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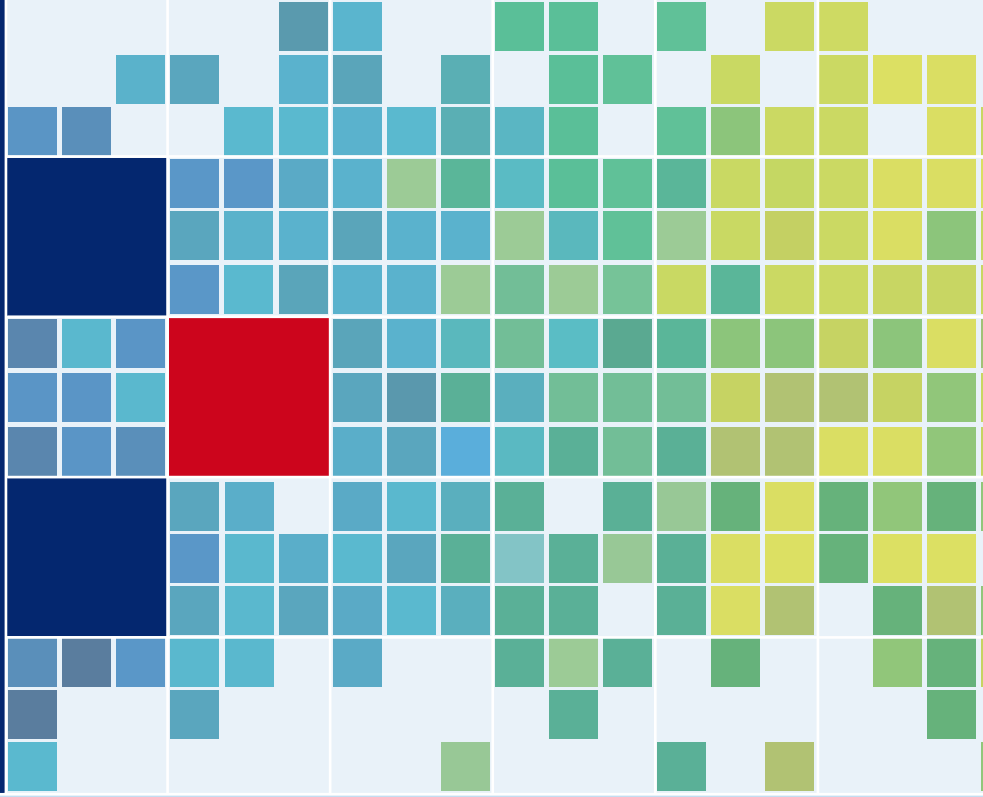

A Woman's Place

Female Participation in the Irish Labour Market

Helen Russell, Frances McGinnity,
Tim Callan & Claire Keane

THE EQUALITY AUTHORITY
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ESRI

A WOMAN'S PLACE: FEMALE PARTICIPATION IN THE IRISH LABOUR MARKET

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The views expressed in this report are those of the authors and do not necessarily represent those of The Equality Authority or The Economic and Social Research Institute.

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FOREWORD

A Woman's Place: Female Participation in the Irish Labour Market is the sixth report arising from the 'Research Programme on Equality and Discrimination' which is being carried out by The Economic and Social Research Institute on behalf of The Equality Authority. Drawing on a wide range of evidence, this research describes how women's participation in the labour market has changed since the mid-1990s and examines whether changing participation has been associated with a narrowing of gender differentials in pay and occupational position.

Over the long term we have been moving towards greater gender equality in labour market participation. Nevertheless, women remain much less likely to be in the labour market than men. There are both pull and push factors at work here - for women and for men. For women, one push factor is their unequal treatment within the labour force - on average they are paid less and have less access to more privileged positions. Viewed from another perspective this is a pull factor for men. A second factor is that the labour market and the workplace remain less than accommodating to those men and women who are trying to combine work and family commitments Both these factors help to explain why women are less likely to be in employment and - when employed - are more likely to work fewer hours and more likely to work in some occupations and sectors than in others.

This research demonstrates that we are still some way from achieving gender equality in the labour market. As a society we need to constantly renew our efforts to ensure equal treatment for women and men in all aspects of employment and to support men and women to positively reconcile work and family life. Right now, in a context where our future as a society is naturally driven by economic debate, it is essential that we do not lose sight of the economic and social benefits of equality - in the labour market and in society as a whole.

We are grateful to Helen Russell, Frances McGinnity, Tim Callan and Claire Keane of the ESRI for their expert and insightful work on this report. Thanks are also due to Laurence Bond, Head of Research with the Equality Authority, for his support to this research project.

Renee Dempsey
Chief Executive Officer
The Equality Authority

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Responsibility for the final content of the report remains solely with the authors.

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EXECUTIVE SUMMARY

This study investigates changes in women's participation in the Irish labour market between 1997 and 2007. The period was marked by strong economic growth, rapid labour market expansion, including a large increase in migrant workers, and significant changes in a number of key policy areas (for example, extensions to maternity leave, the introduction of parental leave, and the establishment of the National Minimum Wage). There were substantial changes in the level and nature of women's labour market participation over this period, and these are the major focus for the current research. The report draws on a wide range of data-sources and research studies to evaluate the nature of these changes in participation, the factors driving change and the consequences for gender equality in the labour market and its wider social implications.

