS microdata Q4 2007 and Q4 2012.

Notes: Ages 15–64 years. EU13 is the old EU15 excluding Ireland and the UK.

* The figures on disability refer to the years 2004 and 2010 (source: Watson et al. (2013), p. 18).

During the recession those from NMS and Asia recorded a greater decline in participation rates than Irish nationals. This brought activity rates for NMS closer to the Irish average but for the Asian group it led to a widening gap compared with Irish nationals. African nationals experienced a smaller decline in participation than Irish nationals between 2007 and 2012 leading to a narrowing participation gap (Table A2.2).

Figure 2.2 Modelled Participation Rates for Men and Women, 2007 and 2012



Source: QNHS Microdata, Q4 2007 and Q4 2012.

Notes: Model includes controls for family and marital status, nationality, education, region and interactions between these variables and year. It also includes 3-way interactions between gender, age and year. Models with 2-way interactions are included in Table A2.2 in the appendix to this chapter. Models incorporating 3-way interactions are available from the authors on request. Total N of cases unweighted = 87,140.

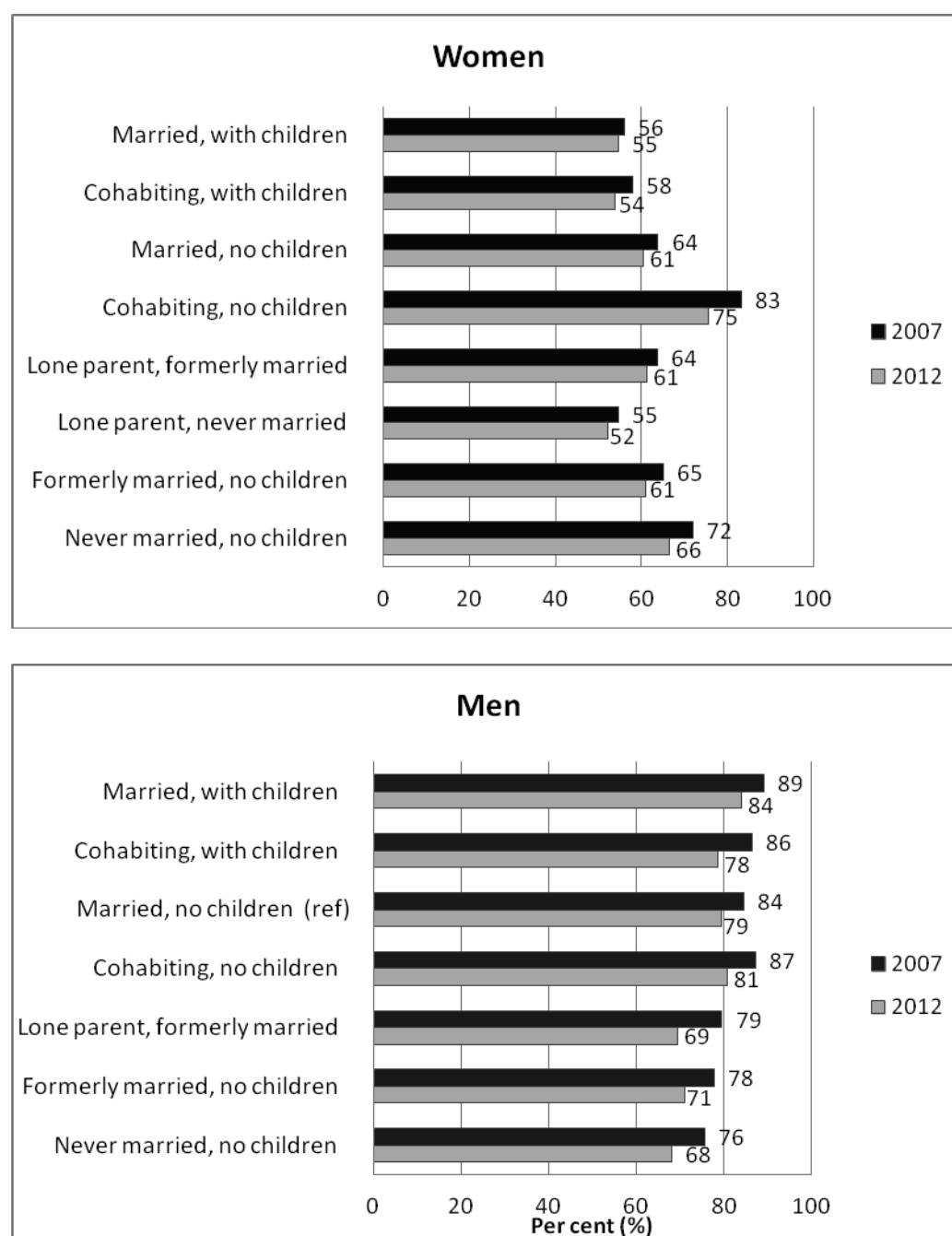
Information on disability is only available for 2004 and 2010; therefore the earlier figure does not contain the full extent of employment expansion during the boom period. In 2004, 34 per cent of people with a disability were participating in the labour market compared with 78 per cent of those without a disability. By 2010, there has been an increase in participation for those with a disability up to 36 per cent while participation for the rest of the population had fallen to by 1 percentage point to 77 per cent. This rise in participation for people with a disability may well have occurred in the last years of the boom period, i.e. pre 2008. There were some important gender differences among people with a disability: the labour market participation rate for men with a disability increased slightly between 2004 and 2010 while the participation rate for women with a disability fell slightly (Watson et al., 2013). As the information on disability is not included in the datasets we cannot add it to the models.

Next we compare labour market participation rates by marital and family status. Given the close association with gender these are presented separately for women and men. Historically, female participation was strongly associated with marital status, with social norms and policies such as the marriage bar, which operated in the public sector until 1973, and joint taxation discouraging employment among married women (Callan et al., 2009; Fahey et al., 2000). However, between the mid 1980s and mid 1990s family status replaced marital status as the crucial factor influencing women's labour market behaviour (Fahey and FitzGerald, 1997). Again, both attitudinal factors and institutional factors, such as availability and affordability of childcare, leave schemes and flexible working arrangements have influenced participation rates among mothers. While activity rates among women with young children increased significantly over the period of the economic boom, there nevertheless

remained significant differences in participation according to the age and number of children (Russell et al., 2009). Previous research suggests that the relationship between lone parenthood and activity is complicated by educational differences, age of children and the prevalence of state supported employment among lone parents (Russell et al., 2009).

Patterns of participation by marital and family status differ for men and women. In 2007, controlling for age, education, nationality and region, rates of participation for men were highest among married with children, followed by those cohabiting, with and without children, lowest rates of participation occurred among the never married without children and lone fathers (see Figure 2.3). In contrast, for women those married or cohabiting with children had the lowest participation rates along with never married lone mothers. Interestingly, previously married lone parents had higher participation rates than married mothers when other characteristics are controlled. This highlights the difference between formerly married lone parents and never married lone parents, and would be an interesting topic for further investigation. The highest activity rates are recorded among cohabiting women without children.

Figure 2.3 Modelled Labour Market Participation Rates by Marital and Family Status, 2007 and 2012



Source: QNHS microdata Q4 2007 and Q4 2012, ages 15 to 64 years.

Notes: Results are estimated from a model containing controls for age, nationality, marital/family status, education and region, interactions for all variables with year, interactions between gender and marital/family status and a 3-way interaction between gender, marital/family status and year.

Model including all year interactions is presented in Table A2.2 in the appendix to this chapter. Model including additional gender and 3-way interactions available on request from the authors. Estimates for never married lone fathers have been omitted because of small numbers. Total N of cases unweighted = 87,140.

Focusing on change over time, we found that those cohabiting without children and those never married without children experienced a greater decline in participation compared with the married without children reference group (see Table A2.2). As the models already control for age it is possible that there are additional social background differences between these

groups that are not captured by education. Research by Lunn et al (2009) shows that marriage is socially selective: those from higher social class backgrounds are more likely to enter marital unions. Lone mothers experienced a similar fall in participation to married women without children, while never married lone fathers fared worse over the recession. There are much fewer lone fathers than lone mothers; therefore it is likely that this is a more selective group for men. There was a gender difference in the experience of those married with children over the recession; men in this group experienced the same fall in participation as married men without children, while women in this category fared better than married women without children (see Figure 2.3).

2.5 Employment

The overall employment level fell considerably during the recent recession: between 2007 and 2012, employment fell by over 307,100 persons. As demonstrated above, some sectors were more adversely affected by the economic crisis, and this in turn affected some groups of the population more than others. Across Europe men, the young, migrants, the low-skilled and those with a short-term contract have been most affected by the economic downturn and the rise in unemployment (European Commission, 2010).

In this section, we present net estimated employment rates for the equality groups in 2007 and 2012.²⁸ In particular, we used probit analysis to separate the effects of membership of the different equality groups (e.g., male, female, etc.) on employment outcomes in both 2007 and 2012 controlling for other characteristics that can impact on a person's likelihood of being employed, specifically educational attainment, region and the other equality grounds, gender, nationality, marital and family status. (In Section 2.6 we use it for unemployment.) We also ran interaction models to test whether there has been a significant change in employment (and unemployment) outcomes over time. The final probit models for each analysis are shown in the appendix to this chapter.²⁹

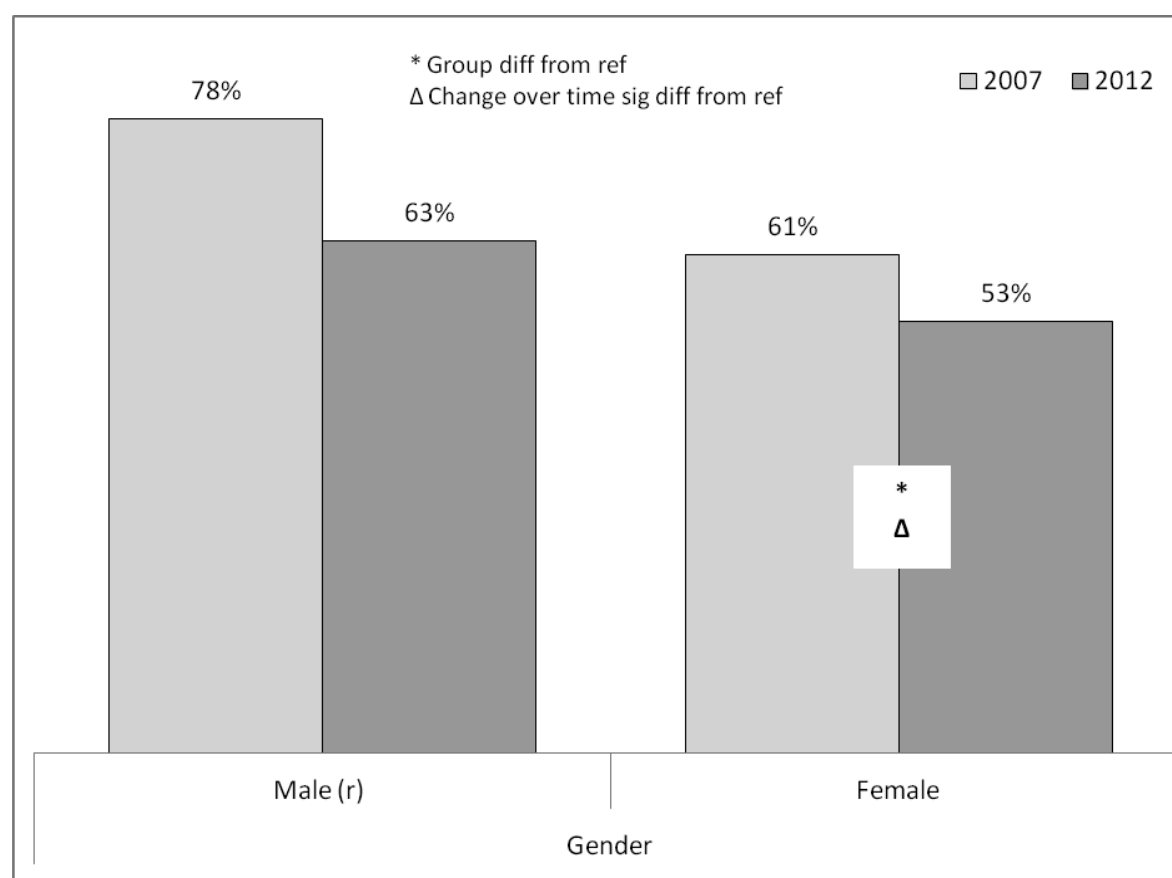
2.5.1 Employment by Gender

Figure 2.4 shows the estimated employment rates for males and females in both 2007 and 2012. Compared with males, females have a significantly lower employment rate in 2007: 63 per cent compared with 78 per cent for males. Somewhat unsurprisingly, employment rates for both men and women fell during the recession. However, the male employment rate fell by a bigger percentage such that the female employment disadvantage decreased significantly over time. Thus, the gap in the employment rates between males and females has narrowed since the recession. As discussed above, sectoral declines in employment are likely to play a role in this gender employment pattern. Specifically, construction and manufacturing were particularly badly hit by recession which predominantly affected male workers. For further discussion of male and female labour market trends see Russell et al. (2014).

²⁸ Gross employment rates are presented in Figure A2.1 in the appendix to this chapter.

²⁹ The models are run in STATA, using weighted data, with robust standard errors, using the 'svy' routine.

Figure 2.4 Estimated Employment Rates by Gender, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012

Notes: (Base = all persons aged 15–64); analysis by authors. See Table A2.3 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Total N of cases unweighted = 87,140.

(r) indicates reference category;

* indicates that the group differs significantly from the reference category in the model-estimated figures;

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

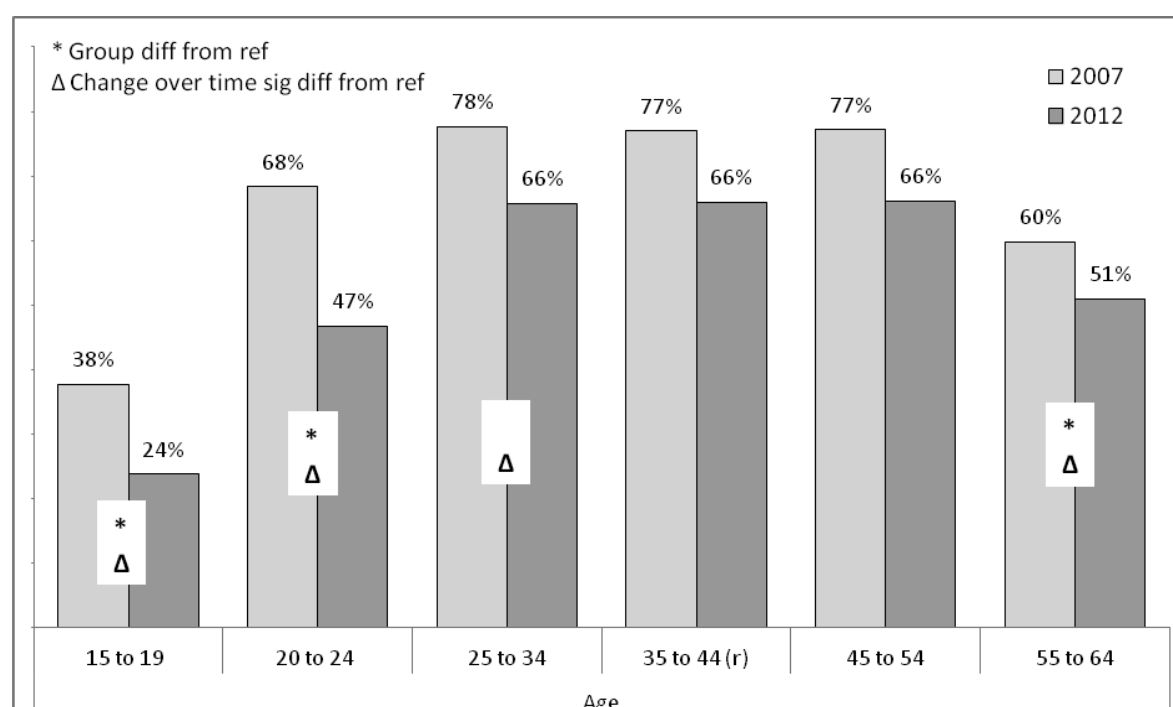
2.5.2 Employment by Age Group

Figure 2.5 presents the model estimated employment rates by age group controlling for other factors. The two youngest age categories – aged 15 to 19 and aged 20 to 24 had significantly lower employment rates compared with those aged 35 to 44 in 2007. Although all age groups experienced a drop in their employment rate between 2007 and 2012, the negative impact of being young (i.e., aged 15 to 24) on being employed compared with a prime-aged individual aged between 35 and 44 increased over the recession. Those aged 15 to 19 experienced a 14 percentage point fall in their employment rate over the period, while those aged 20 to 24 experienced a 21 percentage point drop. New entrants to the labour market are most affected by job shortages, which would relate to people in this age group – both male and female (Rubery, 2013). Moreover, these cohorts are exiting education into a very unstable labour market with little or no experience. Kelly and McGuinness found that the rate of transition to employment for both prime-aged (aged 25 to 54) and ‘NEET’ individuals (aged 15 to 24) fell dramatically over the recession (Kelly and McGuinness, 2013). The majority of the 15 to 24 age group are still in education (OECD,

2011); therefore those who have left will be lower educated and are mostly a disadvantaged group.

In 2007, those aged 55 to 64 were also less likely to be employed compared with those aged 35 to 44; however, the gap between these two groups' employment rates decreased over the recession. We know that participation rates for this older group have been maintained over this period. Furthermore, previous research has shown that workers aged 50 and older are less likely than younger workers to lose their jobs, but it takes them longer to find work when they become unemployed in a recession (Johnson and Park, 2011).

Figure 2.5 Estimated Employment Rates by Age Groups, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = all persons aged 15 to 64 years. Analysis by authors. See Table A2.3 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category;

* indicates that the group differs significantly from the reference category in the model-estimated figures;

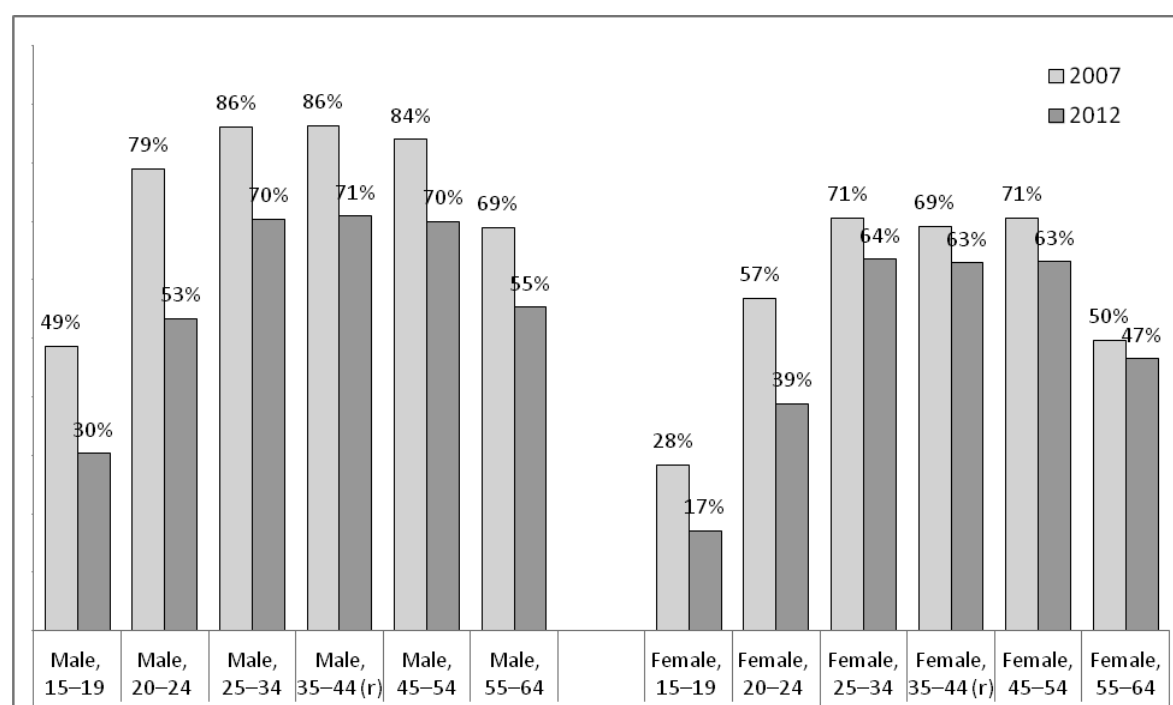
Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

Total N of cases unweighted = 87,140.

Do the employment patterns that we have observed for different age groups vary for males and females? Further modelling of age differences in employment rates by gender, the results for which are presented in Figure 2.6, shows that employment rates for young women (aged 15 to 24) are much lower than for young men. Employment rates for this age group did not fall for women as much as they did for men between 2007 and 2012. However, among young people, female employment rates are much lower than males in both years.

Employment rates for women over 25 are also lower in both 2007 and 2012, but again the fall in employment for women was lower than for men. The employment rate of women in the oldest age group, 55 to 64 is also low (under 50 per cent), but hardly changed over the period.