The objectives of the study were fourfold:

1. To describe the nature of recent changes in female participation with a view to establishing which groups have been drawn into the labour market and to consider how patterns of participation now compare to other EU countries.

2. To examine the factors influencing participation decisions and how they may have changed over time.

3. To discuss the labour market implications of changing female participation, for example, in terms of the widening or narrowing of gender differences in pay and occupational position.

4. To consider the social implications of rising female participation in terms of quality of life, work-life balance and gender role attitudes.

Trends in Women's Labour Market Participation

Between 1998 and 2007, almost 300,000 Irish women joined the labour market. This meant that female activity rates (the proportion of the female population who are employed or unemployed) jumped from 57 to 67 per cent. The rates of increase were highest amongst older women, married women, those with lower educational qualifications, women with children aged 5 to 15 years and women with no children under 15 years.[1] Those with below average increases in participation included women with children aged under 5 years, lone parents and young single women.[2]

The low rate of increase for mothers of young children and the stagnation of participation rates among lone parents in a period of rapid economic growth suggest persistent barriers to employment among these groups. Despite the fact that the rates of increase were highest among women with low education, changes in the educational composition of the population meant that women in the labour force were much better qualified in 2007 than 1998. For instance, the proportion of the female workforce with third level education rose from 29 to 43 per cent over the period.

[1] While looking at trends across groups it is worth noting that it is groups with lower levels of participation in 1998 who have the greatest scope for increases.

[2] The below average increase for younger women is associated with the rising proportion of young women continuing in education.

Women's activity rates in Ireland are now on a par with the average for the EU. The participation rates in Ireland are closest to the rates prevailing in Conservative Welfare Regimes such as Germany, France and Austria, which encourage the 'male breadwinner arrangement'. Irish rates are still considerably lower than in the countries with welfare regimes that promote a 'dual-earner' model such as Denmark, Sweden and Finland where rates of participation in the labour force are above 70 per cent even for mothers with young children. Ireland's proximity to the Conservative regimes is clearest when activity rates among mothers are compared.

Factors Shaping Female Labour Market Participation

Having described the patterns of change over the last decade we then consider the factors lying behind this change at the macro level and the individual level. Our analyses show that changes in the educational qualifications of the adult female population and demographic changes in the age profile account for about 40 per cent of the rise in female participation between 1994 and 2007, while the rest of the change is due to behavioural changes or changes in other characteristics. Part of this "other" change is undoubtedly the huge increase in labour demand which generated abundant employment opportunities and higher real wages. These factors attracted many women into the labour market. Rising real wages were particularly important in increasing the incentives to participate for those with lower qualifications.

The main factors shaping women's participation at the individual level are wage levels, education, family status (i.e. number and age of children) and age. The effect of predicted wage on participation is stronger for women with low qualifications than those with Leaving Certificate or Higher. Having a pre-school child reduces the likelihood of participation by 17 to 20 per cent and having a child aged 5 to 12 years reduces the probability of participating by between 7 and 9 per cent.

The effect of these factors has not changed dramatically over the period in question. The impact of age appears to have weakened somewhat but the effect of having young children remained the same between 1998 and 2005. The wage effect is somewhat lower for the less qualified in 2005 and somewhat higher among the more qualified compared to 1998. The influence of husband's income on women's participation has become non-significant since 1998 and this is attributed to the introduction of tax individualisation.

The Labour Market Consequences of Rising Female Participation

This chapter asks the question 'has increased female participation led to a reduction in gender inequality in the labour market'? The relationship between increased participation and gender equality is not straightforward. On the one hand, if increased participation means that women now have shorter labour market interruptions and more continuous employment, this is likely to reduce the gender pay gap and lead to women making greater inroads into higher level occupations. On the other hand, if rising participation draws in women with lower skills, migrant women or groups with additional labour market difficulties, then there may be a widening of gender pay differentials and a greater concentration of women in lower end occupations.

We focus on two key dimensions of gender equality in the labour market - gender differences in pay and in occupational positions. Our results suggest that the rapid increase in female employment has been accompanied by some narrowing of the gender difference in low pay (i.e. earning less than two-thirds of the median wage) since 2000. In 2000 female employees were 1.8 times more likely than male employees to be low paid, but by 2005 the ratio had dropped to 1.4. Other sources

show a similar pattern in the gender pay gap in average wages. There was little change in the early part of the period (1997 to 2003) but between 2003 and 2006 the raw gap has narrowed.

Our analysis of occupational change shows that between 1996 and 2006 women made significant inroads into some traditionally male occupations. For example, over the period women's share of all employment increased from 37 per cent to 43 per cent, while their share of managerial/executive occupations increased from 32 per cent to 42 per cent, and women's share of business and commerce occupations increased from 35 per cent to 48 per cent. Women's share of professional occupations has also increased. However, there have also been some trends in the opposite direction most noticeably the decreasing share of women in computer software occupations. Using two summary indices we found that the level of gender segregation across the labour market as a whole (divided into 24 occupational categories) was relatively stable between 1996 and 2006.

Vertical segregation is still highly evident - i.e. the under-representation of women at the higher levels within occupations. Our analysis of the 2003 NCPP/ESRI survey of employees shows that men are twice as likely as women to occupy senior and middle management positions. The ratio of men to women among these higher management positions is found to be highest in the business and finance sector and lowest in the health sector.