Figure 2.6 Estimated Employment Rates for Gender Age Groups, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012.

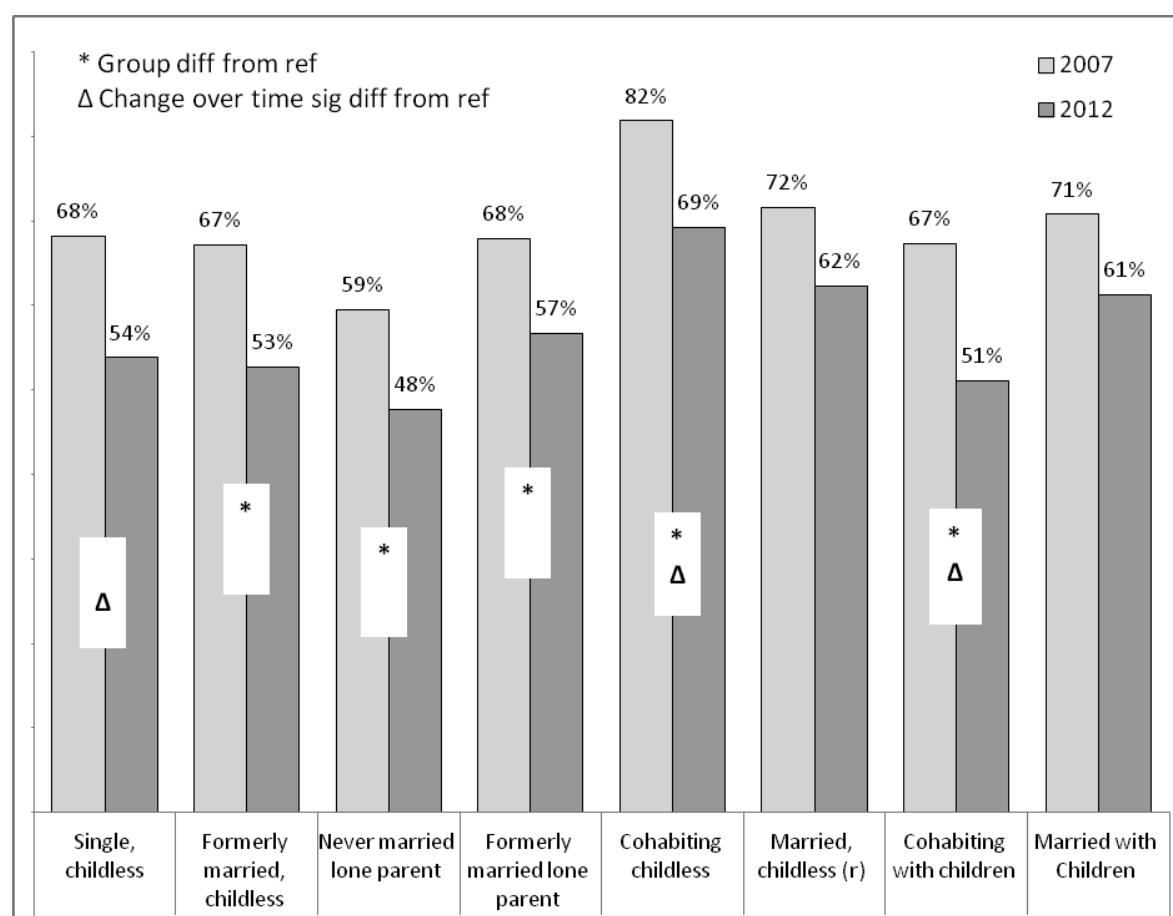
Notes: Base = all persons aged 15 to 64 years. Analysis by authors. Full models available on request. Total N of cases unweighted = 87,140.

2.5.3 Employment by Marital and Family Status

Figure 2.7 shows the modelled rates of employment by marital and family status. Prior to the recession, formerly married individuals with no children, lone parents (both formerly married and never married) and cohabiting individuals with children all had lower employment rates compared with married individuals with no children. On the other hand, cohabiting individuals with no children had a higher employment rate in 2007. Russell et al. (2009) found a stagnation of lone parent labour market participation even during the period of rapid economic growth, suggesting persistent barriers to employment among these groups. Barriers to employment for this group include constraints in the form of affordable childcare, availability of flexible working arrangements and below average educational attainment (Russell et al., 2009).

While all married/family status groups experienced a fall in their employment rate between 2007 and 2012, there were some significant changes. In particular, the 'single childless' group were less likely to be employed over time compared with the married and childless reference group. This change is likely to be explained by the age composition of the group (see above and McQuaid et al. (2010)). The employment rate gap between the married with no children reference group and the cohabiting with children group widened over time. Interestingly, the employment rate gap between cohabiting individuals with no children and the 'married childless' group declined between 2007 and 2012. Part of the cohabiting childless group's higher employment rate in 2007 was due to their younger age profile.

Figure 2.7 Estimated Employment Rates by Marital and Family Status, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS data, Q4 2007 and Q4 2012.

Notes: Base = all persons aged 15 to 64 years. Analysis by authors. See Table A2.3 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Total N of cases unweighted = 87,140.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures pooling the two years.

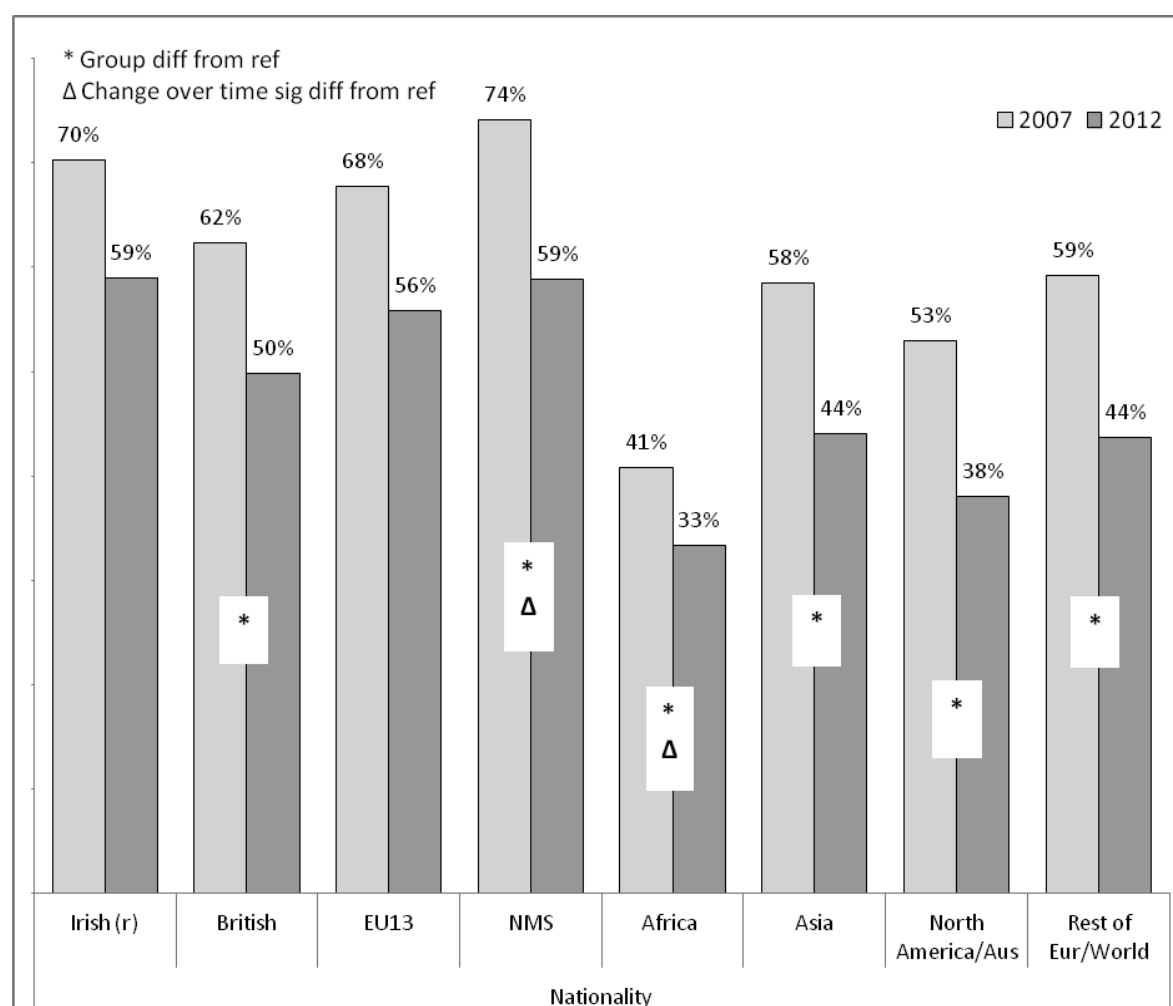
Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

2.5.4 Employment by Nationality

Figure 2.8 shows modelled employment rates by nationality. In 2007, all nationality groups, apart from EU13 and new Member State (NMS) individuals, had lower employment rates compared with Irish people. At this time point, Africans recorded the lowest employment rate compared with Irish individuals, 41 per cent compared with 70 per cent. On the other hand, new Member State nationals had a higher employment rate in 2007 compared with Irish individuals (74 per cent compared with 70 per cent).

Not surprisingly, all nationality groups experienced a fall in their employment rate between 2007 and 2012. However, the only two groups that experienced a significant change in their employment rate over time compared with Irish people were new Member States and African individuals. In 2012, the employment rate gap between Irish nationals and new Member State individuals had narrowed. In fact, in 2012 the employment rates of both of these nationality groups were identical at 59 per cent.

**Figure 2.8 Estimated Employment Rates by Nationality, 2007 and 2012
(model-estimated controlling for other factors)**



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = all persons aged 15–64. Analysis by authors. See Table A2.3 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Total N of cases unweighted = 87,140.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures pooling the two years.

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

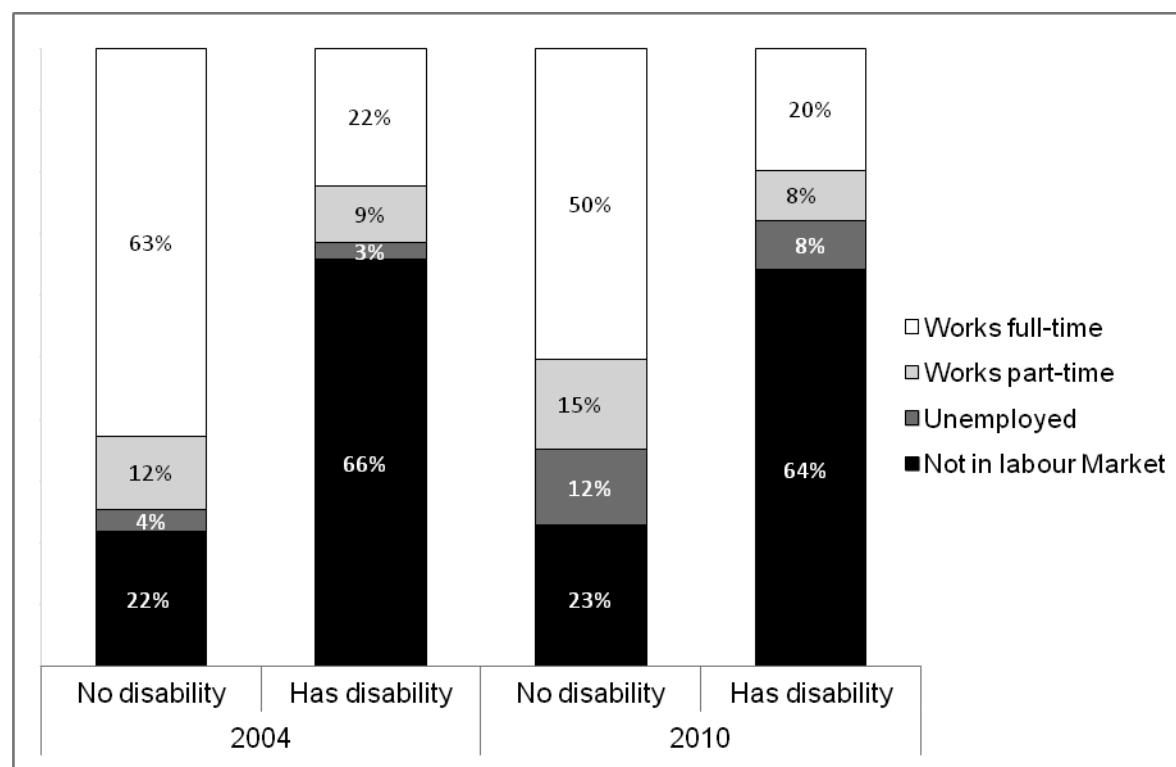
The size of the employment disadvantage for the African group decreased over time; however, there is still a big difference in their employment level compared with Irish people (33 per cent compared with 59 per cent in 2012). Kingston et al. (2013) found that the main concentration of labour market disadvantage occurs among the Black African national ethnic group.

2.5.5 Employment by Disability

Information on disability status is not routinely collected in the QNHS; therefore we draw on the results from two special modules on disability analysed by Watson et al. (2013). The years of the modules do not match those used in the rest of the chapter; instead the pre-recession time point is 2004 and the recession period is 2010. The figures outlined in Figure

2.9 show that the raw employment rate for those with a disability fell from 31 per cent in 2004 to 28 per cent in 2010. The corresponding figures for individuals without a disability were 75 per cent in 2005 and 65 per cent in 2010. The change in employment is statistically significant for people with no disability, but is not significant for those with a disability.

Figure 2.9 Labour Market Status of Individuals With and Without a Disability, 2004 and 2010



Source: Watson et al. (2013).

Note: Figures based on QNHS Equality Modules Q4 2004 and Q4 2010.

2.6 Unemployment

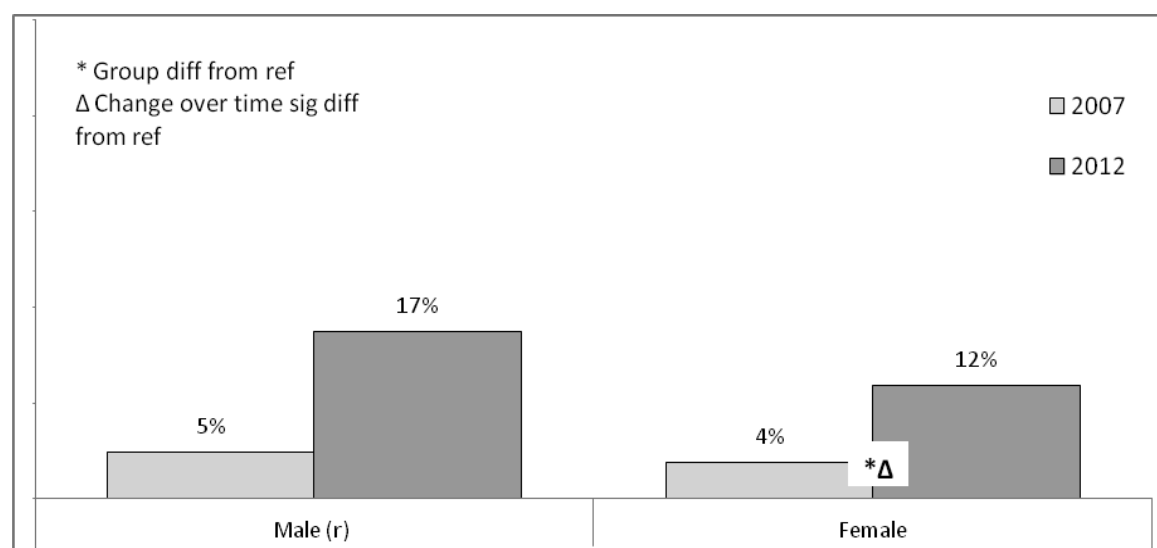
There was a large increase in the overall unemployment rate between 2007 and 2012, reflecting the scale of the economic crisis in Ireland. In Q4 2007, the overall unemployment rate was 4.6 per cent, by Q4 2012 it had increased to 13.7 per cent: over the economic crisis period, the unemployment rate peaked at 15.1 per cent in Q3, 2011.

2.6.1 Unemployment by Gender

Figure 2.10 shows the modelled unemployment rates by gender in 2007 and 2012. Gross figures of unemployment for all groups are presented in Figure A2.2 in the appendix to this chapter. Females emerge as being less likely to be unemployed compared with males and this gender gap in unemployment likelihoods has increased significantly since the recession. The Irish labour market has traditionally been highly gender segregated, with wide variations in the distribution of men and women across different occupational groups (Russell et al., 2009; Barry, 2011). The concentration of job losses in the construction and the manufacturing sectors, and the lower rate of job losses in education, in health and in public administration may have resulted in a relatively lower impact of this recession on women (McQuaid et al., 2010; and Section 2.3 above). Given that males were predominately

employed in the industries that were particularly hard hit by the recession, they have experienced a higher growth in their rate of unemployment, with the modelled rate rising from 5 per cent in 2007, to 17 per cent in 2012. The modelled rate for females has increased from 4 per cent in 2007, to 12 per cent in 2012; the gap in rates between males and females has widened significantly between 2007 and 2012.

Figure 2.10 Net Unemployment by Gender, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012

Notes: Base = Persons active in the labour market aged 15 to 64 years. Analysis by authors. See Table A2.4 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Total N of cases unweighted = 60,523. Excludes those inactive in the labour market.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

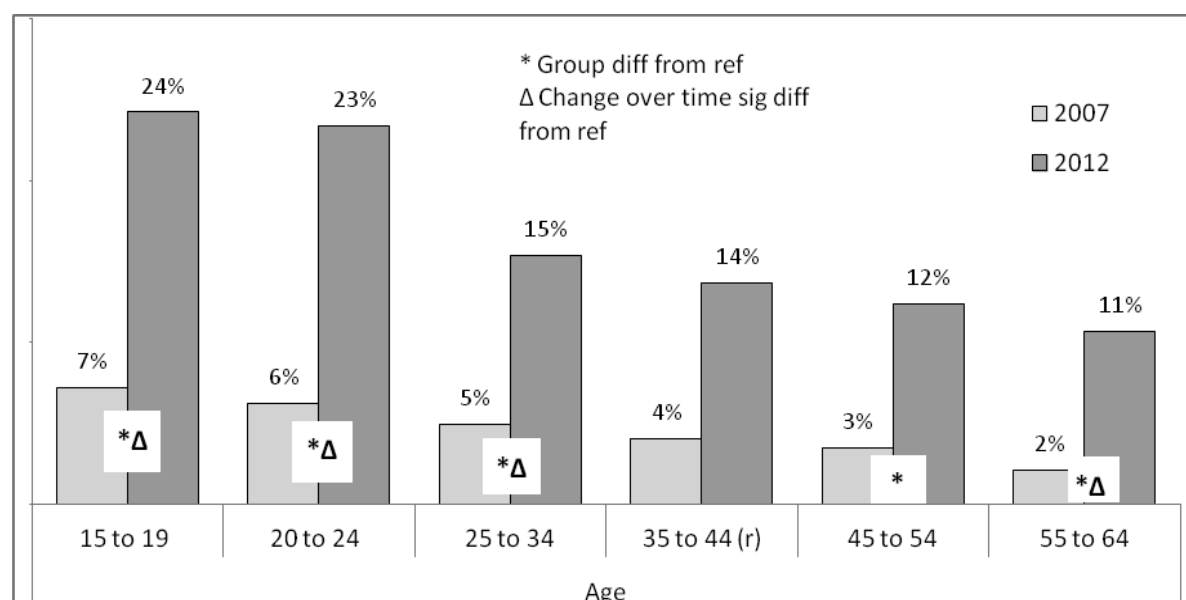
2.6.2 Unemployment by Age

Figure 2.11 presents net estimated unemployment rates across age groups in 2007 and 2012. Unemployment rates have increased for all age groups in this time frame. Accounting for education, geographic location and the other equality grounds, the net estimates of unemployment are particularly high for the 15 to 19 (24 per cent) and 20 to 24 (23 per cent) age groups. In terms of age, those aged between 15 and 34 are more likely to be unemployed compared with those aged 35 to 44, and the disadvantage of the younger age groups has increased significantly over time relative to those aged 35 to 44.

The experience of being jobless has been shown to leave ‘scars’ on future career outcomes, like lower wages, and also impacts on a number of other outcomes, such as happiness, job satisfaction and health, many years later (Arulampalam, 2001; Scarpetta and Sonnet, 2010). The unemployment risk for young people should be interpreted in the context of their low and falling levels of participation. The unemployment rates of the 20- to 24-year-old age group applies to a substantially larger proportion of that age group who are active in the labour market compared with those aged under 20. The youth unemployment rate can be misleading as a large share of young people are not in the labour market (83.4 per cent in Q4 2012); therefore the unemployment rate figure represents a small proportion of the cohort. As an alternative estimate of youth unemployment some analysts prefer to use the

‘unemployment proportion’ or ‘unemployment ratio’ – the proportion of the whole cohort that is unemployed – as a more accurate reflection of the impact of a recession on young people. This calculates unemployment with all young adults as the denominator, rather than young people in the labour market. The youth (aged 15–24) unemployment ratio in Ireland in 2012 is 12.3 per cent compared with an unemployment rate of 30.4 per cent (Eurostat, 2013).

Figure 2.11 Net Unemployment by Age Group, 2007 and 2012 (model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = persons active in the labour market aged 15 to 64 years. Analysis by authors. See Table A2.4 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Total N of cases unweighted = 60,523.

(r) indicates reference category.

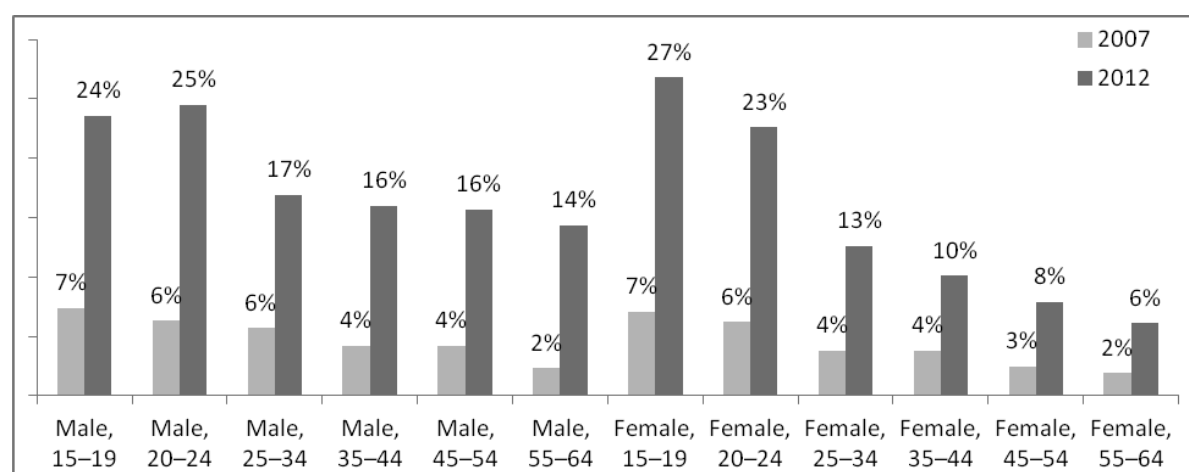
* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures. Excludes economically inactive.

The 45 to 54 and the 55 to 64 age groups experienced significantly lower levels of unemployment compared with the 35 to 44 age group. The gap in unemployment rates between the 35 to 44 and 55 to 64 age groups increased significantly over time. Older people in employment enjoy a degree of protection; therefore, their rate of job-loss tends to be lower than that of young people, particularly those who are newly hired and have little protection (Hogarth et al., 2009).

Do these age differences vary for men and women? The gross unemployment rates (see Figure A2.3 in the appendix to this chapter) are larger for young males than females, with young males aged 15–19 reporting an unemployment rate of 37.3 per cent in 2012, and young females aged 29 per cent in 2012. However, modelled unemployment risks for young women are similar to those for young men, and have risen sharply between 2007 and 2012, as they did for men (see Figure 2.12). For women over 25, the situation is different: unemployment has risen between 2007 and 2012, but the rise has not been as marked as for men. Indeed for women over 25, the modelled unemployment risk in 2012 falls sharply with age, the lowest risk being for the 55–64 age group.

Figure 2.12 Unemployment by Age for Men and Women (model predicted probabilities)



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = persons aged 15–64. Analysis by authors. Full models available on request. Total N of cases unweighted = 60,523.

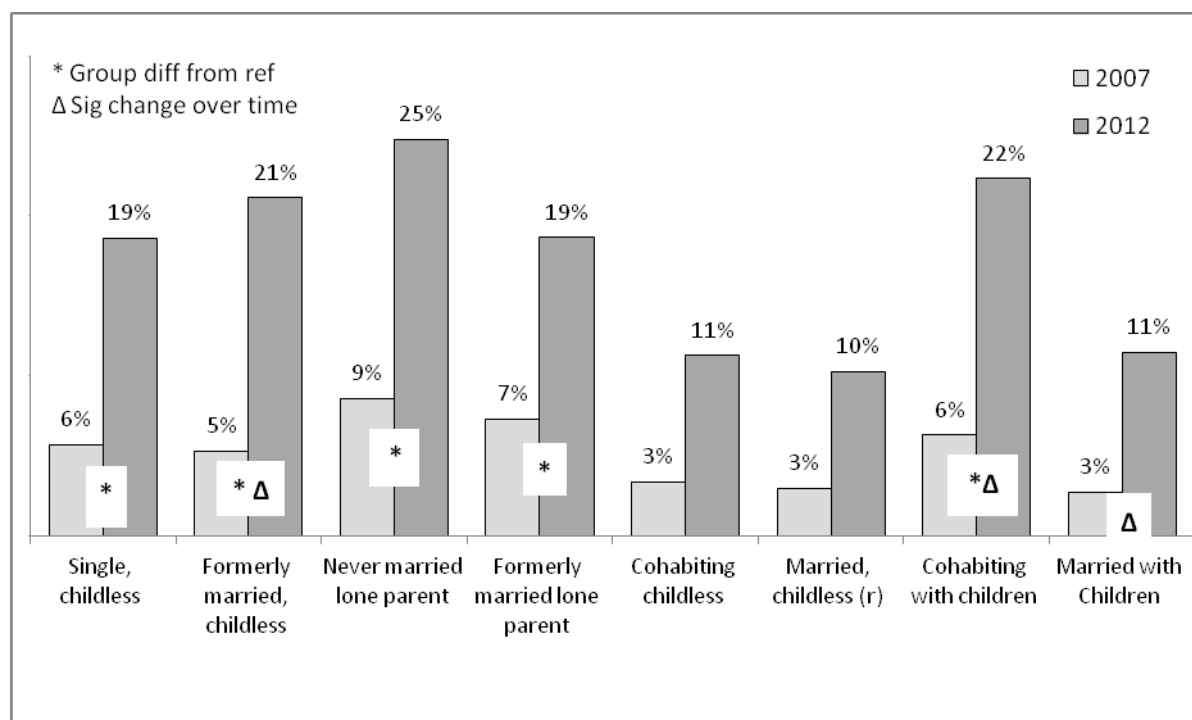
Why do the descriptive unemployment rates differ from the modelled rates? The main reason is the educational advantage of young women. In 2012, just under 40 per cent of 20–24 year old women in the labour market had third-level education, compared with only 22.5 per cent of men (Table A2.5 in the appendix to this chapter). Gender differences in education are not so marked for the 15–19 age group, though here too differences appear: 32 per cent of women aged 15–19 had no qualifications or lower secondary compared with just under 37 per cent of men (see Table A2.5). Both men and women aged 15–19 participating in the labour market are relatively disadvantaged compared with older age groups, but this is because most men and women in this age group are not participating in the labour market, as they are continuing their education, especially women (see Figure 2.2). Those who are participating in the labour market have left the educational system already.

These unemployment rates should be seen in the context of different labour force participation patterns. As discussed in Section 2.4, labour market participation varies considerably across age groups, particularly among women. Participation is lower among the 55–64 age group than ‘prime age’ women, and these women are a positively selected group, with the lower educated women not participating. Conversely, participation rates among women under 25 are very low indeed, and female labour market participants in this age group are a comparatively disadvantaged group, as higher educated women are still in further education. The youngest age groups have the lowest participation rates and also display the sharpest drops in activity over the crisis period.

2.6.3 Unemployment by Marital and Family Status

Modelled unemployment levels increased for all marital/family categories over the period 2007 to 2012 (Figure 2.13). As noted above, marital and family status effects are strongly linked to age and gender, the net figures presented show the effects of marital and family status over and above these other characteristics.

**Figure 2.13 Net Unemployment by Marital and Family Status, 2007 and 2012
(model-estimated controlling for other factors)**



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = persons aged 15–64. Analysis by authors. See Table A2.4 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Excludes economically inactive. Total N of cases unweighted = 60,523.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

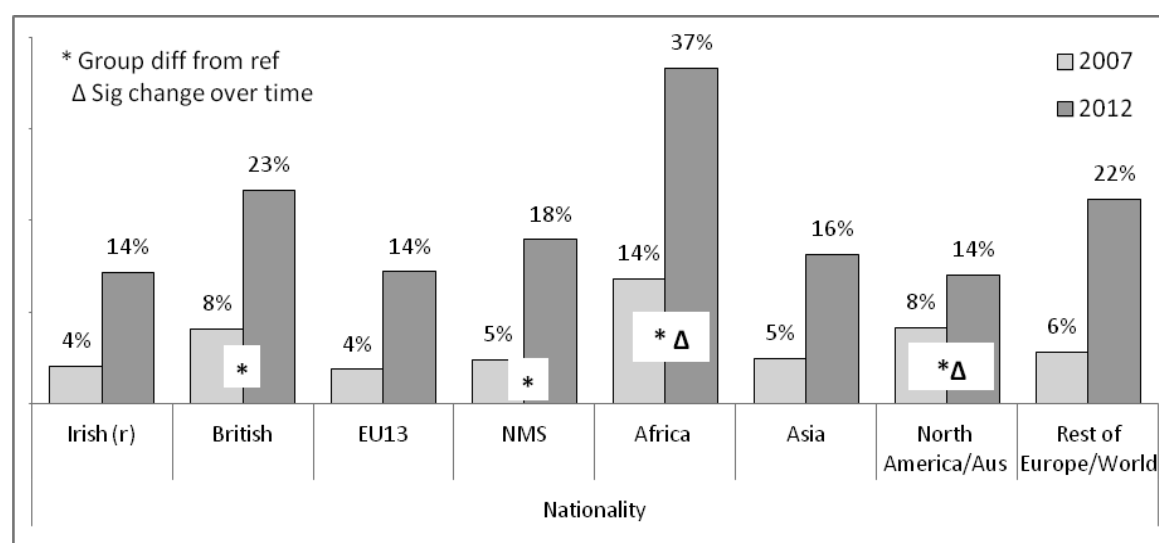
Those in the majority of family/marital status categories were more likely to be unemployed compared with those in the reference married childless group, apart from those cohabiting who had no children, and those married with children (no significant difference). The gap in unemployment rates between the married with children groups and the reference married childless group significantly widened over time.

Couples cohabiting with children are significantly more likely to be unemployed compared with those married without children; this group have seen a significant increase in their unemployment risk compared with the reference group over the recession. The net unemployment rate for this group increased from 6 per cent in 2007 to 22 per cent in 2012. The never married lone parent group experienced the highest modelled unemployment rates (25 per cent); people in this group experience significantly different unemployment rates compared with people in the married childless reference group. The formerly married lone parent group also experiences significantly larger unemployment rates compared with the married childless groups. Again, the lone parent group come out as a disadvantaged group in the labour market, but in the case of unemployment this disadvantage has not widened during the crisis. Those who are formerly married and childless are more likely to be unemployed than the married childless group, and the increase in their disadvantage over time is significant. The single childless group are significantly more likely to experience unemployment than the married childless group.

2.6.4 Unemployment by Nationality

Previous research has demonstrated that immigrants do not fare as well in the labour market as Irish nationals (O'Connell and McGinnity, 2008; McGinnity et al., 2009; Barrett and Kelly, 2012). Overall, non-Irish nationals are more likely to be unemployed than Irish nationals: we find that the net unemployment rate for non-Irish nationals increased from 6 per cent in 2007 to 20 per cent in 2012. However, as the rate for Irish nationals also rose sharply – from 4 to 14 per cent – the gap between the unemployment rates has not widened significantly over time.³⁰ Figure 2.14 demonstrates that between 2007 and 2012, unemployment levels increased for all nationality groups. The unemployment rate of the British and new Member States (NMS) groups was significantly higher than the Irish group in 2007. Though the relative disadvantage for the British group remained the same over the period, the rise in unemployment was somewhat steeper for the NMS nationals (marginally significant at $p < 0.1$). The African group experience the highest net unemployment rate in 2012 (37 per cent), and are significantly more likely to be unemployed than the Irish group. The size of disadvantage has increased over time for this group. Kingston et al. (2013) found that Black African individuals are over four times more likely to be unemployed when compared with White Irish individuals. The North American/Australian and the African groups were more likely to be unemployed than Irish citizens in 2007.

Figure 2.14 Unemployment by Nationality Groups, 2007 and 2012 (overall and model-estimated controlling for other factors)



Source: QNHS Data, Q4 2007 and Q4 2012.

Notes: Base = persons aged 15–64. Analysis by authors. See Table A2.4 in the appendix to this chapter for the full probit model underlying the model-estimated figures. Change over time is marginally significant for NMS group ($p < 0.1$). Total N of cases unweighted = 60,523.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the overall change over time (i.e. significant interaction) in the model-estimated figures.

The North American/Australian group were more likely to be unemployed than the Irish group in 2007. However, the gap in unemployment rates decreased, and the relative position

³⁰ A separate model was run for Irish/non-Irish unemployment.

of this group improved over time.³¹ There were no significant differences in unemployment rates between the Irish, Asian, EU13, and 'Rest of Europe/World' groups.

2.6.5 Unemployment by Disability

The figures presented from the QNHS Equality Modules in 2004 and 2010 above (Figure 2.9) illustrate that the unemployment rate for those with a disability increased from 8 per cent in 2004 to 22 per cent in 2010. These rates were somewhat higher than for the non-disabled group in both years, which stood at 5 per cent and 16 per cent respectively. These unemployment differences should be interpreted in the context of the low rates of participation among people with a disability, which means that a significant proportion of this group are not exposed to unemployment.

Watson et al. (2013) also estimated unemployment models with many of the same factors analysed for the other equality groups here (gender, age, marital status, family status, nationality, education, region, etc.) plus ethnicity and housing tenure. Keeping these other factors constant, the odds of being unemployed rather than employed remained 25 per cent higher for people with a disability. The study also found that there was no change in this ratio between 2004 and 2007.

2.7 Summary

This chapter examines the impact of the recent economic recession on the labour market outcomes of equality groups, namely in terms of their employment and unemployment risks, and explores changes in the labour market between 2007 and 2012. Overall, employment levels have decreased for all groups studied, and unemployment levels had increased.

Females are less likely to be employed compared with males both pre and post the recession; however, the gender gap in employment rates has narrowed between 2007 and 2012, with a larger fall in male employment levels. In turn, females are less likely to be unemployed compared with males, and the size of their advantage has increased over time. Results suggest that the gender segregation of the Irish labour market may have protected female employment rates, due to the concentration of males in the construction and manufacturing industries that were more adversely affected by the crisis (see Russell et al. (2014)).

In relation to patterns of employment by age, overall the negative impact of being aged 15 to 24 on being employed, compared with the 35 to 44 age group increased between 2007 and 2012. The 55- to 64-year-olds are also less likely to be employed; however, their disadvantage has decreased over time, and their participation levels have increased. In relation to unemployment levels, accordingly those aged between 15 and 24 are more likely to be unemployed, and the size of the labour market disadvantage for younger age groups has increased over time compared with the 35 to 44 age group. The 45 to 64 groups experienced significantly lower levels of unemployment compared with the 35 to 44 age group; the gap in unemployment rates between the 35 to 44 and the 55 to 64 age groups increased significantly over time. These results demonstrate that the younger age groups have been impacted on more in the recession: they have experienced higher unemployment rates and lower employment rates.

³¹ This group is a small sample and therefore this may influence results

In terms of employment of marital and family groups, we find that the formerly married childless, lone parents (both never married and formerly married) and cohabiting with children groups are the most disadvantaged in terms of employment levels. The size of the disadvantage has increased over time for the cohabiting with children group. In terms of unemployment levels, the size of the disadvantage has increased for both cohabiting with children and formerly married childless compared with married childless.

The disadvantage of those cohabiting with children has also been found by Watson et al. (2011), and Lunn and Fahey (2011). Watson et al. (2011) find cohabiting couples with children disadvantaged in terms of education, unemployment, social class and access to a car. Watson et al. (2011) also find a disadvantage for formerly married adults. Formerly married men and women are more likely than their married counterparts to have low levels of education, to be unemployed, to be in the lower manual social class and to lack access to a car. It appears that the disadvantage for these groups has become more pronounced in recession. Cohabiting parents were overrepresented in both construction and retail. Formerly married adults were overrepresented in construction, a sector hard hit by recession (Table A2.1).

Concerning unemployment in 2012, the majority of family/marital status categories were more likely to be unemployed compared with the married childless group. The exceptions to this were those cohabiting who had no children and those married with children. Again, the lone parent group come out as a disadvantaged group in the labour market, but in the case of unemployment this disadvantage has not widened during the crisis.

In our analysis of employment of nationality groups we found that NMS individuals were more likely to be employed in 2007 compared with Irish nationals; however, the size of their advantage has decreased over time and in 2012 they were not more likely to be employed than Irish nationals. In terms of unemployment, NMS and African nationals were more likely to be unemployed compared with the Irish group in 2007 and the size of the disadvantage increased over time. The size of the disadvantage decreased for the North America/Australia group. There were no significant differences in unemployment rates between the Irish, Asian, EU13, and 'Rest of Europe/World' groups.

The association between disability and labour market outcomes could only be examined for the years 2004 and 2010. In 2010, people with a disability had a much lower rate of employment than those without a disability (28 per cent compared with 65 per cent) and a higher unemployment rate (22 per cent for those with a disability, 16 per cent for those without a disability). Models estimated by Watson et al. (2013) suggest that the labour market disadvantage for those with a disability remained relatively stable over this period. The disadvantage is substantial, but the gap did not widen between those with and without a disability.

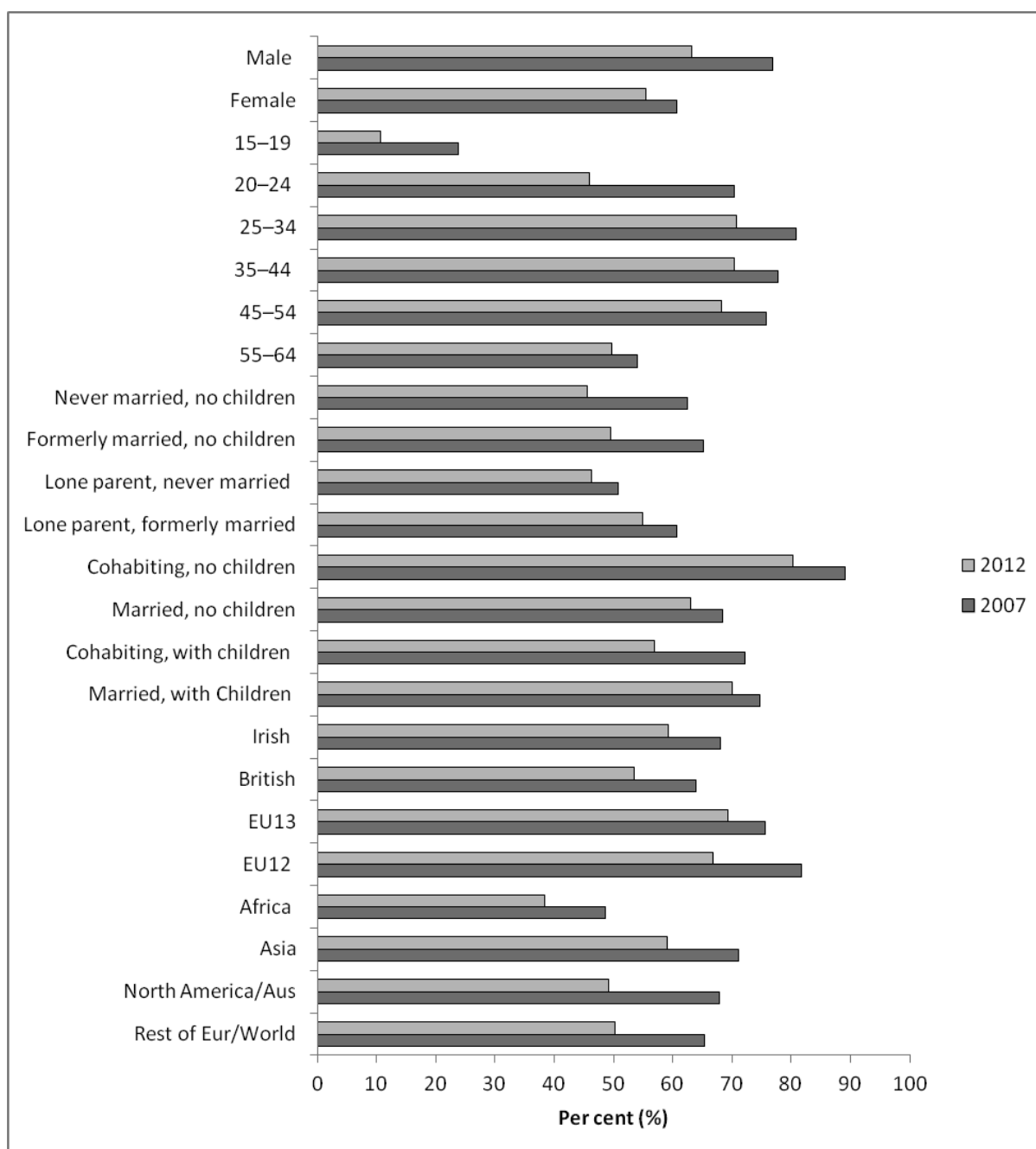
Overall, our analysis shows that it is the young people that have mainly been impacted upon in the recession, experiencing greater falls in employment and very high unemployment rates. The unemployment rates of young men in particular are very high, though once we account for their education disadvantage by statistical modelling, the unemployment rates of young men and women are not so different. The findings suggest that young people are more affected by unemployment due to their weak ties to the labour market (many are labour market entrants) and also their concentration in vulnerable sectors like construction and wholesale and retail where many jobs were lost. Young people face a further disadvantage of exiting education in an extremely stagnant labour market.