Moreover, the level of segregation remains high in Ireland by international standards (Korpi *et al.*, 2009) and there is still a high level of concentration i.e. 63 per cent of women are still located in just 5 occupational categories.

One of the mechanisms through which occupational segregation is reproduced was highlighted by the longitudinal analysis of women's transitions from economic inactivity to employment. We found over a third (34 per cent) of the women returned to a job at a lower level of status than their last.

The Social Implications of Rising Female Labour Market Participation

In Chapter 5 we consider the social implications of rising female participation in terms of quality of life, work-life conflict and gender role attitudes. The changes in the labour market have been accompanied by significant changes in the gender role attitudes of Irish women and men. Irish attitudes are no longer distinctive compared to elsewhere in Europe. While the increase in employment among women is associated with some increase in time pressure, especially among those combining work and the care of young children, and some reduction in satisfaction with how paid work hours fit in with family/social commitments, the trend in overall levels of work-life conflict are not uniformly negative. Some indicators show a decrease in such conflict. Moreover, studies of life satisfaction show that negative effects of work-life conflict are outweighed by the benefits of being in employment compared to non-employed or unemployed.

Policy Implications

The results of the study highlight the need for continued policy interventions in a number of key areas. The first is childcare. While participation has increased among mothers of young children the gap between this group and women without children remained the same between 1998 and 2005, and participation levels among lone parents stalled despite the economic boom. Lower levels of participation among mothers is likely to reflect both women's preferences for reducing paid work when

their children are young and constraints in the form of affordability of childcare, and availability of flexible working arrangements. The recent OECD report showing that Ireland's childcare costs as a proportion of earnings were highest among 26 countries (OECD, 2007) together with recent evidence on the lack of affordable quality childcare as a major barrier to participation among lone parents (Murphy *et al*., 2008) underlines the need for more targeted intervention in this area. While it is acknowledged that early education is of considerable benefit to children the proposed scheme to provide pre-school education is unlikely to promote labour market participation among parents. When it comes to the multiple aims of childcare policy, one-size does not fit all. Policies targeting the high cost of childcare for lower earners are, therefore, essential to reduce the motherhood employment gap in line with the policy commitments Ireland has made at the EU level.

The importance of access to training and education is highlighted by the strong link between participation and educational attainment. Moreover, the below average educational attainment of lone parents and the consequences this has for the financial pay-off to employment, is likely to have contributed to their lower rate of increased participation during the boom years. The particular need for training among women returning to work was underlined by level of occupational downgrading experienced by such women between 1994 and 2000. As labour market conditions worsen, education and training will become increasingly important, as those with low skills will find it increasingly difficult to find work.

Where To from Here?

Since 2007 employment has contracted and unemployment has increased significantly. The *Quarterly National Household Survey* showed the employment rate decreased from 69.2 per cent in 2007 to 62.5 per cent in the second quarter of 2009. Unemployment rose rapidly over the same time period to reach 12.2 per cent and is predicted to rise further in 2010 (Barrett *et al*., 2009).

These changes have very significant implications for female labour market participation. Participation has already declined by from 63.7 per cent in Quarter 1 2008 to 62.5 per cent in Quarter 2 2009 (Central Statistics 0ffice, 2009). The decline was somewhat greater among men than women. Our analysis shows that underlying compositional changes namely further increases in educational qualifications of women and the population bulge in the 25-35 year age group (the peak participation age for women) means there are still pressures for increased participation and this may feed into higher unemployment during the recession.

Due to significant changes in women's involvement in employment charted in this study and the considerable change in attitudes noted in Chapter 5 it is less likely that women will retreat into the home in the event of unemployment. It is important in assessing the costs of recession that any rise in non-participation is counted, both in terms of the lost contribution to the economy and in the costs to the individual both financial and non-financial. It is important to undertake further research on the impact of recession on men and women who lose their jobs as well as the effects on those who cannot make the desired transition back to work from economic inactivity.

1. INTRODUCTION: PREVIOUS RESEARCH AND POLICY CONTEXT

1.1 Introduction

The economic boom in Ireland was accompanied by a dramatic increase in female labour market participation. Over the period 1998 to 2007 female employment grew by 55 per cent, an exceptional increase by any standards. The long-term trends in female participation and employment have been well documented (Callan and Farrell, 1991; Fahey, 1990; Fahey *et al.*, 2000; O'Connor, 1998; Walsh, 1993) and there have been detailed analyses of women's participation decisions using data for 1994 and 1998 (Barrett, Callan *et al*., 2000; Doris, 2001): however, changes in the period since 1998 have received less attention. The period between 1998 and 2007 was a period of strong economic growth and also witnessed considerable policy development in areas relevant to female participation. All of these factors make this time period of particular interest to the study of women's labour market participation.

While the increase in female employment has been widely acknowledged rather less is known about the forces shaping this rise in participation. There are a number of possible factors driving this increase. The first of these is the huge increase in demand for labour caused by economic growth and the consequent increase in wages. A second factor is policy initiatives such as improvement in maternity and parental leave provision, increased investment in childcare and individualisation of the tax system, which are all thought to enhance participation among women. A third potential factor is the changing profile of women themselves, most importantly the rising levels of educational attainment and demographic factors such as increase in the population aged 25 to 35 years. Finally, the increase may be due to changes in the behaviour of women. While women's labour market behaviour is likely to be influenced by the changing incentives due to the first three factors other potential influences may also be at work such as increased commitment to employment among women and changing expectations about the role of women in society.

There is also a gap in knowledge about the consequences of the most recent changes for labour market equality and for gender equality in society more generally. It might be intuitively expected that increasing female participation would lead to a reduction in gender inequalities in the labour market, however the relationship is uncertain. If increased female participation in the labour market takes the form of women spending less time out of employment when they have children, it is likely to reduce the gender pay gap and result in women moving further up the occupational hierarchy. However, an expansion of participation to include lower skilled women, women with shorter employment experience, migrant women, lone parents, those with health restrictions, increased participation might lead to a greater concentration of women in lower end occupations and to a wider gap between men and women's pay. Given these competing processes it is important to examine empirically both how the characteristics of women participating in the labour market have changed and how this relates to labour market outcomes such as pay and occupational attainment.

Increasing female labour market participation also has potential consequences that reach beyond the labour market. Women and men participate in the labour market not as isolated workers but as members of households and families. Therefore, a key concern is how households have adapted to increased integration of women into the labour market. Changing household patterns of employment due to women's

increased labour market participation are seen as a source of rising work-family conflict (Jacobs and Gerson, 2004).

This study, therefore, has four main aims. First, to describe in more detail the nature of changes in female participation - for example, investigating trends in participation rates by age, family characteristics and by educational level. Second, to examine the factors influencing participation decisions and how they may have changed over time, particularly in response to wages. Third, to discuss the labour market implications of changing participation. This combines a focus on gender inequalities in pay - to what extent women are found among low paid and how their pay compares to men more generally (the gender wage gap) - with a detailed examination of the occupations women hold, i.e. the nature of the jobs they do, and the implications of this for gender inequality in the labour market. Are women now more or less likely to do 'women's jobs' and have they made gains in the occupational hierarchy? Fourth, the study considers some social implications of the recent changes. Has increased employment led to an increase in work-life conflict and been detrimental to quality of life? Have attitudes to women's employment changed in tandem with actual employment rates, or has there been a backlash against increased women's employment?

Where possible comparative evidence is used to assess where Ireland fits in comparison to other EU countries, with particular reference to the EU15 countries. We will consider how Ireland compares to other countries in Europe both in relation to patterns of participation and in attitudes towards gender roles.

The report gathers a wide range of data from a number of sources. In many places it is descriptive, with a clear focus on documenting and discussing the changes in the period in a way that has not been done before. The aim is to sketch out the changes in participation and employment and their implications 'with a broad brush'. It is clear that there are gaps in research in the area, and one of the purposes of this report is to highlight avenues for future research on women's labour market participation in Ireland.

These analyses can help to guide policy as to the most effective and efficient interventions to achieve the overall policy goal of labour market equality between men and women. The indicators we use to assess the consequences of changing labour force participation, measure inequality in *outcomes* (i.e. pay and occupations) since we cannot directly observe the processes that lead to these inequalities. The extent to which gender differences arise from *inequality of opportunities* rather than for example differences in behaviour arising from diverse preferences is clearly crucial in establishing responses. Our aim in Chapter 4 is to describe the nature of change in these outcomes between 1998 and 2007, however, we draw on previous studies that shed light on the sources of gender inequality in labour market outcomes.

In this Introduction we review historical trends in female employment and previous research in the area, we discuss the broader labour market context in which changing female participation has occurred and finally, we describe the policy setting, outlining recent changes that are likely to impact on labour market participation.

1.2 Previous Research on Female Labour Market Participation

The main focus of analysis in this report is the past decade, the period from 1998-2007.[1] This section sets the context for this analysis, by reviewing previous trends and previous research on female labour market participation in Ireland. This is important because any analysis of change needs to take account of the starting position, as well as the previous trends to understand more fully the nature of the changes.

1.2.1 Irish Female Labour Force Participation: Historical Trends

The long-term evolution of women's paid employment in Ireland is difficult to trace, because until recently, available data provided only partial coverage of women's economic activity. Census data do indicate very low participation rates in the first half of the century, particularly for married women - although this data may be underestimating actual participation given women's participation in farm labour, as well as female unemployment and part-time work in industry (Fahey, 1990). Emigration was also female dominated, with women unable to find work more likely to emigrate than men. Fahey argues that taking all forms of labour force activity into account it is likely that married women's labour force participation rates in the 1960s were above 25 per cent, so the 5 per cent estimates from the Census are a serious underestimate.

Some problems of measuring women's unemployment are still current, as women are much more likely than men to re-classify themselves as in 'home duties' if they cannot find a job (see Russell (1996) for a discussion of measuring women's unemployment). This is particularly true during economic recession periods when the availability of jobs is very low. The idea of a 'silent reserve army of labour' is used to describe the potential workforce of women who may not define themselves as unemployed, but would work if they were offered a job (McGinnity, 2004). Indeed Russell *et al.* (2002) argue that labour market categories were developed to explain and describe male working patterns, and that women's participation might be more accurately described as a continuum. At one end are women out of the labour force with no desire to return, and at the other are women in full-time, continuous employment. In between are potential returners and those actively seeking work.