Men have also been more affected than women. The findings suggest that men may have been more affected by higher rates of unemployment due to their concentration in the industries that have been the most adversely affected by the downturn. But men, particularly

young men, are also disadvantaged in terms of education, and education has become increasingly important for understanding unemployment risk (Kelly et al., 2013). It is salient that the modelled gender gap in unemployment or 'male disadvantage' is greatest for prime-age workers, particularly those over 45 years. Employment rates are still higher for men than women, but the gender gap is smallest for those over 25.

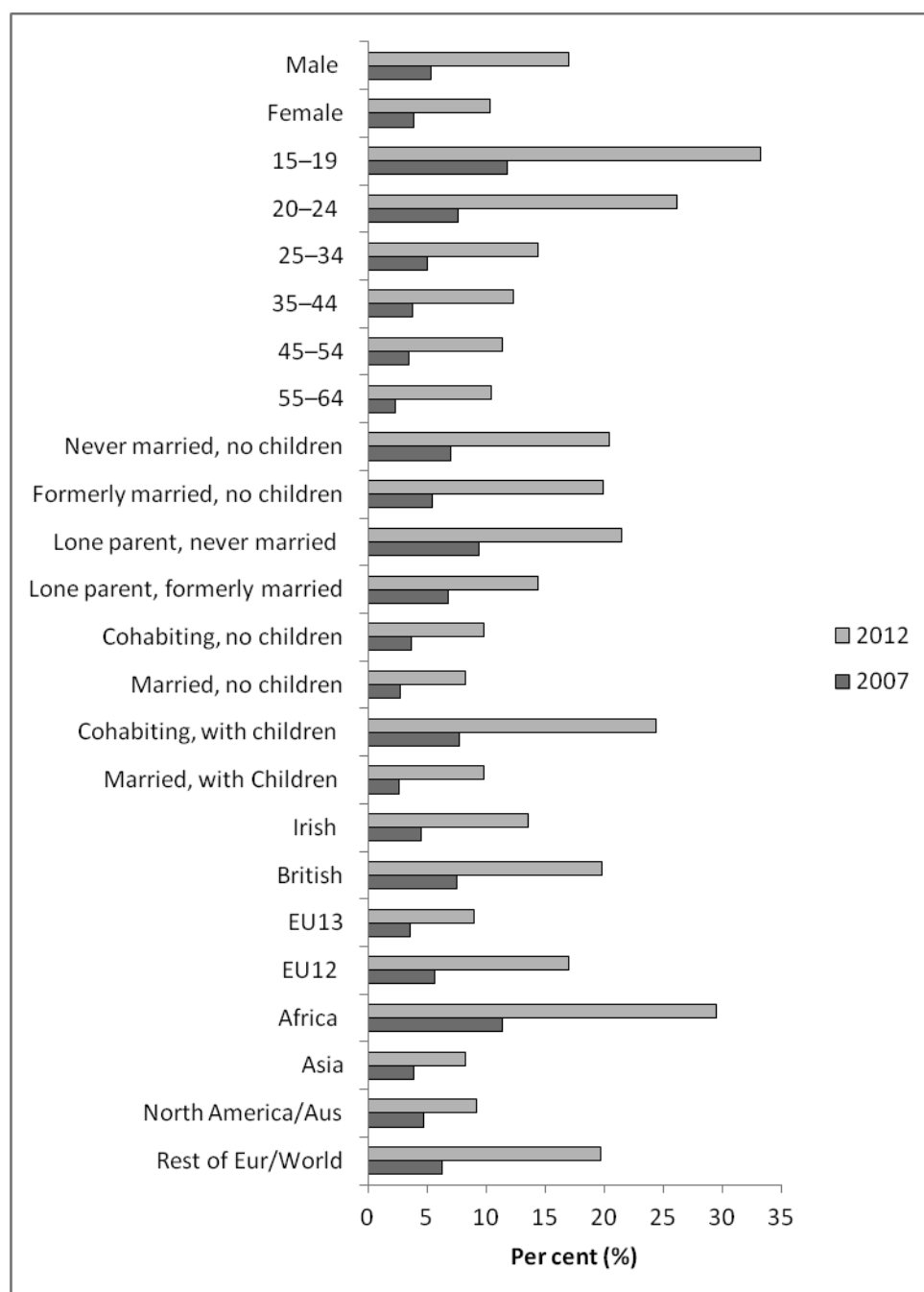
Appendix to Chapter 2

Figure A2.1 Gross Employment Among Equality Groups, 2007 and 2012



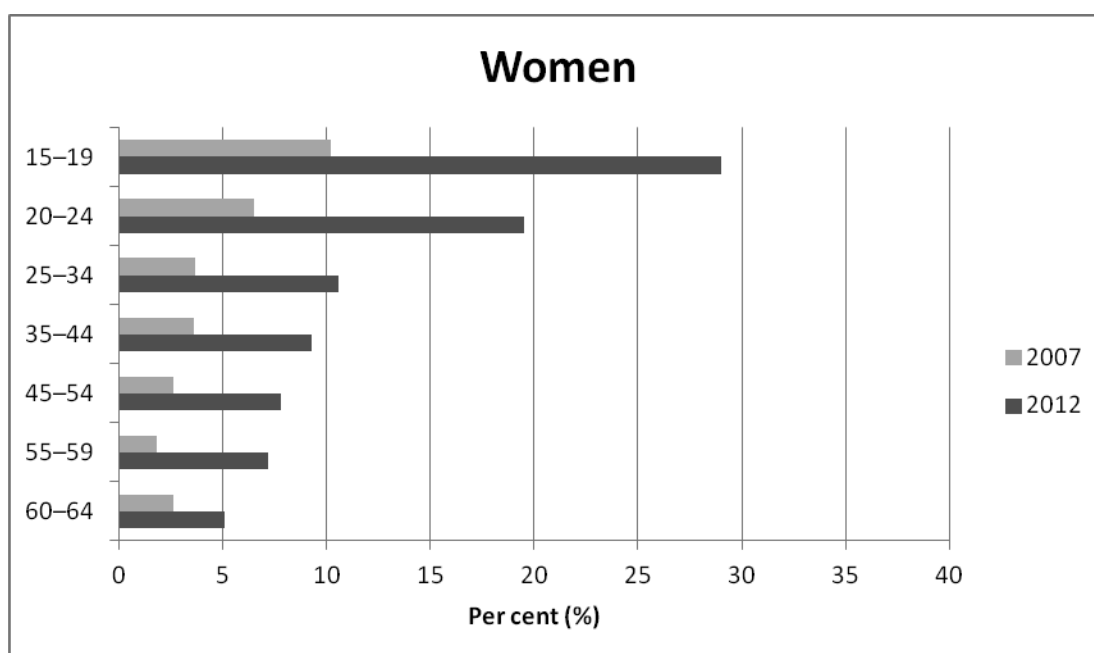
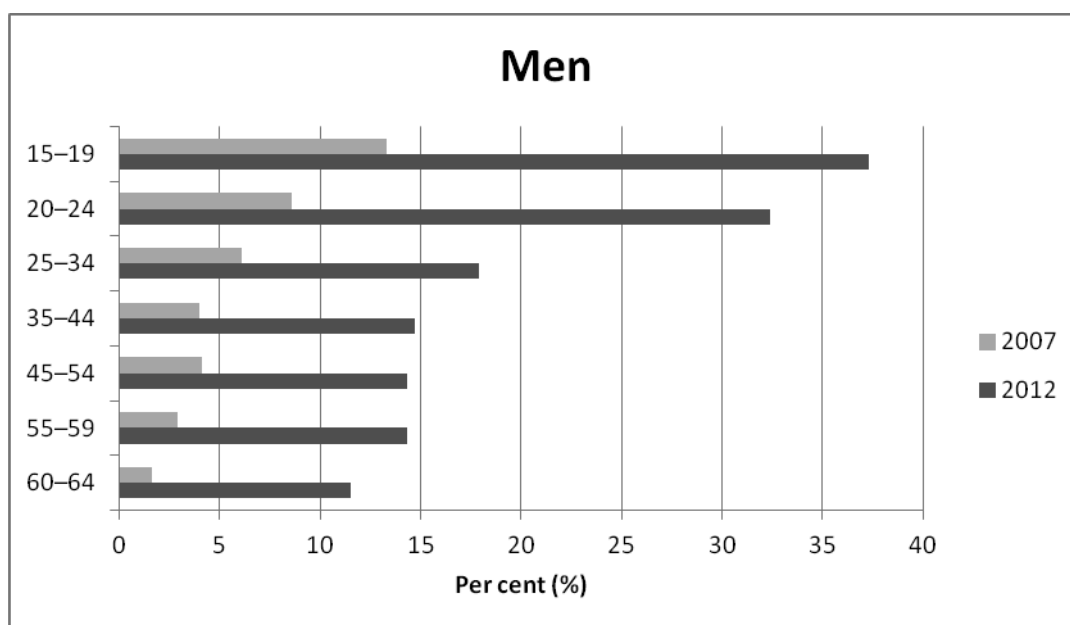
Source: QNHS Q4 2007 and Q4 2012. Labour market participants aged 15–64 only.

Figure A2.2 Gross Unemployment Among Equality Groups, 2007 and 2012



Source: QNHS Q4 2007 and Q4 2012. Labour market participants aged 15-64 only.

Figure A2.3 Gross Unemployment by Gender and Age Group, 2007 and 2012



Source: QNHS Q4, 2007 and Q4, 2012. Labour market participants aged 15-64 only.

Table A2.1 Pre-Recession Sectoral Distribution of Employment by Marital/Family Status, 2007

	Never married no children	Formerly married no children	Lone parent never married	Lone parent formerly married	Cohabit no children	Married no children	Cohabit with children	Married with children
Agriculture	4.2	3.8	.3	3.3	1.3	5.3	2.2	5.7
Manufacturing	12.3	14.3	6.9	8.7	13.3	13.6	14.2	15.0
Construction	14.8	17.0	2.7	5.1	11.2	10.5	18.8	11.4
Wholesale & retail	17.5	11.9	21.8	12.9	17.1	13.3	16.4	12.4
Transport	3.2	6.7	2.4	3.9	4.1	5.1	7.2	5.4
Accommod. & food	8.0	7.7	10.1	8.5	7.5	5.0	6.5	4.3
Information & communic.	3.4	2.4	1.9	1.6	5.2	3.4	2.7	3.2
Financial services	5.9	2.0	3.4	4.0	6.6	4.6	3.3	4.6
Profess., scien. & technical	5.6	2.5	3.7	3.7	7.8	5.2	4.5	5.2
Administrative & support	3.8	5.1	4.8	4.8	5.3	4.1	4.0	3.3
Public admin	3.7	4.3	2.1	4.9	4.3	5.1	3.2	6.5
Education	5.2	3.8	7.8	10.0	4.6	7.5	4.4	8.0
Health & social work	7.2	12.6	23.6	22.1	6.9	12.9	8.8	11.4
Arts & other services	5.1	5.9	8.6	6.5	4.7	4.3	3.7	3.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: QNHS 2007, based on all employed aged 15–64 years.

Table A2.2 Probit Model for Labour Market Participation with Control Variables

		Main Effect		Interaction with 2012	
		Coefficient	Standard error	Coefficient	Standard error
Constant		0.897**	(0.138)		
Gender:	Male	(ref.)			
	Female	-0.710**	(0.120)	0.125**	(0.033)
Age:	15–19	-1.278**	(0.025)	-0.165**	(0.020)
	20–24	-0.286**	(0.028)	-0.237**	(0.035)
	25–34	0.072**	(0.019)	-0.023	(0.023)
	35–44	(ref.)			
	45–54	-0.015	(0.013)	-0.027**	(0.004)
	55–64	-0.651**	(0.032)	0.023	(0.023)
Marital/Family:	Single, childless	-0.052	(0.081)	-0.094**	(0.028)
	Formerly married, childless	-0.112**	(0.037)	-0.028	(0.057)
	Never married, lone parent	-0.348**	(0.016)	0.040	(0.034)
	Formerly married, lone parent	-0.052**	(0.010)	-0.017	(0.033)
	Cohabiting, childless	0.542**	(0.110)	-0.193**	(0.063)
	Married, childless	(ref.)			
	Cohabiting, with children	-0.065**	(0.019)	-0.049	(0.036)
	Married, with children	-0.046	(0.025)	0.025	(0.021)
Nationality:	Irish	(ref.)			
	British	-0.209**	(0.022)	0.042	(0.055)
	EU13	-0.128	(0.120)	-0.022	(0.090)
	New member state (NMS)	0.242*	(0.084)	-0.103*	(0.046)
	Africa	-0.890**	(0.064)	0.283**	(0.027)
	Asia	-0.448**	(0.040)	-0.134*	(0.050)
	North America and Australia	-0.574**	(0.059)	-0.219	(0.114)
	Rest of Europe/World	-0.384**	(0.084)	-0.072	(0.112)
Education:	Junior Certificate or less	(ref.)			
	Upper secondary	0.493**	(0.075)	0.027	(0.023)
	Post secondary	0.642**	(0.096)	0.017	(0.048)
	Third level	0.909**	(0.052)	0.034	(0.021)
Region:	Border	0.000	(0.027)	-0.166**	(0.046)
	Midland	0.039	(0.029)	-0.111*	(0.040)
	West	-0.021	(0.021)	0.104*	(0.040)
	Dublin	(ref.)			
	Mid-East	-0.015	(0.011)	-0.006	(0.024)
	Mid-West	-0.041	(0.027)	0.059*	(0.023)
	South-East	0.033	(0.019)	-0.052**	(0.015)
	South-West	-0.051**	(0.012)	0.050	(0.026)
Year:	2007	(ref.)			
	2012	-0.182**	(0.043)		
Observations:		87,140			

Source: QNHS Microdata, Q4 2007 and Q4 2012.

Notes: Standard errors in parentheses. Dependent variables: 1 = labour force participant; 0 = economically inactive.

Significance levels: ** p < 0.01; * p < 0.05.

Table A2.3 Probit Model for Employment with Control Variables

		Main Effect		Interaction with 2012	
		Coefficient	Standard error	Coefficient	Standard error
Constant		0.712	(0.130)		
Gender:	Male	(ref.)			
	Female	-0.595**	(0.112)	0.280**	(0.032)
Age:	15–19	-1.182**	(0.021)	-0.069*	(0.030)
	20–24	-0.293**	(0.019)	-0.258**	(0.053)
	25–34	0.027	(0.019)	-0.032*	(0.014)
	35–44	(ref.)			
	45–54	0.008	(0.011)	-0.003	(0.022)
	55–64	-0.551**	(0.028)	0.118**	(0.019)
Marital/Family:	Single, childless	-0.122	(0.082)	-0.142**	(0.043)
	Formerly married, childless	-0.157**	(0.050)	-0.140	(0.069)
	Never married, lone parent	-0.407**	(0.028)	-0.040	(0.020)
	Formerly married, lone parent	-0.129**	(0.013)	-0.048	(0.034)
	Cohabiting, childless	0.424**	(0.093)	-0.193**	(0.063)
	Married, childless	(ref.)			
	Cohabiting, with children	-0.149**	(0.013)	-0.198**	(0.027)
	Married, with children	-0.029	(0.029)	-0.003	(0.016)
Nationality:	Irish	(ref.)		0.000	(0.000)
	British	-0.273**	(0.020)	-0.012	(0.028)
	EU13	-0.090	(0.133)	-0.009	(0.098)
	New member state	0.144*	(0.060)	-0.149**	(0.018)
	Africa	-0.940**	(0.044)	0.140**	(0.018)
	Asia	-0.397**	(0.044)	-0.066	(0.076)
	North America and Australia	-0.569**	(0.050)	-0.082	(0.093)
	Rest of Europe/World	-0.373**	(0.089)	-0.100	(0.164)
Education:	Junior Certificate or less	(ref.)			
	Upper secondary	0.507**	(0.073)	0.071	(0.037)
	Post secondary	0.656**	(0.085)	-0.093	(0.048)
	Third level	0.921**	(0.047)	0.091**	(0.023)
Region:	Border	-0.026	(0.025)	-0.176**	(0.031)
	Midland	0.032	(0.026)	-0.186**	(0.037)
	West	-0.006	(0.020)	-0.006	(0.014)
	Dublin	(ref.)			
	Mid-East	0.003	(0.013)	-0.058**	(0.016)
	Mid-West	-0.053	(0.028)	-0.025	(0.016)
	South-East	0.022	(0.025)	-0.169**	(0.031)
	South-West	-0.047**	(0.014)	0.035	(0.024)
Year	2007	(ref.)			
	2012	-0.414**	(0.039)		
Observations		87,140			

Source: QNHS Microdata, Q4 2007 and Q4 2012.

Notes: Standard errors in parentheses. The results are taken from one model/equation – i.e. the coefficients in Column 3 are the main effects for each variable in a model that also includes the interaction terms. Dependent variable 1 = employed; 0 = unemployed or economically inactive.

Significance levels: ** p < 0.01; * p < 0.05.

Table A2.4 Probit Model for Unemployment with Control Variables

		Main Effect		Interaction with 2012	
		Coefficient	Standard error	Coefficient	Standard error
Constant		1.578**	(0.050)		
Gender:	Male	(ref.)			
	Female	-0.125**	(0.027)	-0.147**	(0.039)
Age:	15–19	0.296**	(0.037)	0.136*	(0.054)
	20–24	0.216**	(0.031)	0.186*	(0.067)
	25–34	0.094**	(0.027)	-0.012	(0.015)
	35–44	(ref.)			
	45–54	-0.073**	(0.021)	0.006	(0.036)
	55–64	-0.303**	(0.025)	0.143**	(0.010)
Marital/Family:	Single, childless	0.317**	(0.056)	0.086	(0.053)
	Formerly married, childless	0.280**	(0.086)	0.220*	(0.076)
	Never married, lone parent	0.540**	(0.069)	0.090	(0.055)
	Formerly married, lone parent	0.449**	(0.026)	-0.044	(0.043)
	Cohabiting, childless	0.062	(0.045)	-0.004	(0.053)
	Married, childless	(ref.)			
	Cohabiting, with children	0.369**	(0.013)	0.176**	(0.018)
	Married, with children	-0.037	(0.037)	0.107**	(0.021)
Nationality:	Irish	(ref.)			
	British	0.363**	(0.060)	0.011	(0.095)
	EU13	-0.049	(0.166)	0.052	(0.107)
	New member state	0.079**	(0.026)	0.084	(0.048)
	Africa	0.678**	(0.049)	0.124*	(0.047)
	Asia	0.092	(0.228)	0.000	(0.210)
	North America and Australia	0.373**	(0.086)	-0.388*	(0.138)
	Rest of Europe/World	0.157	(0.090)	0.182	(0.267)
Education:	Junior Certificate or less	(ref.)			
	Upper secondary	-0.344**	(0.038)	-0.121*	(0.052)
	Post secondary	-0.431**	(0.054)	0.186**	(0.060)
	Third level	-0.546**	(0.037)	-0.190**	(0.022)
Region:	Border	0.108**	(0.035)	0.080	(0.048)
	Midland	0.001	(0.034)	0.222**	(0.055)
	West	-0.045	(0.035)	0.208**	(0.064)
	Dublin	(ref.)			
	Mid-East	-0.073**	(0.022)	0.159**	(0.023)
	Mid-West	0.081*	(0.028)	0.122**	(0.026)
	South-East	0.027	(0.074)	0.251*	(0.093)
	South-West	0.023	(0.013)	-0.009	(0.020)
Year	2007	(ref.)			
	2012	0.604**	(0.018)		
Observations		60,523			

Source: QNHS Microdata, Q4 2007 and Q4 2012.

Notes: Standard errors in parentheses; The results are taken from one model/equation – i.e. the coefficients in Column 3 are the main effects for each variable in a model that also includes the interaction terms.

Significance levels: ** p < 0.01, * p < 0.05.

**Table A2.5 Educational Qualifications for Men and Women, 2007 and 2012
(labour market participants only)**

2007						
Males:	Aged 15–19	Aged 20–24	Aged 25–34	Aged 35–44	Aged 45–54	Aged 55–64
No qualifications	5.9	2.3	4.1	7.1	14.8	35.0
Lower secondary	39.2	13.8	13.1	21.6	25.3	19.3
Upper secondary	52.7	49.5	29.4	24.0	23.1	16.2
Post secondary	1.6	11.7	13.6	12.6	9.4	8.6
Third level	0.7	22.6	39.9	34.6	27.4	21.0
	41,448	143,667	338,434	295,042	236,378	147,101
Females:	Aged 15–19	Aged 20–24	Aged 25–34	Aged 35–44	Aged 45–54	Aged 55–64
No qualifications	4.4	0.8	2.1	4.6	9.2	20.5
Lower secondary	33.8	5.0	6.1	12.2	17.0	20.1
Upper secondary	55.6	43.6	23.3	26.5	29.3	23.0
Post secondary	4.3	10.2	9.4	11.9	10.6	10.4
Third level	2.0	40.4	59.1	44.9	33.9	25.9
	37,155	125,979	283,464	217,281	178,883	86,253
2012						
Males:	Aged 15–19	Aged 20–24	Aged 25–34	Aged 35–44	Aged 45–54	Aged 55–64
No qualifications	5.7	1.4	2.6	4.6	8.0	19.3
Lower secondary	30.9	8.5	8.7	13.7	20.3	20.2
Upper secondary	57.0	55.9	26.8	21.9	23.7	21.0
Post secondary	6.1	11.7	18.0	15.0	14.1	12.8
Third level	0.3	22.5	43.9	44.8	33.9	26.7
	22,604	86,827	298,997	311,572	252,405	152,180
Females:	Aged 15–19	Aged 20–24	Aged 25–34	Aged 35–44	Aged 45–54	Aged 55–64
No qualifications	2.9	0.8	1.1	1.9	5.2	11.6
Lower secondary	29.4	3.6	3.5	6.8	11.5	15.1
Upper secondary	59.9	44.6	19.9	19.2	26.2	25.1
Post secondary	6.4	11.5	13.0	13.2	14.2	12.4
Third level	1.3	39.5	62.5	58.9	43.0	35.8
	21,836	79,347	282,425	242,688	195,058	106,155

Source: QNHS Q4 2007 and Q4 2012. Labour market participants aged 15–64 only.

3 POVERTY AND DEPRIVATION

3.1 Introduction

In this chapter we draw on the Survey of Income and Living Conditions (SILC) data for Ireland to examine changes in the poverty and deprivations status of equality groups between 2007 and 2011 (the latest available wave of this dataset at the time of writing). We begin by describing the data and the measurement of poverty and deprivation before examining how each of the six groups fared in terms of these outcomes.

It is worth noting that while labour market outcomes are measured at the level of the individual, poverty and deprivation are assessed at the level of the household. In measuring income poverty, for instance, income from all sources and from all household members is considered, together with household size and composition. The analysis in this chapter is conducted at the level of the individual, but the household status in terms of poverty and deprivation is attributed to every individual household member. For this reason, we would expect the living arrangements of members of disadvantage equality groups to be particularly important. One advantage of focusing on outcomes that are measured at the level of the household is that we can consider the situation of children as well as adults by examining their risk of living in poor or deprived households. Adults of retirement age are also included in the analysis in this chapter. This means that we examine a wider range of age groups than was the case in the labour market analyses.

3.2 Research Methodology

3.2.1 Data

The data used in this chapter comes from the CSO Survey on Income and Living Conditions, particularly the 2007 and 2011 waves. The survey is administered by the Central Statistics Office (CSO), primarily to provide estimates of key social exclusion statistics. This survey collects information on the income and living conditions of households as well as a large range of socio-demographic data about household members, including personal characteristics, labour market position, education, disability and health status. The data are based on a voluntary survey of private households carried out by the CSO. The survey has been carried out annually, with interviews taking place throughout the year, since 2004. Data is collected from the household manager and from every adult (age 16 and over) in the household. The number of households in the completed sample varied from 4,300 to 5,600 between 2007 and 2011. In 2011, the total completed sample size was 4,300 households and 11,000 individuals.³²

3.2.2 Measuring Poverty

Income is measured at the household level over a calendar year. All sources of income of all household members are included and both cash income and the imputed income value of certain non-cash benefits are covered. Income poverty (or 'at-risk-of-poverty'), is based on living in a household where the disposable income, after adjusting for household size and composition, is below 60 per cent of the median income across individuals. The adjustment for household size and composition involves dividing the disposable income by an equivalence scale value so that it is expressed as 'equivalised income' or the income that is

³² The sample design was two-stage, with eight population density stratum groups (based on the 2006 Census of Population), random selection of sample and substitute households within blocks. The survey results are weighted to agree with population distributions by age, sex, region and household composition (CSO, 2010).

assumed to allow a living standard similar to a single adult living alone. The equivalence scale allows a weight of 1 for the first adult in the household; 0.66 for each subsequent adult and 0.33 for each child under age 14 (CSO, 2013). This is the standard CSO method for measuring poverty in Ireland and has been adopted in the National Anti-Poverty Strategy (NAPS) poverty measure.³³ The measure assumes that individuals in households pool their income: this assumption is supported by recent analysis of a special module on income pooling (Watson et al., 2013).

3.2.3 Measuring Deprivation

The concept of deprivation is designed to provide a direct measure of the living standards of households in contrast to income, which is considered an indirect measure. Deprivation is measured as lacking certain goods and services, because of an inability to afford them. Not having something because of preference would not count as deprivation in this definition. Basic deprivation is one of the core indicators of social exclusion in the context of Ireland's policy on monitoring and combating poverty. It is measured as an inability to afford two or more of eleven basic goods and services, such as adequate food and clothing, adequate heat for the home, replacing worn-out furniture and the ability to afford to socialise (CSO, 2013).³⁴

The importance of deprivation lies in the fact that it provides an important check on the income measure. Relying on income alone as an indicator of poverty has a number of disadvantages. These include the difficulty in accurately measuring household income for certain groups such as the self-employed and farmers; the fact that current income does not take account of the accumulation of resources over time (through savings and property), the erosion of resources due to debt or unusual expenses such as those associated with illness and disability; and the fact that income poverty measured with respect to the median income can sometimes fail to detect a fall in overall living standards, such as when the poverty threshold falls in recession. This is not so much a problem when comparing across groups in the population at a particular point in time, but can be an issue when examining trends in poverty over time. As we see in this chapter, the indicator of income poverty in Ireland did not capture the general fall in the standard of living with the recession because the poverty threshold itself fell from 2009 to 2011 (see also Watson and Maitre, 2012; Watson et al., 2012; Nolan and Whelan, 2011). This is because the poverty threshold is a relative measure and is calculated as a proportion (60 per cent) of median income at any given time. When all incomes fall, the median income and thus the poverty threshold falls, which influences the proportion falling under the threshold.

3.2.4 Measuring Group Membership and Other Variables

Table 3.1 shows the indicators of group membership that are available on the SILC dataset and the sizes of the groups in 2007 and 2011. Women and men account for roughly equal proportions of the population. We see a decline in the period in the percentage of young adults age 15–19 (from 11 to 8 per cent) and age 20–24 (from 7 to 5 per cent). This is linked to the migration of young people, following the start of the recession.

³³ See <http://www.socialinclusion.ie/poverty.html> for further details.

³⁴ The 11 items are: Two pairs of strong shoes, a warm waterproof overcoat, buy new (not second-hand) clothes, eat meat with meat, chicken, fish (or vegetarian equivalent) every second day, have a roast joint or its equivalent once a week, had to go without heating during the last year through lack of money, keep the home adequately warm, buy presents for family or friends at least once a year, replace any worn out furniture, have family or friends for a drink or meal once a month, have a morning, afternoon or evening out in the last fortnight for entertainment.

Table 3.1 Equality Groups – Measurement in SILC Data and Group Size

		2007	2011
Gender	Males	50%	49%
	Females	50%	51%
Age group of the person	Age 0–14	20%	22%
	Age 15–19	11%	8%
	Age 20–24	7%	5%
	Age 25–34	13%	14%
	Age 35–44	12%	13%
	Age 45–54	14%	13%
	Age 55–64	11%	12%
	Age 65 and over	11%	12%
Marital/family status of the person	Single, childless (age 18 and over)	22%	18%
	Formerly married, childless	7%	7%
	Never married lone parent	4%	6%
	Formerly married lone parent	6%	4%
	Cohabiting childless	2%	2%
	Married, childless	17%	20%
	Cohabiting with children (under age 18)	3%	6%
	Married with children (under age 18)	38%	38%
Disability status of adult	Does not have a disability	85%	87%
	Disability (age 16+): In the last 6 months, person was limited/severely limited in terms of activities people usually do because of a health problem.	15%	13%
Nationality of the person	Irish citizen	93%	89%
	Non-Irish national	7%	11%

Source: SILC data for Ireland, 2007 and 2011

Note: Base = persons of all ages. Analysis by authors.

Although marital and family statuses are listed as separate grounds in the Equality legislation, we construct an indicator that combines them for the purpose of analysis in this report. This is because life chances are differentiated more by the interaction between the two and between marital status, family status and gender, rather than by any one taken singly. For example, it is being a single lone parent that creates barriers for many people rather than being single or being a parent per se. In the analysis then, we use a combined measure of marital and family status, as shown in the table. Some groups are very small, for example those cohabiting without children, but previous research has shown that these are rather different from cohabiting couples with children in a number of outcomes (Watson et al., 2011).

Marital/family status is constructed separately for each person aged 18 and over rather than attributing the marital/family status of the householder to all persons in the household. Children under the age of 16 are included in the marital and family status group to which their mother belongs. Some earlier research comparing SILC with the 2006 Census data suggests that the SILC data under-represents cohabiting couples (Lunn et al., 2009, p. 6). The proportion of people living in these households has increased in the SILC data between 2007 and 2011, however, with an increase from 3 to 6 per cent in those living in cohabiting couple households with children.

Because of the smaller sample size for SILC than for the QNHS we do not have enough cases to provide a detailed breakdown of nationality so our measure simply reflects whether

the person is an Irish citizen. McGinnity et al. (2011, 2012b) also argue that the SILC underestimates the non-Irish population prior to 2009.³⁵ Children are assigned the nationality of their mother (or father if the mother is not in the household).

The largest category of marital/family status is 'married with children' accounting for 38 per cent of persons in both years, followed by 'single, childless'. The latter category fell in size between 2007 and 2011 (from 22 to 18 per cent) – again, influenced by migration of young adults.

Other variables controlled in the analysis include the level of education of the householder, region and urban-rural location. Householder level of education is included as a control as this is likely to be most consequential for the overall living standard of the household and it can be attributed to all household members including children. Three regions are identified: Dublin, Border/Midlands/West and South & East, based on aggregating the eight regions identified in the NUTS 3³⁶ classification. Finally, urban areas are those with a population of 1,000 or more while rural areas include open country-side and villages with a population under 1,000.

3.2.5 Methods of Analysis and Presentation

We analyse the data using statistical models that allow us to identify which groups are at the greatest risk of poverty and deprivation. The statistical models allow us to distinguish the relationship between poverty and being a young adult, for instance, from the relationship between poverty and being single. The results we present show the expected level of poverty or deprivation for each group, if they had the same distribution on other characteristics. In charts where we focus on age groups, for instance, we are able to ask what the expected poverty rate for each age group would look like if the groups were similar in terms of gender, marital status, disability status and nationality as well as in terms of education, region and urban-rural location. This kind of 'what if' analysis is based on a multivariate probit model run in STATA on the weighted data with standard errors adjusted for sample weighting. The methodology is described in more detail in the Methodological Appendix.

3.3 Income Poverty

In this section, we present the results for the analysis of the income poverty rate for the equality groups. Perhaps surprisingly, the overall income poverty rate was not higher in 2011 than in 2007, despite the recession. The income poverty rate fell between 2007 and 2009 (from 16.5 per cent to 14.1 per cent) before rising again to 16 per cent in 2011 (CSO, 2013, Table A). The rate remained essentially unchanged when we compare 2011 with 2007, at between 16 and 16.5 per cent (CSO, 2013). The overall difference is not statistically significant when we control for composition of the population in terms of gender, age group, disability status, nationality and marital/family type. This reflects a number of factors. One factor is that income in SILC is measured for the previous 12 months, so there will be a lag between the current income situation of a household and the annual income as captured by the SILC survey. This means that there was a lag in the detection of the fall in income during the recession in the SILC survey. Another reason for the smaller than expected change in

³⁵ The proportion of non-Irish nationals in the SILC data is considerably lower than the QNHS prior to 2009. For example, McGinnity et al. (2011) estimate that the proportion of non-Irish over 15 in the QNHS in 2008, at almost 14 per cent, is approximately double that of the SILC 2008 (circa 7 per cent).

³⁶ The NUTS classification (nomenclature of territorial units for statistics) is an EU system for dividing up the economic territory of the EU for a number of purposes. The numbers 1 to 3 refer to the size of the regions in the NUTS system. Ireland is a NUTS 1 region and it is divided into two NUTS 2 regions, which are further divided into a combined total of eight NUTS 3 regions. For details, see: http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction

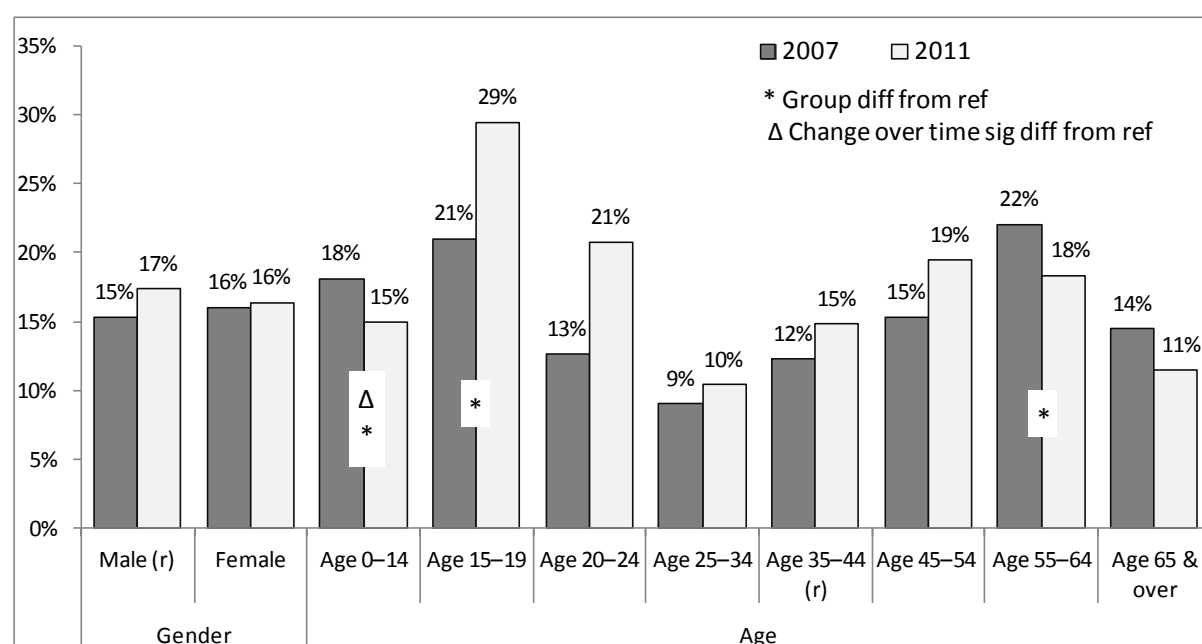
the poverty level with the onset of the recession was the fact that social transfers became more effective at closing the gap left by the fall in incomes from work and the fact that the poverty threshold itself fell by almost 10 per cent between 2009 and 2011 (CSO, 2013, Table A; Watson and Maître, 2013).

In the following we show the model-estimated percentage of individuals in each group in the two time periods who lived in households below the national income poverty threshold. This is the level of poverty we would expect having controlled for other characteristics. The controls include membership of other groups, level of education, region and urban-rural location. The full model for income poverty is shown in Table A3.1 in the appendix to this chapter.

3.3.1 Income Poverty by Gender and Age Group

Figure 3.1 shows the model-estimated percentage of males and females and the percentage of those in each age group who are living in poor households. The gender differences are not statistically significant. This is because most men live in households which also contain women, and vice versa. The only driver of a gender difference would be any differences in poverty status between men and women living alone or as lone parents.

Figure 3.1 Income Poverty by Gender and Age Group, 2007 and 2011 (model-estimated figures, controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011.

Notes: Base = persons of all ages. Analysis by authors. See Table A3.1 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the change over time for the reference category (i.e. significant interaction) in the model-estimated figures.

The differences by age group are more substantial. Compared with the reference age group of adults age 35 to 44, the model-estimated income poverty rate was higher for children and for young adults in the 15 to 19 year age group. It was also higher for adults aged 55 to 64. With other characteristics controlled, the model-estimated poverty rate for children in 2007 was 18 per cent and for adults age 15 to 19 it was 21 per cent compared with 12 per cent for

those aged 35 to 44. The model-estimated rate in 2007 was 22 per cent for adults aged 55 to 64.

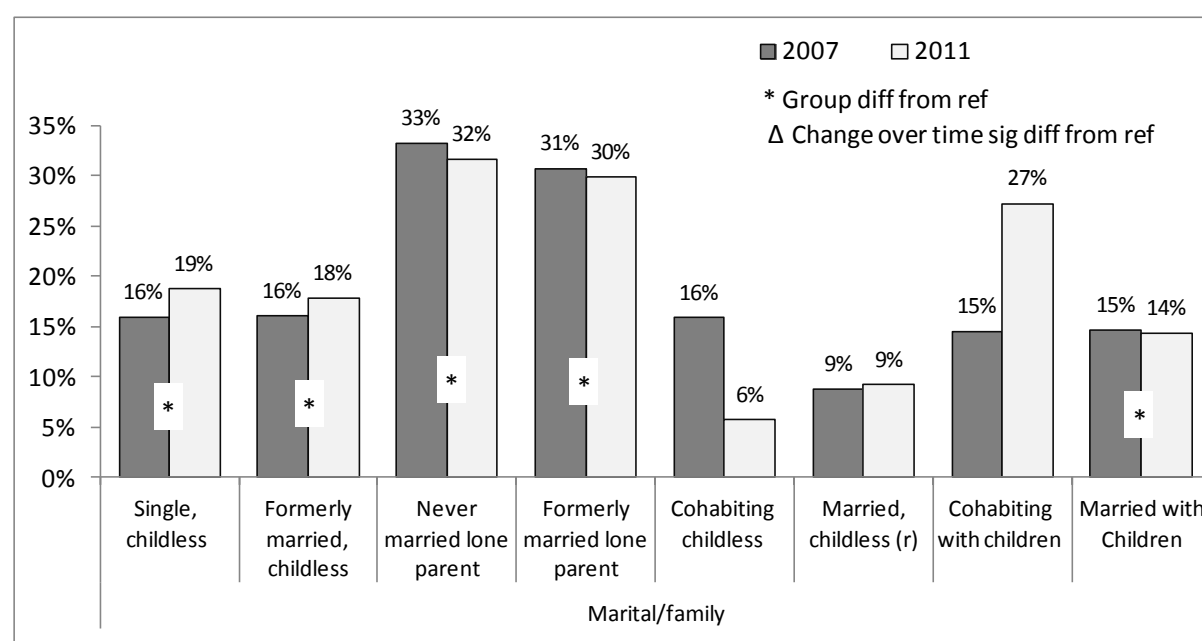
Although the overall change in the poverty rate between 2007 and 2011 was not statistically significant, there was a slight fall in the model-estimated risk for children under 14, with other characteristics controlled, from 18 to 15 per cent. None of the other changes over time were statistically significant.

Finally, it is worth noting that the patterns in Figure 3.1 do not change a great deal between the overall figures without controls (see Figure A3.1 in the appendix to this chapter) and the model-estimated figures shown in Figure 3.1. In other words, controlling for membership in other groups, level of education, region and urban-rural location does not appreciably alter the patterns by gender and age group.

3.3.2 Income Poverty by Marital/Family Status

Figure 3.2 shows the model-estimated poverty risk in the two years by marital/family status. As noted above, we combine the marital and family status variables because it is certain groups at the interface of these two characteristics (such as lone parents) that are likely to be particularly disadvantaged.

Figure 3.2 Income Poverty by Marital/Family Status, 2007 and 2011 (model-estimated controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011.

Notes: Base = persons of all ages. Analysis by authors. See Table A3.1 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category;

* indicates that the group differs significantly from the reference category in the model-estimated figures;

Δ indicates the change over time differed from the change over time for the reference category (i.e. significant interaction) in the model-estimated figures.