However, it is clear that since the 1970s, or more particularly since the late 1980s, women's labour force participation has increased sharply, from 40 per cent in 1983 to 50 per cent in 1997. All of the increase was due to rapidly rising participation rates for married women. By 1997, marital status had much less of a bearing on participation rates than previously, as participation rates between single and ever-married women narrowed sharply (Fahey *et al.*, 2000). As Fahey and Fitz Gerald (1997) note *Between 1981 and the early 1990s….. the presence of children rather than marriage became the crucial factor affecting participation* (1997, p. 67). Labour force participation rose for all women of child-bearing age in the period 1983-1997, but particularly in the 25-34 year age group. These figures provide the historical context within which more recent trends in female participation can be understood. When describing recent trends between 1998 and 2007 in Chapter 2 we will note where these changes reflect a continuation of longer term trends.

[1] The precise years of observation depend upon the data-sets utilised. We start in the year 1998 rather than 1997 because there was a break in the main labour force statistics series that year. In 1998 the Quarterly National Household Survey (*QNHS*) replaced the Labour Force Survey, and there were changes in a number of relevant indicators.

1.2.2 Factors Shaping Participation Patterns

Rising female participation rates can be related to factors such as increasing educational attainment, changes in legislation and social provision, and changes in the nature of labour demand. The domestic division of labour and gender role attitudes/the cultural context are also associated with female labour market participation, though here it is difficult to establish the direction of effects.

Previous research has shown that education is a key factor influencing female labour market participation in Ireland, as in other countries. More highly educated women have higher participation rates (and lower fertility rates), reflecting the higher wages which can be earned with higher levels of educational attainment (Callan and Farrell, 1991; Barrett *et al.*, 2000). However, given that female education expanded a long time before participation rates rose, education levels *per se* are not a good explanation for rising participation rates. This suggests that the impact of education should be seen in the context of the labour market, social policy and socio-cultural changes (like attitudes), that we discuss in more detail below. Since the mid-1990s, educational attainment has actually been higher among young women than among young men in Ireland (Smyth, 1999), a factor that may influence women's participation in the future.

Changing participation patterns should also be seen in the context of overall changes in the Irish labour market. At a fundamental level the overall demand for labour and wage rates will influence whether women participate in the labour market or not. Precisely how wages affect participation is considered in more detail in econometric approaches to female labour supply (Section 2.3), and also in Chapter 3. Another factor is high unemployment rates, as in the 1980s and early 1990s, which will tend to depress female participation rates. Whether job vacancies are part-time or not may also influence participation, particularly for mothers. Mothers may be unable, or unwilling, to take a full-time job.

The example of part-time opportunities highlights the fact that labour demand is not necessarily gender neutral. Labour market positions are not simply 'empty places' that are equally likely to be occupied by men and women, rather gender is enmeshed in the construction of different jobs. As discussed in Chapter 4, many occupations come to be dominated by one or other sex. This sex segregation arises through a complex interaction of influences, for example, the sex-typing of certain skills (e.g. caring), socialisation, educational choices, 'doing gender', and the exclusion of one gender through discrimination of employers (or historically, trade unions) (England, 2005; Walby,1986; Reskin and Roos, 1990; Russell *et al*., 2005; Collinson *et al.*, 1990; Okamato and England, 1999).

This sex segregation in the labour market means that the type of jobs created will influence participation. In the 1970s, female participation was driven by the expansion of clerical and service sector jobs, though in the1980s and 1990s, this pattern changed, as female employment grew in a wide range of occupations (Hughes, 2002). In addition, the increasing proportion of women with third level qualifications has led to a feminisation of some professional occupations like medicine and law (Fahey *et al*., 2000). In Section 1.3, we examine fundamental changes in the Irish labour market in the period 1997-2007 in terms of employment growth and growth by sector, as a backdrop for the analysis of changes in women's participation.

The policy context may influence female labour market participation. Policies to support the combination of working and caring have been shown to influence

women's participation in a range of countries (Gornick *et al.*, 1997) A key factor in this regard is state support for the care of pre-school children, followed by after-school care for school-age children. Privately provided childcare is often expensive, and may form a particular barrier for mothers who cannot command high levels of pay. Other policies include state provision for paid leave around the birth of a child (maternity leave); other leave provision for parents of small children such as paid or unpaid leave (parental leave) or time off when a child is sick (sometimes called 'force majeure' leave). In many European countries parents also have the right to work part-time. Taxation and welfare policy may influence the financial incentives to work (Steiner and Wrohlich, 2004; Callan *et al*., 2009). In Section 1.4 we discuss the provision of these policies in Ireland, and situate Ireland in comparative European context.

While it is useful to situate current patterns within a policy context, it is also true that behavioural patterns and cultural norms may be partly a result of *previous* policy and institutional context. A taxation system that discouraged married women from working in the past may influence current participation rates. Once a woman has left the labour market for many years, the decision to return to the labour market may be very different from the decision to stay participating (Russell *et al*., 2002). These factors mean that social change often happens slowly: a country will not be transformed from a low to high participation country overnight.