Turning first to the differences between the groups in 2007, we see that the highest model-estimated poverty risk was faced by lone parents (both never married and formerly married lone parents, 31 to 33 per cent) and that the risk was also higher for single and formerly married childless adults (both 16 per cent) than for married childless adults (the reference group, 9 per cent). The risk for cohabiting childless adults, which fell considerably, and for

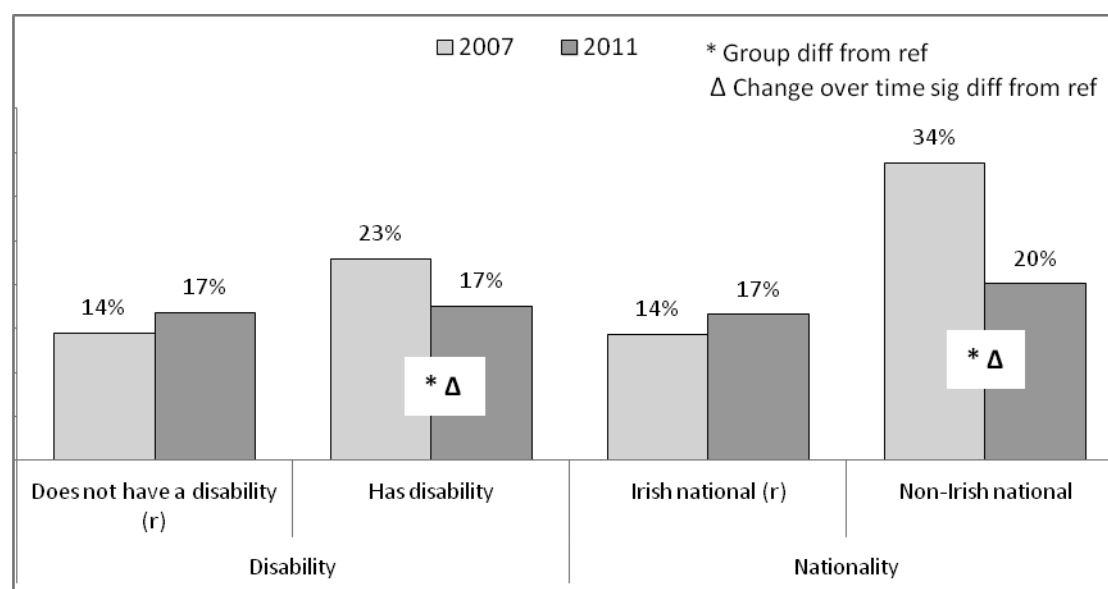
those cohabiting with children, which rose sharply, did not differ significantly from married childless adults, partly because the relatively small size of these two groups (2 to 3 per cent of persons in 2007, see Table 3.1) means that the difference does not reach statistical significance.

As with the results for gender and age, the patterns are not altered a great deal by the inclusion of the controls. The overall figures show the same general pattern (see Figure A3.1). In addition, the changes over time do not reach statistical significance for any of the groups once other characteristics are controlled.

3.3.3 Income Poverty by Disability Status and Nationality

Figure 3.3 shows the model-estimated risk of poverty in the two time periods by disability and nationality. These two groups – people with a disability and non-Irish nationals – share some common features in terms of their experience of poverty. In both cases, we find a large disadvantage in 2007 that had narrowed considerably (non-Irish nationals) or disappeared (people with a disability) by 2011.

Figure 3.3 Income Poverty by Disability Status and Nationality, 2007 and 2011 (model-estimated controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011

Notes: Base = persons of all ages. Analysis by authors. See Table A3.1 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the change over time for the reference category (i.e. significant interaction) in the model-estimated figures.

If we focus on the model-estimated figures, we see that people with a disability had a poverty risk in 2007 that was significantly higher than that of those without a disability (23 per cent versus 14 per cent). By 2011, this gap had disappeared (both at 17 per cent). This improvement in the situation of people with a disability may be linked to the effectiveness of social transfers in keeping those dependent on them out of poverty. Analyses by Watson and Maître (2013) showed that adults with a disability in 2011 depended on social transfers for just over half of their income. This means that the government strategy with respect to maintaining the levels of social transfers in recent budgets (Callan et al., 2013) has benefitted this group, particularly as incomes from work have fallen.

The situation of non-Irish nationals had also improved, although their poverty rate in 2011 remains higher than that of Irish nationals. In 2007, non-Irish nationals had a poverty risk of 34 per cent with other characteristics controlled compared with 14 per cent for Irish nationals. By 2011, the risk had not changed significantly for Irish citizens but had fallen to 20 per cent for non-Irish nationals. Note that the small sample size, particularly for non-Irish nationals in 2007, means that the margin of error around the figure for the model-estimated poverty rate of non-Irish nationals will be relatively wide (about 11 percentage points in 2007 and 5 percentage points in 2011). Information from the SILC survey across a greater range of years suggests that the income poverty rate of non-Irish nationals may have fallen, but not as dramatically as the 2007–2011 figures here suggest. For example, McGinnity et al. (2011, 2012b) report a poverty rate of 18 per cent among non-Irish compared with 14 per cent for Irish nationals using SILC data and the same methodology in 2008, and no significant difference between Irish and non-Irish nationals in 2009.

Some of the fluctuation in the income poverty rates may be due to the small sample for non-Irish nationals. Other sources of variation are the changing composition of the non-Irish group itself over time and selective outmigration of certain groups, as discussed in Chapter 1. There is considerable variation between national groups in terms of poverty risk (McGinnity et al., 2011, 2012b) and part of the overall variation may be due to the changing composition of groups.

Apart from the pattern for non-Irish nationals and people with a disability, there are some other indications that people who were in a more favourable position pre-recession had a more marked deterioration in their poverty circumstances by 2011. For instance, there was a strong reduction in the risk of income poverty in 2007 as levels of education increased (the ‘main effect’ in Table A3.1). However, by 2011 the advantage associated with higher levels of education had been substantially reduced.³⁷

3.3.4 Gender Differences in the Pattern by Age and Marital/Family Status

In the course of this analysis we checked whether the differences between age group or between marital status categories in the risk of income poverty differed for males and females. For instance, we might wonder whether single men and women differ in their poverty risk, as there is some evidence that different processes might lie behind the selection of men and women into remaining single in adulthood (see discussion in Watson et al. 2011, p. 10). We checked whether there were significant gender interactions for age and marital/family status in 2007 or 2011. The results of these checks indicated that the gender interactions were not statistically significant for income poverty. In other words, the poverty circumstances of men and women living outside family households do not differ significantly.

3.4 Basic Deprivation

At this point we turn to a consideration of the second major indicator of social exclusion in Ireland: basic deprivation. As noted above, basic deprivation involves living in a household which is unable to afford two or more of eleven basic goods and services such as adequate food, clothing, heating and the capacity to engage in social activity. While the indicator of income poverty did not show a significant increase overall between 2007 and 2011, the indicator of deprivation more than doubled from 11.8 to 24.5 per cent (CSO, 2013). In this section, we are particularly interested in whether disadvantaged equality groups fared better or worse than average in terms of deprivation between 2007 and 2011. The following sections discuss model results, Figure A3.2 in the chapter appendix presents deprivation rates by group without controls.

³⁷ This can be seen in that the interaction between education and year in Table A3.1 (in the appendix to this chapter) is in the opposite direction to the main effect of education (representing the educational differences in poverty risk in 2007).

3.4.1 Basic Deprivation by Gender and Age Group

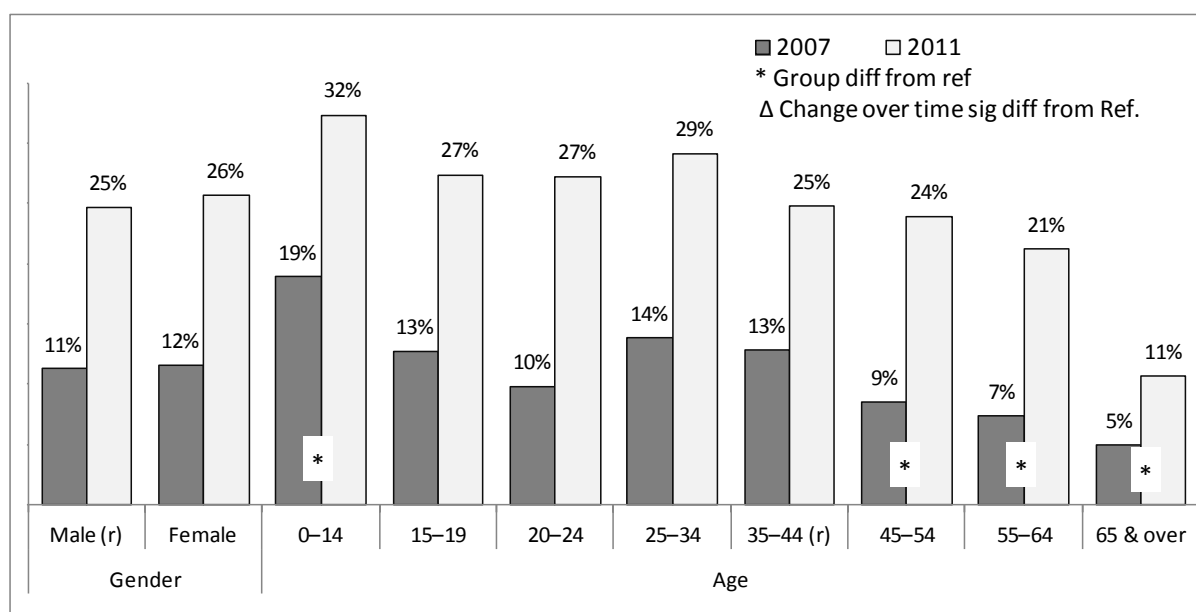
We begin, in Figure 3.4, with an examination of the risk of basic deprivation by gender and age group. As we saw in the case of income poverty, there is no overall gender difference once we control for other characteristics. Again, this is because deprivation is measured at the household level and most men and women live in households with members of the opposite sex. Unlike the situation for poverty, however, we see a very substantial rise in the level of basic deprivation between 2007 and 2011. In 2007, about 11 per cent of people lived in a household experiencing basic deprivation according to the model-estimated figure which controls for other characteristics. By 2011, this had increased to between 25 and 26 per cent.

Turning to the pattern by age group, there were some significant differences by age in 2007, with a general tendency for deprivation to be higher for the younger age groups. Compared with the reference age group – adults aged 35 to 44 – the model-estimated risk of basic deprivation was significantly higher for children (19 per cent versus 13 per cent) and was significantly lower for older adults. The model-estimated risk was 9 per cent for those in the 45 to 54 age group, 7 per cent for those in the 55 to 64 age group and 4 per cent among those aged 65 and over.

There was no significant difference by age group in the change between 2007 and 2011, so that the general pattern of higher deprivation at younger age levels was maintained in the later period. Deprivation risk increased for all age groups at about the same rate. The model-estimated deprivation level in 2011 ranged from a high of 32 per cent among children to a low of 11 per cent among adults aged 65 and over. As in 2007, the deprivation risk was considerably lower for those aged 65 and over (11 per cent model-estimated risk) and higher for children (32 per cent model-estimated risk).

Both the income poverty and basic deprivation indicators show a higher level of disadvantage among children than among adults of retirement age, but the gap is bigger in terms of model-estimated deprivation risk (32 per cent versus 11 per cent in 2011) than in terms of model-estimated poverty risk (15 per cent versus 11 per cent in 2011).

Figure 3.4 Deprivation by Gender and Age Group, 2007 and 2011 (model-estimated controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011.

Notes: Base = persons of all ages. Analysis by authors. See Table A3.2 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category.

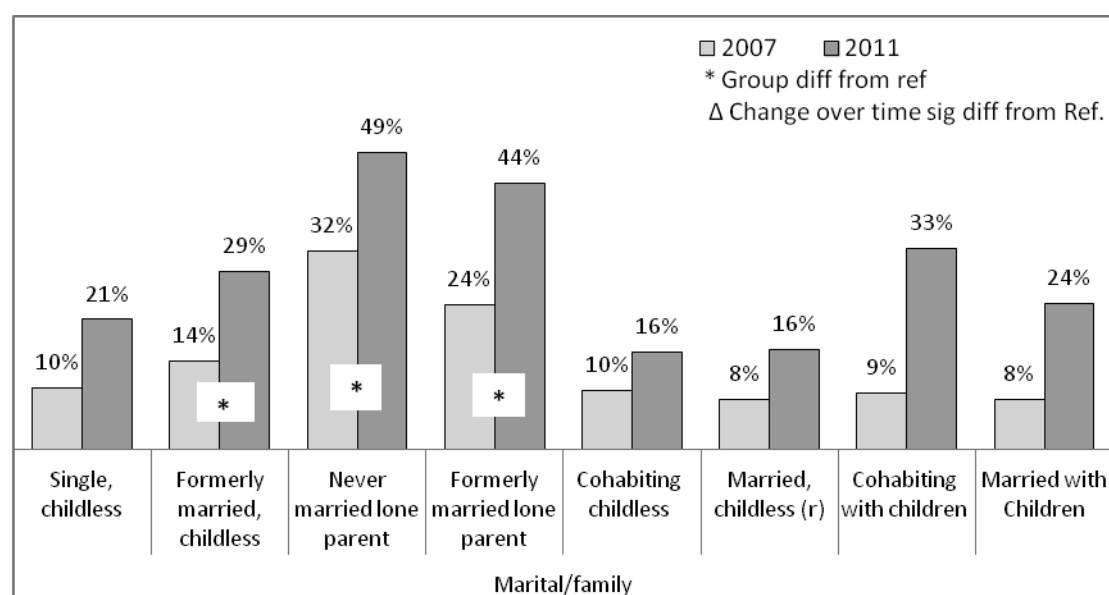
* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the change over time for the reference category (i.e. significant interaction) in the model-estimated figures (none of the year interactions were statistically significant in this chart).

3.4.2 Basic Deprivation by Marital/Family Status

Figure 3.5 looks at the model-estimated risk of deprivation by marital and family status in 2007 and 2011. Turning first to the pattern in 2007, we see that compared with the reference group (married childless adults) the model-estimated risk of deprivation is higher for formerly married childless adults (14 per cent versus 8 per cent) and lone parents (32 per cent for never-married lone parents and 24 per cent for formerly-married lone parents). This is broadly consistent with previous research on these groups. There are rather fewer statistically significant differences between the marital/family status groups for basic deprivation in 2007 than there were for income poverty. In particular, single childless people and married adults with children had a higher risk of income poverty in 2007, but do not have a significantly higher level of basic deprivation.

Figure 3.5 Deprivation by Marital/Family Status, 2007 and 2011 (model-estimated controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011.

Notes: Base = persons of all ages. Analysis by authors. See Table A3.2 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the change over time for the reference category (none of the year interactions were statistically significant in this chart).

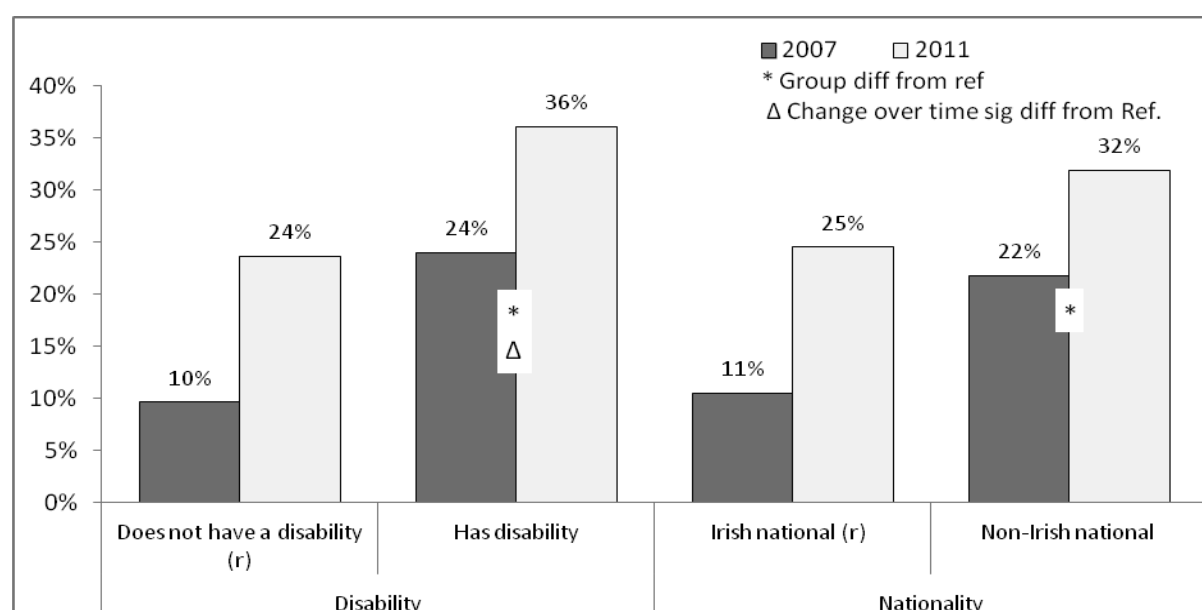
Turning to changes in model-estimated basic deprivation between 2007 and 2011 we see that the increase in deprivation level was similar for all marital/family status groups with sharp rises observed for all groups. This parallels the findings for income poverty, where the relative positions of the groups did not change over time. In the case of basic deprivation, however, all groups were in a significantly worse position in 2011 while there was little difference in the income poverty rates compared with 2007. In 2011, the model-estimated risk of basic deprivation was by far the highest for lone parents: 49 per cent for never married lone parents and 44 per cent for formerly married lone parents. The model-estimated risk of basic deprivation rose sharply for cohabiting couples with children (from 9 per cent to 33 per cent, though it fails to reach statistical significance, due to the small numbers in this group, as was the case with income poverty). The lowest deprivation risk was for married and cohabiting childless couples (model-estimated risk of 16 per cent for both groups).

3.4.3 Deprivation, Disability Status and Nationality

In Figure 3.6 we turn to differences in the risk of deprivation by disability status and nationality. Turning first to disability, we see a significant difference in 2007 in the risk of deprivation by disability. Controlling for other characteristics, the model-estimated risk of deprivation was 24 per cent for people with a disability in 2007 compared with 10 per cent for those without a disability. Deprivation risk increased very substantially for both groups between 2007 and 2011, but the increase was greater for those without a disability so that the gap between the two groups had narrowed by 2011. In 2007, the model-estimated risk of deprivation for people with a disability was about 2.5 times higher than the risk for those without a disability; by 2011 the ratio was reduced to about 1.5 times higher. This narrowing of the gap in the period was something we also observed for income poverty.

Turning to the pattern by broad nationality, we see a very substantial gap between Irish and non-Irish nationals in the risk of deprivation. In 2007, the model estimated risk of deprivation was twice as high for non-Irish nationals as for Irish nationals (22 per cent and 11 per cent, respectively). By 2011, the risk had increased for both groups: to 25 per cent for Irish Nationals and to 32 per cent for non-Irish nationals. The gap may have narrowed somewhat over time, but we cannot be sure that this apparent pattern is not due to statistical fluctuation (see Table A3.2). The gap between Irish and non-Irish nationals in terms of income poverty did narrow significantly over time but the change in the gap over time in basic deprivation was not statistically significant.

Figure 3.6 Deprivation by Disability and Nationality, 2007 and 2011 (model-estimated controlling for other factors)



Source: SILC data for Ireland, 2007 and 2011.

Notes: Base=persons of all ages); analysis by authors. See Table A3.2 in the appendix to this chapter for the full probit model underlying the model-estimated figures.

(r) indicates reference category.

* indicates that the group differs significantly from the reference category in the model-estimated figures.

Δ indicates the change over time differed from the change over time for the reference category (i.e. significant interaction) in the model-estimated figures.

In the discussion of income poverty, above, we found that both people with a disability and non-Irish nationals experienced less of a deterioration in their circumstances than the general population between 2007 and 2011. We also noted that the gap between those with higher education and those with lower education narrowed when it came to income poverty. When we focus on deprivation rather than income poverty, however, only the pattern for people with a disability is statistically significant. We observe a narrowing of the deprivation gap between people with a disability and the general population. There is no narrowing of the deprivation gap between non-Irish nationals and Irish nationals, however, and the gap between those with higher and lower levels of education is not significantly narrowed. The reason for the slightly different patterns for income poverty and basic deprivation is that the two measures are capturing different things. Income poverty relates to the circumstances of a household at a particular point in time, while deprivation tends to capture a longer term command over resources, including access to savings and the presence of unusual expenses and debt. Income poverty focuses on the level of a household's income with respect to the poverty threshold, which represents a very basic level of living. While social transfers have done a reasonably good job in keeping households above this threshold, at

least until 2011 which is the latest Irish SILC data available at the time this study is being written, they are likely to be less adequate in providing for unexpected expenses or in covering debt.

3.4.4 Gender Differences in the Deprivation Pattern by Age and Marital/Family Status

As we do in the case of income poverty, we check whether the age and marital status patterns of basic deprivation differed for males and females. There were some significant three-way interactions in the case of basic deprivation. In general, the model-estimated differences were either small in magnitude or subject to very wide margins of error. For instance, formerly married childless women experienced a greater increase over time in the risk of basic deprivation than their male counterparts. However, the margins of error around the predicted percentages were very wide, so the results are not presented here. Moreover, the general patterns described in the charts above were not substantially altered by the three-way interactions.

3.5 Summary

In this chapter we draw on the SILC data to examine the risk of poverty and deprivation in 2007 and 2011 for groups distinguished on the basis of gender, age group, marital/family status, disability and nationality.

The main strength of the SILC dataset lies in the quality of the information available on household income and living standard. From the perspective of the present analysis, one of the limitations is that the small sample size does not permit a more detailed breakdown of national groups and the measure of disability is a very crude one with no information on the type of disability. Nevertheless, the analysis provides a very useful addition to the focus on working-age adults in other chapters of this report. With the SILC data, we are able to include children and adults above retirement age.

The use of two different indicators of social inclusion highlighted the advantages of using more than one indicator. In particular, the measure of income poverty did not reflect the expected overall decline in living standards between 2007 and 2011 for a number of reasons, including a lag in the measure of income which is based on the previous 12 months; an increase in the effectiveness of social transfers in closing the gap between the poverty threshold and incomes from work and other market sources, and a fall in the poverty threshold after 2009 in response to declining incomes.

The main findings of the analysis are as follows:

- The overall income poverty level was essentially the same in 2011 as in 2007, but it had decreased for some groups (children, people with a disability, non-Irish nationals) so that these groups were less disadvantaged in 2011 than in 2007.
- The highest model-estimated income poverty rates in 2011 were for lone parents (30–32 per cent) and those in the 15–19 age group (29 per cent).
- Overall, basic deprivation increased very substantially between 2007 and 2011, more than a doubling of risk across the population as a whole from 11.8 to 24.5 per cent (CSO, 2013). There was less change in the relative position of the different groups than in the case of income poverty.
- The only group that had a significantly different change pattern in basic deprivation between 2007 and 2011 was people with a disability. The increase in deprivation was smaller for people with a disability so that the gap between this group and those without a disability was narrower by 2011 (36 per cent versus 24 per cent, 1.5 times higher) than in 2007 (24 per cent versus 10 per cent, nearly 2.5 times higher).

- The highest deprivation levels in 2011 were for lone parents (49 per cent for never married lone parents and 44 per cent for formerly married lone parents – model-estimated values); children (32 per cent); cohabiting couples with children (33 per cent), people with a disability (36 per cent) and non-Irish nationals (32 per cent).
- Overall, in terms of poverty and deprivation, the differences associated with marital/family status (especially lone parenthood) were the largest.

If we had been able to identify more specific nationality groups, such as Black African nationals, we might have seen stronger patterns by nationality.

The change over time shows no real ‘winners’, particularly in terms of deprivation which is the indicator which showed the stronger response to the recession. Instead, all groups were pulled downwards and, in general, the gaps between the groups were changed very little. Even those groups that look like they might be winning on the income measure all record an increase in deprivation. For instance, there was some decline in the income poverty rate for children, people with a disability and non-Irish nationals, but all of these groups experienced an increase in the risk of deprivation by 2011.

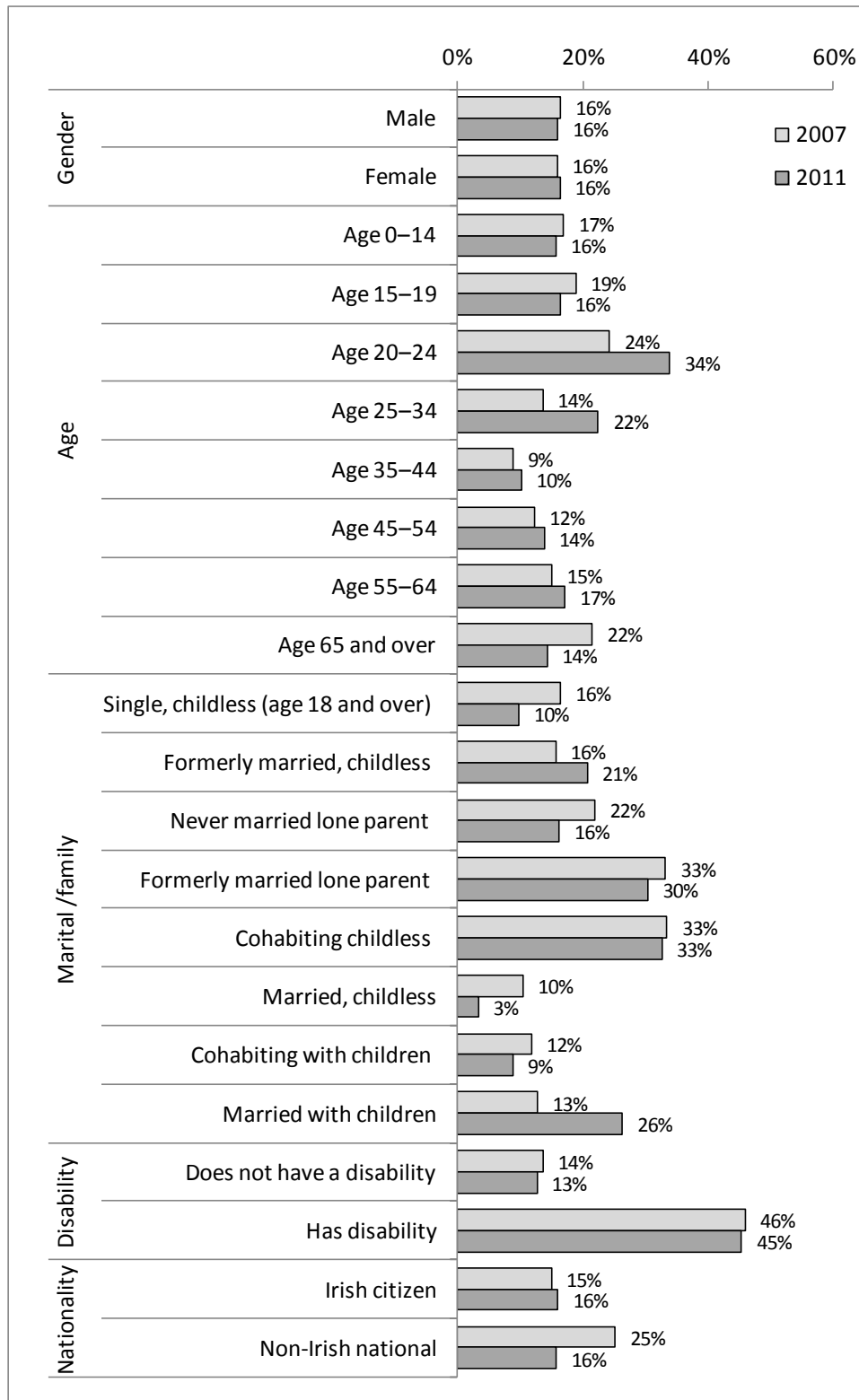
There was some narrowing of the deprivation differentials for people with a disability when compared with the general population. However, this is a levelling downwards linked to job losses among the working-age population without a disability, rather than a substantial improvement for people with a disability.

An analysis of the depth of poverty and extent of deprivation, as opposed to the position of groups with respect to the thresholds, is beyond the scope of the present chapter. However, a characteristic of the recession in Ireland was that the largest losses were experienced by those who had been relatively advantaged before the recession. There was a marked reduction in income from market sources such as work and property (Watson and Maître, 2012). Market sources account for most of the income in higher-income households. In terms of job losses, Watson, et al. (2012) also note that there was a greater reduction in full-time work among men than among women. We see some evidence of greater losses among advantaged groups here, also, where the poverty gap between those with the highest and lowest levels of education narrowed between 2007 and 2011 (Table A3.1). A government commitment to maintaining the levels of weekly social welfare payments meant that the levels of social transfers in real terms actually increased in real terms between 2007 and 2009 (Watson and Maître, 2013). This means that it is unlikely that the poverty gap of disadvantaged equality groups relative to more advantaged groups has deteriorated. Nevertheless, there may have been changes in their relative position with respect to some outcomes we did not examine here, such as the depth of deprivation or the persistence of poverty.

Moreover, by focusing on poverty and deprivation, in this chapter we consider differences between the equality groups at the bottom of the income distribution. Patterns of change between groups for high or even median incomes may be rather different. Another feature of the analysis in this chapter is that the outcomes (income poverty and basic deprivation) are measured at the household level. As such, they do not take account of differences between individuals living in the same household. For instance, we found no significant gender differences in poverty and deprivation – both assessed at the household level. This is in contrast to the results reported by Keane et al. (forthcoming) who find that the recession had a stronger impact on the individual incomes of women than of men. Their analysis focused on individual incomes and took account of the whole range of the income distribution, whereas the analysis in this chapter focused on the household level and the lowest part of the income and living standard distribution.

Appendix to Chapter 3

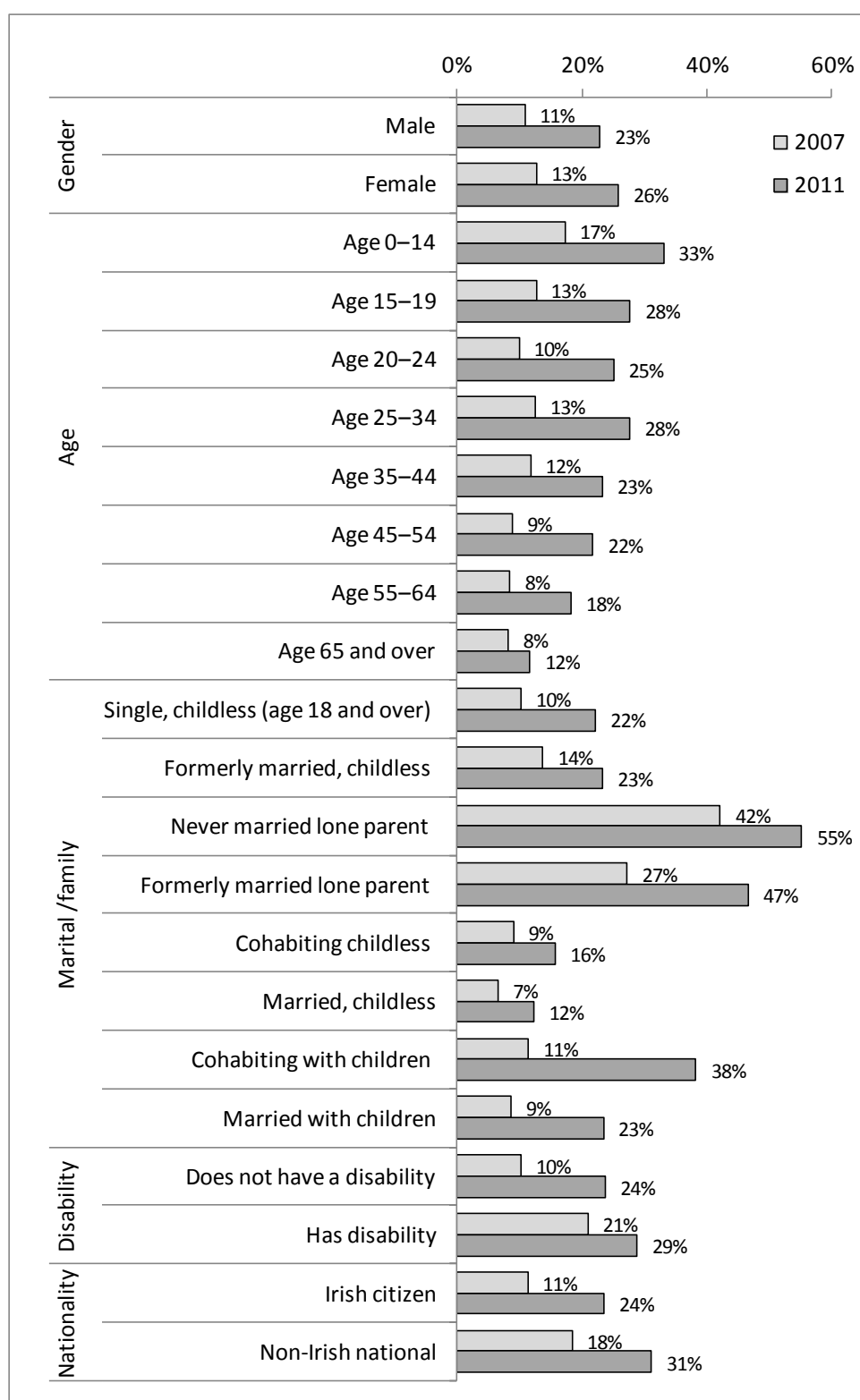
Figure A3.1 Income Poverty Rate by Group, 2007 and 2011 (overall levels, with no controls)



Source: EU SILC, 2007 and 2011

Notes: Analysis by authors. base = persons.

Figure A3.2 Deprivation Rate by Group, 2007 and 2011 (overall levels, with no controls)



Source: EU SILC, 2007 and 2011.

Notes: Analysis by authors. Base = persons.

Table A3.1 Probit Model for Income Poverty with Control Variables (probit coefficients)

		Main Effect		Year Interaction	
		Coefficient	Standard error	Coefficient	Standard error
Constant		-1.425**	(0.130)		
Gender	Male	(ref.)			
	Female	0.032	(0.034)	-0.075	(0.048)
Age	Age 0–14	0.283**	(0.077)	-0.276**	(0.097)
	Age 15–19	0.402**	(0.098)	0.141	(0.140)
	Age 20–24	0.020	(0.126)	0.226	(0.183)
	Age 25–34	-0.199	(0.125)	-0.032	(0.157)
	Age 35–44	(ref.)			
	Age 45–54	0.156	(0.096)	0.040	(0.142)
	Age 55–64	0.441**	(0.108)	-0.288	(0.171)
	Age 65 and over	0.114	(0.106)	-0.285	(0.177)
Marital/family	Single, childless	0.395**	(0.087)	0.074	(0.136)
	Formerly married, childless	0.399**	(0.105)	0.032	(0.148)
	Never married lone parent	1.024**	(0.184)	-0.120	(0.247)
	Formerly married lone parent	0.947**	(0.157)	-0.096	(0.240)
	Cohabiting childless	0.392	(0.290)	-0.659	(0.375)
	Married, childless	(ref.)			
	Cohabiting with children	0.331	(0.245)	0.437	(0.308)
	Married with children	0.334**	(0.100)	-0.052	(0.163)
Disability	Missing family/marital status	1.109**	(0.294)	0.071	(0.404)
	Does not have a disability	(ref.)			
Nationality	Has disability	0.360**	(0.060)	-0.328**	(0.089)
	Irish citizen	(ref.)			
Education of householder	Non-Irish national	0.740**	(0.182)	-0.593**	(0.213)
	Lower second level or less	(ref.)			
	Higher second level	-0.441**	(0.115)	0.275	(0.153)
	Lower third level	-0.603**	(0.153)	0.501 *	(0.221)
	Higher third level	-0.818**	(0.120)	0.345 *	(0.157)
Region	Missing education	-0.429	(0.336)	0.322	(0.397)
	Dublin	-0.156	(0.113)	-0.137	(0.160)
	BMW	0.205 *	(0.091)	-0.080	(0.123)
	Southern & Eastern	(ref.)			
Urban/rural	Urban	(ref.)			
	Rural	-0.009	(0.090)	0.084	(0.122)
Year	2007	(ref.)			
	2011	0.153	(0.206)		
Observations		24,680			

Source: EU SILC, 2007 and 2011

Notes: Analysis by authors; base = persons. The table shows a model with interaction effects. The interaction effects are shown in Columns 3 and 4 to make the table more compact.

(ref) indicates reference category.

** statistically significant at $p < 0.02$

* statistically significant at $p < 0.05$.

Table A3.2 Probit Model for Basic Deprivation with Control Variables (probit coefficients)

		Main effect		Year interaction	
		Coefficient	Standard error	Coefficient	Standard error
Constant		-1.291**	(0.130)		
Gender	Male	(ref.)			
	Female	0.017	(0.038)	0.018	(0.049)
Age	Age 0–14	0.295**	(0.071)	-0.053	(0.083)
	Age 15–19	-0.002	(0.098)	0.089	(0.134)
	Age 20–24	-0.180	(0.122)	0.263	(0.167)
	Age 25–34	0.055	(0.109)	0.087	(0.134)
	Age 35–44	(ref.)			
	Age 45–54	-0.270**	(0.096)	0.240	(0.129)
	Age 55–64	-0.367**	(0.121)	0.239	(0.162)
	Age 65 and over	-0.594**	(0.129)	-0.019	(0.175)
Marital/family status	Single, childless	0.127	(0.095)	0.063	(0.131)
	Formerly married, childless	0.369**	(0.106)	0.082	(0.148)
	Never married lone parent	1.037**	(0.169)	-0.040	(0.222)
	Formerly married lone parent	0.749**	(0.153)	0.111	(0.219)
	Cohabiting childless	0.100	(0.257)	-0.123	(0.318)
	Married, childless	(ref.)			
	Cohabiting with children	0.075	(0.270)	0.491	(0.318)
	Married with children	0.006	(0.113)	0.276	(0.156)
	Missing family/marital	0.477	(0.284)	-0.038	(0.417)
Disability	Does not have a disability	(ref.)			
	Has disability	0.687**	(0.061)	-0.286**	(0.090)
Nationality	Irish citizen	(ref.)			
	Non-Irish national	0.552**	(0.139)	-0.309	(0.169)
Education of householder	Lower second level or less	(ref.)			
	Higher second level	-0.499**	(0.132)	0.186	(0.165)
	Lower third Level	-0.393 *	(0.167)	0.174	(0.223)
	Higher third level	-0.695**	(0.119)	0.110	(0.148)
	Missing education	-0.226	(.315)	0.197	(0.383)
Region	Dublin	0.075	(0.105)	-0.175	(0.140)
	BMW	0.262 *	(0.106)	-0.197	(0.134)
	Southern & Eastern	(ref.)			
Urban/rural	Urban	(ref.)			
	Rural	-0.164	(0.103)	-0.039	(0.130)
Year	2007	(ref.)			
	2011	0.502**	(0.184)		
Observations		24,680			

Source: EU SILC, 2007 and 2011.

Notes: Analysis by authors. Base = persons. The table shows a model with interaction effects. The interaction effects are shown in Columns 3 and 4 to make the table more compact.

(ref) indicates reference category.

** statistically significant at $p < 0.02$.

* statistically significant at $p < 0.05$.

4 CONCLUSION

4.1 Introduction

This report sets out to provide a broad overview of the equality impact of the recession, by analysing changes between 2007 and 2011/12 in four key outcomes (employment, unemployment, income poverty, deprivation) for a range of range of equality grounds (gender, age, marital and family status, nationality, and disability). It presents a comparative overview of how different groups fared in terms of outcomes, controlling for compositional differences, rather than a detailed analysis of one particular group. To achieve a readable and informative research report, we needed to make a number of choices, in terms of both the outcomes and the time points, and these have implications for the results presented in this chapter.

Firstly, in terms of outcomes, these were chosen to reflect both labour market change and changes in standard of living. Employment and unemployment are core labour market indicators and closely linked to individuals' ability to achieve income security. Poverty and deprivation are important measures of standard of living and linked to an ability to participate in society. These measures are important and well-established in the literature, but are four of many potential indicators. As noted in Chapter 1, there are a wide range of outcomes, such as wages, consumption, household debt, self-rated health, life satisfaction and child development outcomes, that have not been addressed here but which are also influenced by economic crisis. The standard of living measures also focus on those who lack basic resources, rather than considering the entire income distribution, which might generate a somewhat different picture. Group differences in experiencing income poverty or material deprivation are arguably more salient for quality of life than changes between groups further up the income distribution. We also note that there have been a series of cuts to services that are not measured in this report and these may affect some equality groups more than others.

While in both Chapter 2 and Chapter 3 the focus is on individuals, the labour market outcomes and characteristics (employment and unemployment) are fundamentally attributes of the individual. For poverty and deprivation, following standard measures in research on the topic, household attributes such as household income and deprivation are assigned to individuals. This means all individuals living in the same household will have the same poverty or deprivation outcome. A further issue with income poverty is that the overall levels of income poverty are very similar at the two time points examined, despite a sudden and sharp recession. The fact that income poverty rates do not reflect the fall in living standards associated with the current recession is due to a number of reasons; chief among these is that income poverty is measured relative to the median income and when all incomes are falling, the median income and poverty threshold falls too.

Secondly, this report uses the best available data for the outcomes measured – the QNHS for labour market outcomes and the SILC for poverty outcomes. There are many advantages, as discussed in Chapters 2 and 3 for using each dataset for these outcomes. One disadvantage for this report is that they have very different sample sizes. For statistical modelling purposes, which relies in part on the size of the groups for assessing whether the group differences can be generalised to the population, this means that it will be easier to detect group differences in labour market outcomes than in poverty/deprivation outcomes. Furthermore, the data is drawn from the population resident in Ireland at the time. As noted in Chapter 1, emigration rose rapidly as a result of the crisis, and this means that for some equality groups the impact of the recession on outcomes is likely to be underestimated.

Thirdly, for analytic clarity we focus on two time points, one pre-recession peak and one recent time point. As discussed in the introduction, 2007 was certainly a labour market peak, and the bulk of job losses in the current recession were between 2007 and 2009 (Russell et al., 2014). Household income also peaked around 2007 (CSO, 2013); however, the greatest annual decreases occurred in 2010 and 2011.³⁸ For the most part, social welfare benefits were maintained and in some cases rose until after 2009 (see Chapter 1). Many benefits were cut in the years following 2009; thus for those reliant on social welfare incomes, the period 2007–2011 covers both a rise and fall, and many benefits, though certainly not all, were at similar levels in both years. The level of fall in income and rise in deprivation over the economic crisis will therefore partly be influenced by the starting point chosen.

A further point to note is that in any comparison of two time points, we cannot rule out that some of these changes would have happened anyway, whether or not there had been a recession. We would argue that the change in employment, unemployment and deprivation is so dramatic for this time period and in general consistent with expectations, that the evidence strongly suggests that recession played a strong role.