An additional factor which is important in understanding mother's labour market participation is attitudes to women working (Pfau-Effinger, 1998). Mothers may be responding to normative pressures in their environment, not just objective constraints. While it is difficult to disentangle to what extent attitudes are a product of institutional constraints, or to separate attitudes from past and current behaviour (Alwin *et al.*, 1992), they are still revealing. Recent work on the topic shows that attitudes to maternal employment have changed rapidly in Ireland, with decline in support for the gendered division of labour. Therefore, Irish attitudes can no longer be characterised as motherhood-centred but as work oriented (O'Sullivan, 2007; see also Fahey *et al.*, 2005). The rise in attitudinal support for employment among mothers of young children between 1994 and 2002 coincides with the period of strong growth in maternal employment. The periods of observation mean it not possible to establish whether the change in attitudes preceded or followed changes in behaviour. Change in attitudes will be reviewed further in Chapter 5.

A final issue of note is that women's engagement in the domestic sphere, namely, housework and childcare, is crucial for understanding their participation in paid labour (McGinnity and Russell, 2008; Lynch and Lyons, 2008). Women's responsibilities for caring and housework may have a strong bearing on both the rate and nature of their participation in paid work.

1.2.3 Econometric Approaches to Women's Participation

Moving on from simply comparing women's labour market participation rates over time or between groups, econometric approaches to women's labour market participation use a modelling framework to assess the relative impact of different factors (Callan and Farrell, 1991; Barrett *et al.*, 2000; Doris, 2001; Callan *et al.*, 2009). The simplest framework is based on the following ideas: women who could command relatively high wages would be more likely to participate; women whose time in other activities is of greater value would be less likely to participate; women facing relatively high unemployment rates would be less likely to find a job, or be discouraged from participating because of that fact. The models in these studies generally look at the impact of education and previous work experience; family

income if the wife is not employed; labour market conditions; number and age of children and woman's own age. In the Irish context the key findings are that university education and greater work experience make participation more likely; conversely, a long period spent out of the labour market makes participation much less likely. The presence of a young, pre-school child is a strong factor depressing participation (Callan and Farrell, 1991; Barrett *et al.*, 2000).

The limitation of this simple framework is that it gives no information on the effects of potential earnings on participation. In order to answer this question it is necessary to predict the potential wages of those who were not employed, since, by definition, actual wages are not currently observed for this group. Using predicted wages of non-participants and either predicted or actual wages for those currently employed it is possible to estimate the effect of potential wages on participation. This 'elasticity' then measures the expected change in participation for each percentage change in wages. Further extensions of these models examine the influence of income taxes and social welfare benefits. This is the approach taken in Chapter 3, which also compares new results with those for earlier years, and considers how the size of effects of various factors has changed or remained stable over time.

1.2.4 Summary of Previous Research

Previous studies have shown that the period from the 1970s to the mid-1990s was characterised by a sustained rise in participation rates for women in Ireland. This rise was particularly steep since the late 1980s, so participation had begun to rise before the period under investigation and the 'Celtic tiger years' (usually dated from the mid-1990s). These studies also note a decline in the importance of marital status in influencing participation. Models of participation reveal a strong positive influence on participation of a university degree and continuous work experience, while the strongest depressing factor is the presence of a pre-school child. Previous research has also highlighted the importance of the labour market and policy context for understanding women's labour market participation alongside more subjective factors such as attitudinal change.

1.3 The Labour Market Context: Rapid Employment Growth

The period of interest in this report, 1998-2007, was one of unprecedented economic boom in Ireland, that saw GDP per capita rise from about 60 per cent of the EU average to over 120 per cent of the average over the course of the 1990s. This was accompanied by a dramatic growth in employment. Table 1.1 shows summary data on some of the principal changes in the labour market since 1998, the year our period of investigation begins. This followed a period of sluggish growth, 1991-1993, with unemployment reaching almost 16 per cent in 1993, followed by rapid growth in 1994-1997 (O'Connell and Russell, 2007).

There are a number of important features of labour market developments in the period. First, employment grew very rapidly, by just over almost 600,000 or 40 per cent between 1998 and 2007. This is a very dramatic growth in employment in less than a decade. The employment rate, expressed in proportion to the population aged 15-64 years, increased from 52 per cent in 1998 to 61 per cent in 2007. The Irish employment rate converged with the EU average in 1998, and exceeded it by about two percentage points in 2004.

Second, there was a sharp and sustained increase in women's employment. Total female employment increased by 52 per cent between 1998 and 2007, much higher than the growth rate among men (33 per cent). These differential growth rates resulted in a shift in the balance of employment between men and women, and

women's share of total employment increased from 39.7 per cent in 1998 to almost 43 per cent in 2007. It is precisely the changes in female employment which we plan to investigate further in this report.

Table 1.1: Principal Changes in the Labour Market, 1998-2007

	1998	2007	Absolute Change	% Change
Total Employment (000)	1,494.0	2,095.4	601.4	40
Employment Rate (% population 15+)	52.1	60.6	8.5	16
Male Employment (000)	900.7	1,195.9	295.2	33
Male Employment Rate (%)	63.9	69.6	5.7	9
Female Employment (000)	593.4	899.4	306.0	52
Female Employment Rate (%)	40.7	51.7	11.0	27
Female Share (%)	39.7	42.9	3.20	8
Unemployment (000)	126.4	98.8	-27.6	-22
Unemployment Rate (% Labour Force 15+)	7.8	4.5	-3.3	-42
Long-term Unemployment (000)	63.6	28.4	-35.2	-55
Long-term Unemployment Rate (% Labour Force 15+)	3.9	1.3	-2.6	-67

Sources: Central Statistics Office: *QNHS*, 1998, Q2 and *QNHS* 2007, Q2.

Third, the unemployment rate, which had been just under 15 per cent in 1994, fell further - from just under 8 per cent in 1998 to 4.5 per cent in 2007. Long-term unemployment fell sharply: from 63,000 in 1998 to 28,000 in 2007. This decline in long-term unemployment was facilitated by an increase in demand for low-skilled employment that complemented increased demand for high-skilled employment at the other end of the occupational structure (O'Connell and Russell, 2007).

Fourth, for the first time in Ireland's history, there was significant inward migration of non-Irish nationals. In 1996 inward migration exceeded emigration, resulting in net immigration. By 2006, non-Irish nationals made up just over 13 per cent of the labour market (*Census 2006*).

Table 1.2 shows employment by sector. Among women, it is notable that employment grew in many sectors. Growth was pronounced in Finance and Business, Public Administration, Education and Health, sectors largely characterised by medium to high skills.[2] Among males, the most rapid growth occurred in Construction, where employment doubled, but which is largely characterised by low to medium skills. The other expanding sector was Finance and Business services, where higher skill levels are in demand. So employment expansion over the course of the decade entailed a polarisation process among men, with expansion at both extremes of the skill distribution (O'Connell and Russell, 2007). Among women, employment expansion was more concentrated in sectors with demand for medium and higher skill.

This picture of the Irish labour market is likely to change significantly in the coming period as the Irish economy entered into a recession during 2008. The

[2] There was also a marked percentage growth in construction, though this accounts for a very small fraction of overall female employment so overall accounts for a small proportion of new jobs for women.

unemployment rate rose from 4.9 per cent at the beginning of 2008 to 10.2 per cent at the beginning of 2009 (CSO, 2009, using the International Labour Organisation (ILO) definition), and is predicted to rise to an average of 14.8 per cent during 2010 (Barrett *et al*., 2009). These changing conditions are likely to impact on future levels of participation. Already there has been a decline of 2 per cent in the male participation rate and of 1 per cent in female participation (CSO, 2009), with the most noticeable decrease occurring among young people. In general, levels of economic inactivity rise in tandem with unemployment rates.[3]

Table 1.2: Employment by Economic Sector and Gender, 1998 and 2007

	1998		2007		
	1,000s	%	1,000s	%	% Change
Males					
Agriculture	120.0	13.3	103.1	8.6	- 14
Other Production	210.5	23.4	208.9	17.5	- 1
Construction	120.6	13.4	266.7	22.3	+ 12
Wholesale and Retail Trade	117.1	13.0	149.2	12.5	+ 27
Hotels and Restaurants	40.4	4.5	51.7	4.3	+ 28
Transport and Communication	65.7	7.3	95.3	8.0	+ 45
Finance and Business	85.4	9.5	140.3	11.7	+ 64
Public Administration	43.4	4.8	50.7	4.2	+ 17
Education	32.4	3.6	37.4	3.1	+15
Health	26.0	2.9	38.1	3.2	+47
Other	39.2	4.4	54.5	4.6	+39
Total	900.7	100.0	1195.9	100.0	+33
Females					
Agriculture	16	2.7	11.6	1.3	-27
Other Production	91.9	15.5	82.6	9.2	-10
Construction	5.4	0.9	13.6	1.5	+152
Wholesale and Retail Trade	94	15.8	144.3	16.0	+54
Hotels and Restaurants	57.5	9.7	73	8.1	+27
Transport and Communication	21.3	3.6	27.2	3.0	+28
Finance and Business	85.7	14.4	147.3	16.4	+72
Public Administration	27.5	4.6	53.9	6.0	+96
Education	60.9	10.3	104.1	11.6	+71
Health	87.9	14.8	174.8	19.4	+99
Other	45.3	7.6	67.1	7.5	+48
Total	593.4	100.0	899.4	100.0	+52

Sources: CSO: *QNHS* 1998, Q2 and *QNHS* 2007, Q2.

To date, the most dramatic fall in employment has been in the construction sector, which is highly male-dominated, this has led to a sharper drop in male employment. Between quarter 1 in 2008 and quarter 1 in 2009 there was a 10.2 per cent decline in the number of men in employment, while the number of women employed decreased by 3.9 per cent (CSO, 2009). So far women have been afforded some protection from recession by their greater concentration in the public sector and services. However, the recession has led to significant fall in employment in the services sector, particularly the retail, transport and financial sectors. Part-time work appears to have been more sheltered from the recession than full-time employment. An

[3] The relationship between unemployment and inactivity rates is influenced by welfare institutions, for example, the introduction of tighter controls in unemployment benefits can push some individuals into categories such as 'permanently sick/disabled'.

increase in part-time work was recorded during 2008, which was nearly all attributable to men (CSO, 2009). It is still unclear as to how deep the recession will spread and how long it will last, nevertheless it is very unlikely that the high levels of growth in female participation will be sustained during a prolonged period of recession. Chapter 3 discusses the influence of change in compositional factors (e.g. education levels, demographics), labour demand and behavioural changes (including in behavioural responses to policy changes). This discussion can shed some light on the possible influence of declining labour demand in the future.