To investigate differences between groups in these outcomes in the boom and recession periods and whether these differences have changed over time, this report uses statistical modelling. The purpose of these models is to identify the characteristics that were most important in accounting for outcomes like employment, unemployment, poverty and deprivation, particularly when several characteristics of the individuals are interrelated. In this conclusion we focus on modelled employment, unemployment, income poverty and deprivation risks experienced by each group controlling for other characteristics, i.e. the range of equality grounds (age, family/marital status, gender, and nationality), education level and geographical location.³⁹ This can also be referred to as the net outcome for the characteristic in question. The modelled results differ from the headline employment, unemployment and poverty figures because they hold constant other differences between groups such as education and age, and estimate the ‘net’ effect of the characteristic of interest, such as gender. We also reflect in this chapter on the extent to which the evidence supports or refutes the expectations discussed in Chapter 1.

4.2 Gender

The labour market crisis in Ireland has had a strong gender dimension. Job losses have been particularly dramatic in male-dominated sectors of the economy, while some sectors with a higher proportion of female workers such as health and education have been better sheltered from unemployment. These sector-based trends have resulted in a greater convergence of employment levels between men and women and a growing gap in their unemployment rates. This is broadly consistent with the expectation articulated in Chapter 1 that sectoral segregation would protect women from job loss. Other factors have also influenced this gendered pattern of unemployment, including the higher educational qualifications of women, particularly younger women.

In previous recessions it has been argued that women’s unemployment was frequently hidden in rising inactivity rates as women were discouraged from joining the labour market or re-entering following periods of childcare (Rubery et al., 1998, 1999). In contrast, during the current recession female levels of labour market activity have been better sustained than

³⁸ At the time of writing, 2011 is the latest representative data on incomes in Ireland from SILC.

³⁹ As is noted in Chapter 1, the surveys used do not include information on sexual orientation, religion or membership of the Traveller Community.

male activity rates. This refutes the idea that women have acted as labour market ‘buffers’ in the current recession.

While the employment gap between men and women has narrowed from 16 per cent in 2007 to 8 per cent in 2012,⁴⁰ this should be seen as a ‘levelling downwards’. Irish women’s employment rates grew rapidly during the economic boom, but had only just reached the European 2010 targets of 60 per cent by 2007 (Russell et al., 2014). The economic downturn has resulted in women falling below this target rate again. Moreover, there remain significant differences in the working hours and working conditions of men and women, some of which have deteriorated over the recessionary period (Russell et al., 2014). Gender segregation in the labour market is likely to continue to influence patterns of employment during recovery, and continued retrenchment in the public sector may mean female concentration in these jobs would become disadvantageous. This pattern has also been evident in the British labour market (Rubery and Rafferty, 2013).

Gender differences in labour market outcomes vary by age. In terms of employment and participation rates, the greatest differences are now among women and men aged under 25 years. Participation and employment rates are much lower among young women than young men; the discussion suggests this is because young women are more likely to stay on in education. Unemployment rates are higher for young men than young women, but the models suggest that part of this reflects the educational advantage of young women. Once we account for differences in education, the gender gap in unemployment rates is much reduced. Among those aged over 25 years, the male ‘disadvantage’ in unemployment rates increases with age.

While the labour market models consider only individual outcomes, women and men often live together in the same households. Our investigation of poverty and deprivation recognises the wider household context in which individuals are situated. In the case of both income poverty and material deprivation there are no significant differences between men and women when we control for household type, and the changes over the period 2007 and 2011 were the same for both sexes. However, as we see below, the poverty and deprivation risks of lone parents – most of whom are women – were substantially higher in both periods.

It should be noted that income poverty and basic deprivation are measured at the household level and assume equal sharing of resources between individuals living in the same household. This is in contrast to the study by Keane et al. (forthcoming), which focuses on individual incomes and takes account of the whole range of the income distribution, whereas the analysis in this report focused on the household level and the lowest part of the income distribution. Using this alternative methodology Keane et al. (forthcoming) find that the recession had a somewhat stronger impact on the individual incomes of women than of men.

4.3 Age Group

In an analysis of household consumption patterns, Gerlach-Kristen (2013) concluded that the main burden of the Irish crisis has been borne by younger households.⁴¹ Does this age pattern persist when we consider labour market and poverty outcomes? The analysis of labour market risks is confined to individuals aged 15 to 64 years, as the vast majority of those outside this age range are not economically active. The results on income and

⁴⁰ When other relevant characteristics were controlled the net employment gap narrowed from 17 per cent in 2007 to 10 per cent in 2010.

⁴¹ Younger households are defined as those where the head of household is aged under 45 years while older households are those headed by an individual aged 45 or over.

material deprivation have no such cut-off and so include both children and adults aged 65 and over.

The employment and unemployment results show a clear disadvantage among the youngest age groups. While the employment rates of all age groups fell during recession, the situation of those aged 15 to 19 years and 20 to 24 years was found to have deteriorated most relative to the 35 to 44 age group (holding characteristics such as education, nationality and family status constant). For those aged under 20 years, declining employment partly reflected greater participation in education and training, which in itself may be a response to more difficult labour market conditions. However, it was also due to an exceptionally high unemployment rate among those active in the labour market. Net of other characteristics, including education, 15 to 19 year olds had a predicted unemployment rate of 24 per cent and the unemployment gap between young and prime-age workers had widened during the recession.

Those aged 20 to 24 years old experienced the greatest net fall in employment between 2007 and 2012 and, along with the under 20 group, had the highest predicted unemployment rate. This unemployment rate had grown significantly faster than for the reference group (35 to 44 years). Those aged 20 to 24 years also experienced the additional disadvantage of a high NEET rate, meaning that rising rates of inactivity did not represent growing education or participation in training.

At the other end of the age scale, unemployment among those aged over 45 was significantly lower than for the 35 to 44 reference group; however, the advantage enjoyed by the oldest age group (55–64) declined over the period of the recession. Employment levels among those aged 45 to 54 years did not differ from those aged 35 to 44 and both groups experienced the same fall in employment. Those aged 55 to 64 years have significantly lower employment rates than those aged 35 to 44, but the gap between these two groups declined during the economic downturn.

These results suggest that while all age groups have been affected by the contraction of the labour market, the groups hardest hit are those aged under 25 years. Net unemployment levels and falls in employment did not differ for the two prime working age groups (35–44; 45–54), though for the 25–34-year-old group, employment fell and unemployment rose somewhat more than for the reference group (35–44). The impact of the recession on the relative situation of older workers aged 55–64 is somewhat mixed: part of the lower unemployment rate enjoyed by this group has been eroded since 2007, but their employment was less severely hit than was the employment of the 35–44 age group.

A somewhat similar pattern emerges in relation to poverty. Highest net rates of income poverty are recorded for the youngest age groups: children and young adults up to 19 years. The overall risk of income poverty was stable across the period observed, but there was some narrowing of the gap between the age groups. When we consider deprivation, we see a higher risk for children and young adults than for older adults. We see no shift in the relative positions of the different age groups in terms of deprivation over time, so that deprivation levels remain higher for children and lower for older adults in 2011.

4.4 Family/Marital Status

The report finds significant differences between family/marital status groups in both labour market and poverty outcomes. As noted above, family and marital status are strongly linked to age and can have different effects depending on the gender of the respondent. The results discussed here are the effects of the family and marital status of individuals, net of

these other characteristics. Further research would be required to present the complex interplay between age, gender and family/marital status in terms of labour market and poverty outcomes.

Employment rates fell for all groups. Falls were sharpest for single childless adults and cohabiting adults, with and without children. All these falls differed significantly from the fall in employment rates for married childless adults. By 2012, employment rates were lowest among lone parents, those cohabiting with children, formerly married and single childless adults.

In 2012, levels of modelled unemployment risk were highest among never married lone parents (25 per cent), formerly married childless (21 per cent) and those cohabiting with children (22 per cent). The latter two groups were found to have experienced a steeper rise in unemployment relative to the married childless reference groups over the period of recession. One possible reason for this is their overrepresentation in the construction sector, see Table A.2.1 above. Unemployment also increased disproportionately among individuals married with children although this rise was from a low base.

These trends mean that marital/family differences in labour market outcomes became more pronounced during the recession and that groups not traditionally seen as disadvantaged – i.e. those cohabiting with children and the formerly married childless group – are emerging as disadvantaged groups.

Turning to income poverty, we see a higher risk for those with children – especially lone parents – and for single or formerly married adults compared with married childless couples. When we consider deprivation, it is the lone parents and formerly married adults who show a higher net risk compared with married childless couples. In both 2007 and 2011 income poverty and deprivation were highest for lone parents, among whom 30–32 per cent were in income poverty and 44–49 per cent were materially deprived in 2011. Formerly married childless individuals also had higher deprivation rates (29 per cent in 2011) and income poverty rates (18 per cent in 2011). With other factors controlled, married couples with children and single adults do not have a higher deprivation risk. The recession was found to have no significant effect on family/marital status differences in income poverty and deprivation. By 2011, cohabiting couples with children had a relatively high income poverty and deprivation risk, following a sharp rise in both, though the small group size means the change over time was not significantly different from the change for married childless couples. While there was a sharp increase in deprivation for all marital/family groups, pre-recession patterns of advantage and disadvantage were, in general, maintained. Similarly there was no change in the relative income poverty risks of the groups over time.

The results do not distinguish between the number of children in the family, although in calculating the income poverty rate an adjustment is made for household composition. Therefore the analysis does not pick up the heightened level of poverty and financial stress experienced by those with larger families in recent years that has been noted in other research (Watson et al., 2012; Whelan and Maître, 2010).

4.5 Nationality

The economic boom in Ireland was associated with large scale immigration of non-Irish nationals, which led to a significant increase in the proportion of non-Irish nationals in Ireland. With recession there has been a rapid increase in emigration, particularly of NMS nationals in the 2008–2010 period (McGinnity et al., 2013). In spite of this rising emigration,

the 2011 Census still recorded 12 per cent of the total population as non-Irish – 8.5 per cent came from other EU countries, and 3.5 per cent were non-EU nationals.

The model results show that pre-recession, in 2007, migrants from the new member states had higher employment rates than Irish nationals, migrants from the EU13 (that is, the older 15 EU member states excluding Ireland and the UK) had the same employment level as natives, and all other non-Irish nationals had lower employment rates. Between 2007 and 2012 employment fell significantly for all nationalities and in most cases this fall was of the same magnitude experienced by Irish workers, resulting in the persistence of pre-recession differentials. There were two exceptions to this pattern: NMS nationals experienced a greater decline in employment relative to Irish nationals, and African nationals experienced a smaller fall, although the disadvantage faced by this group remained substantial.

Overall, non-Irish nationals are more likely to be unemployed than Irish nationals. Their net unemployment rose from 6 per cent to 20 per cent in 2012, but the change was not significantly different from the rise for Irish nationals. National groups differ somewhat in the experience of change over time: the disadvantage of British nationals remained the same; the position of North American/Australian migrants improved and the unemployment rate of NMS nationals and African nationals increased more than for Irish nationals. African migrants experienced the highest unemployment risk at both time points with a modelled rate of 14 per cent in 2007 and 37 per cent in 2012. Unemployment among migrants from the old EU13 had the same rate of unemployment as Irish-nationals.

In 2011 just under one-third of the non-Irish nationals were found to be experiencing basic deprivation compared with one-quarter of Irish nationals (modelled results), up from 22 per cent and 11 per cent in 2007 respectively. The situation of both groups was found to have deteriorated equally during the crisis period so the disadvantage of non-Irish nationals was stable over time. The income poverty measure behaved in a contradictory way over the same time period, with income poverty actually falling for non-Irish nationals between 2007 and 2011. As mentioned above, the drop in the poverty threshold over the recession means that it does not adequately capture declines in living standards. In addition, poverty figures for migrants in 2007 are based on a relatively small sample size and were unexpectedly high in the earlier year (McGinnity et al., 2012b).

Overall, these results do not suggest that migrants have suffered disproportionately during the economic crisis but rather that pre-recession disadvantages, which were very considerable for some migrant groups, persisted. Part of explanation may be that the differences by sector were not as pronounced as for, say, gender. Non-Irish nationals are overrepresented in the accommodation and food sector, which contracted, but not particularly concentrated in, for example, construction, which experienced the largest contraction. The exception to this is NMS nationals who experienced a higher than average fall in employment rates, a (somewhat) higher than average rise in unemployment and high net emigration in the recession. If any migrant group were to be described as labour market 'buffers' as described by Borjas (2001), it would be this group.

4.6 Disability

The association between disability and labour market outcomes could be examined only for the years 2004 and 2010. In 2010, people with a disability still had a much lower rate of labour market participation than those without a disability (36 per cent versus 77 per cent), a lower level of employment (28 per cent versus 65 per cent) and a higher unemployment rate (22 per cent versus 16 per cent). Models estimated by Watson et al. (2013) show that the labour market disadvantage experienced by people with a disability remained relatively

stable between 2004 and 2010 even though the unemployment risks increased substantially for both groups. Controlling for other characteristics, those with a disability were almost 6 times more likely to be economically inactive than those without a disability and this gap was unchanged between 2004 and 2010 though the likelihood of inactivity increase 1.17 times for both groups (ibid, p. 53).

Between 2007 and 2011 there was a narrowing in the income poverty differentials and deprivation gap between people with a disability and those without. However, this is due to a levelling downwards in conditions linked to job losses among the working age population without a disability rather than an improvement for the disabled group. This finding does lend credence to the idea discussed in Chapter 1 that in a labour market recession those less dependent on income from employment experienced less of a change in their incomes than those dependent on the labour market, at least for those with a disability who did not work.

4.7 Summary of Change over Time

Table 4.1 gives a summary of the change over time in the relative disadvantage of selected equality groups between 2007 and 2012. This table does not aim to be comprehensive, but rather to broadly summarise how selected disadvantaged or potentially disadvantaged groups fared in the period relative to the reference category. Some groups were disadvantaged on some but not all outcomes. Some were also very disadvantaged in both years, but the extent of this disadvantage did not change over time.

Table 4.1 Change Over Time in the Relative Disadvantage of Selected Equality Groups, 2007–2012

‘Disadvantaged’ Groups in 2007	Employment rate change: same, better or worse than reference group?	Unemployment rate change: same, better or worse than reference group?	Income poverty change over time: same, better or worse than reference group?	Deprivation change over time: same, better or worse than reference group?
Mean change (modelled risk)	Down 17% (from 70% to 58%)	Up 220% (from 4.5% to 14.5%)	No change (circa 16% in both years)	Up 100% (from 12% to 24.5%)
Women	Better	Better	Same	Same
Under 25s (v. 35–44)	Worse	Worse	Worse	Same
Over 55 (v. 35–44)	Better	Better	Better	Same
Children (v. 35–44)	Not applicable	Not applicable	Better	Same
Lone parents (v. married childless)	Same	Same	Same	Same
Cohabiting parents (v. married childless)	Worse	Worse	(Worse) ¹	(Worse) ¹
Formerly married childless (v. married childless)	Same	Worse	Same	Same
Single childless (v. married childless)	Worse	Same	Same	Same
Non-Irish nationals	Not applicable	Not applicable	Better	Same
African nationals	Better	Worse	Not applicable	Not applicable
NMS nationals	Worse	(Worse) ¹	Not applicable	Not applicable
Disabled	Not applicable	Not applicable	Better	Better

Notes: This table summarises model results from Chapter 2 and Chapter 3. The focus is relative change compared with the change for the reference group. A group can remain very disadvantaged in both years, but if the relative change is the same as the reference group it is recorded as ‘same’ (e.g. this is the case for lone parents).

¹ Change not statistically significant, though substantial.

From Table 4.1 we see that women, though they have lower employment rates, experienced less of a fall relative to men. For unemployment rates, women experienced less of a rise than men. Young people (under 25) experienced more negative change in the labour market and in income poverty. Lone parents experienced a change of similar magnitude to married childless couples, though they were much more disadvantaged both in terms of labour market and income outcomes in both years. Cohabiting couples experienced more negative change than married childless couples in all four outcomes, though the small size of the group means the financial outcomes are not statistically significant. African nationals saw a better than average change in employment but worse for unemployment; new member state nationals saw worse outcomes for both. Those with a disability saw a less negative change than those without a disability in terms of income outcomes, but this is from a very disadvantaged position (see Chapter 3).

4.8 Policy Implications

One clear finding of this report is the exceptionally high unemployment rates among young people, even after controlling for education and other characteristics. As well as the current negative impact on the income and quality of life of young people, one concern is with scarring effects, that is, how early difficulties with the transition to work can have knock-on effects for individuals' later career trajectories and well-being (Bell and Blanchflower, 2011). The study by Kelly and McGuinness (2013) of transitions among young people found that the disadvantage facing young unqualified individuals had become more pronounced. Young unemployed people with no qualifications face a very high risk of unemployment.

These results highlight a number of measures which could be considered. Firstly, educational interventions are needed to prevent early school leaving, as it is those who leave school early who are most vulnerable to unemployment. While rates of completion of upper secondary education have increased over the past decade (Department of Education and Skills, 2012), there is a need for continued efforts to retain those who are disengaged from schooling. Byrne and Smyth (2010) highlight not only the need for initiatives to support retention in school, but also that acquiring qualifications is important for these young people. Secondly, there is the issue of retraining for the under-25 age group. The objective of this would be to enhance the skills of young people in those areas where jobs are likely to emerge in the future. Training tends to increase job prospects, but it is important that the training relates to skill demands in the labour market (Kelly et al., 2013).

Social welfare policy in the recession emphasised maintaining levels of the main social welfare payments. This has been effective in protecting certain vulnerable groups from the effects of the recession. This was particularly true for older adults (65+), though perhaps less true for those of working age. As noted above, we do find evidence supporting the broad expectation expressed in Chapter 1 that those less dependent on the labour market experienced less of a change in their incomes than those dependent on the labour market, at least for the groups whose benefits were maintained (for example, those on fixed retirement incomes and people with a disability who do not work). Whether this is maintained in later years of austerity – 2012 and 2013 – remains to be seen. Callan et al (2013) show that Budget 2014 had its greatest impact on low income groups.

In terms of the equality grounds, it was groups based on the marital and family status ground (especially lone parents) who show a particular disadvantage with levels of poverty and deprivation among the highest. The size of the disadvantage experienced by lone parents remained stable over the period of the recession.

The analysis in this report finds that the substantial difference in income poverty and deprivation levels between people with a disability and those without narrowed somewhat over the period of the recession. Part of the explanation for these relative income trends lies in the higher reliance of this group on social welfare payments and lower integration into the labour market. Participation rates remain much lower for people with a disability, and are low by international standards (Watson et al., 2013). The 2006 National Disability Survey found that 24 per cent of people with a disability were at work. Of the remainder, 37 per cent would be interested in work, in the right circumstances – amounting to 28 per cent of people with a disability (Watson and Nolan, 2011). In addition, cuts in services, which are not covered in this report, may be particularly relevant for this equality group.

It is challenging to identify any clear 'winners' in the current recession, at least in terms of equality groups. What we can say is that in the labour market young people and men have seen labour market conditions deteriorate significantly, while labour market outcomes have changed less for women, prime-age and older workers, though all groups have seen a

decline in employment and a rise in unemployment. Employment rates of NMS nationals also fell sharply and unemployment might have risen more were it not for a rapid increase in emigration among this group. Other labour market outcomes for non-Irish nationals show a broadly similar pattern to Irish nationals, though overall non-Irish nationals are disadvantaged in both years.

In terms of income poverty and deprivation, in general the living standards of those with a disability and older adults (65+) were less affected by the recession than other groups, at least by 2011, partly because of their reliance on social welfare incomes. Many of the other groups experienced a sharp fall in living standards but for the most part, pre-recession group differences were maintained: the 'winners' and 'losers' were the same 'winners' and 'losers' as in the economic boom.

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METHODOLOGICAL APPENDIX

The statistical analysis involves Probit models are run in STATA, using the 'svy' procedure for analysis of complex sample designs. The 'svy' procedure allows the analysis of weighted data, while correcting standard errors for the effects of sample weighting (StataCorp, 2013; Heeringa et al., 2010). The probit models are appropriate when the outcome of interest is binary (Long and Freese, 2006).

The probit coefficients can be difficult to interpret, however, so the results are presented as the expected percentage in each outcome category, such as the expected percentage unemployed, with other variables held constant (Long and Freese, 2006). This is accomplished using the 'margins' command in Stata (Williams, 2012). Essentially, this routine reports the average expected value of the outcome variable, such as the expected percentage unemployed, for each group. These are the 'Average Marginal Effects' (AME) as defined by Williams (2012). In setting up the probit model, all of the categorical variables such as nationality and marital status categories are explicitly entered as categorical variables rather than as a series of dichotomous variables. This ensures that when the expected outcome is being calculated for Irish nationals, for instance, all of the other nationality categories are set to 'zero' rather than according to the population distribution of each other national group.⁴² In other words, someone who is an Irish national cannot also have partial membership in any other nationality group – something which would not be clear if the model estimation included a set of dichotomous variables.

⁴² If a set of dichotomous variables were included in the model for the marital status categories, the predicted percentage unemployed for married childless adults, for instance, would be calculated assuming that a certain proportion of the married childless population was married with children, single and childless and so on. This is because when a series of dummy variables are entered into a model, the prediction does not constrain the other dummy variables in the set to have a value of 'zero' when 'married childless' has a value of 'one' (see discussion in Williams (2012)).

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