1.4 The Policy Context of Women's Participation

In this section we discuss the policy context for women's participation, covering state support for caring, working time flexibility, and important changes in tax and welfare policies that impinge on labour market participation among women.

1.4.1 State Support for Caring

The price and availability of childcare may have a strong influence on mothers' labour market participation. Expensive childcare will act as a disincentive for mothers of young children to work, particularly those with low potential earnings. Compared to most European countries, childcare provision for pre-school children in Ireland is and has been uncoordinated, variable in quality and in short supply (OECD, 2004). There have been some recent improvements in provision on foot of the National Childcare Strategy, though Ireland still has the highest net childcare costs as a proportion of average earnings in the OECD (OECD, 2007, p.156). The OECD (2008) argue that a key priority in increasing female participation of mothers is to introduce income supplements to make childcare more affordable.

Compared to other Northern European Countries and continental Europe where there is more emphasis on state provision, state support in Ireland is indirectly provided in the form of grants to encourage private and community sector provision. Capital Grants are available to both private and voluntary sector organisations, while staffing grants are available for community/voluntary sector only. These grants allow some subsidy to those availing of community/voluntary sector places but the amount of subsidy is variable and the number of places is very limited and only available in disadvantaged areas.[4]

The childcare module conducted by the CSO in early 2005[5] reveals a high reliance on informal childcare arrangements in Ireland. Among parents of pre-school children using non-parental care, just under 40 per cent used informal care (a paid or unpaid relative or friend); a further 30 per cent a paid carer; about one quarter a crèche/Montessori (CSO, 2006). One issue with this is that unpaid childcare relies on other women (often grandmothers) not being in paid employment, and this may change with rising participation levels. Another issue is that regulation or quality control of care is limited to crèches and registered childminders looking after three or more children in the minders premises, which may lead to variations in provision.

Primary school children finish school at 2.30 pm and there are also long holidays for the summer and during the year.[6] There is no state support for after school childcare

[4] In 2008 the funding scheme for delivering community childcare was changed, with funding of community childcare schemes now being linked to social welfare receipt. The effects of this change are not yet known, but it may create a disincentive from moving from a state employment/training schemes to employment. It may also lead to greater 'segregation' of early childcare in Ireland, with disadvantaged children in separate facilities from advantaged ones.

[5] Results from the 2007 survey are not yet available.

[6] Infant classes (4-6 years) generally finish at 1.30 pm.

and a scarcity of provision: parents in Ireland have limited options from which to meet the childcare needs of their school going children outside school hours (Working Group of the National Childcare Co-ordinating Committee, 2005). For school-age children there is an even higher reliance on informal care, with almost 60 per cent of non-parental care being informal (unpaid or paid relative or friend) (CSO, 2006). OECD (2008) note that there is a target of 5,000 new out-of-school-hour places provided by schools, though, while achievable, this would cover less than 1.5 per cent of the population aged 6-12 years.

Government support for childcare in Ireland has been guided by a number of competing objectives of which supporting female employment (and gender equality) is only one. Other objectives include child development and education, social inclusion, and support for birth rates (see Fahey and Russell, 2006). The government has tried to steer a course that is neutral in providing support for care in the home (by parents) and care outside the home, for example, by increasing universal child benefit. In 2006 the government announced an 'Early Childcare Supplement', a benefit payable with respect to all children under 6 years, which was a central plank of its National Childcare Strategy. The payment was explicitly introduced to help parents of pre-school children meet their childcare needs, however, it was paid to all parents regardless of whether they were in employment and was not linked to the take-up of any childcare services. Consequently, the effect of the policy on increasing female labour market participation is likely to have been weak. This payment was abolished by the Supplementary Budget April 2009. It will be replaced in January 2010 with a pre-school Early Childhood and Education Scheme (ECCE) for all children between the ages of 3 years 3 months and 4 years 6 months. A capitation grant will be payable to service providers who provide free pre-school services. The provision will amount to 3 hours per day 5 days a week over a 38 week year. This policy is more strongly linked to early education objectives than the childcare supplement, as with the previous policy it does not incentivise labour force participation among mothers as it is unconnected to mother's employment status.

Paid leave from work around the birth of children is generally believed to facilitate women's continuous labour market participation, by allowing continuity of employment and preventing occupational downgrading by guaranteeing employment at the same level (Gornick *et al.*, 1997). The extent of maternity and parental leave in Ireland was low compared to other European countries at the beginning of the period under investigation, though legislation, partly in response to an EU Directive, has now improved provision considerably, particularly for maternity leave. In 2001 paid maternity leave was increased from 14 to 18 weeks, and unpaid leave was raised from four to eight weeks. A series of successive changes meant that by April 2007, paid maternity leave was 26 weeks, and unpaid leave was 16 weeks. Women have the right to return to the same job, or a job on a similar level, after maternity leave. Maternity leave provision in Ireland now compares well to other West European countries. These changes in maternity leave are likely to have enabled more women with caring responsibilities to remain in the workforce.

The 1998 Parental Leave Act introduced a statutory entitlement for both parents to 14 weeks of unpaid leave. The EU Directive on which the Parental Leave Act is based allowed individual countries to decide whether this should be paid or unpaid: Ireland chose to have unpaid parental leave. This lack of payment means many parents cannot afford to avail of it, and also that men are less likely to avail of it.[7] The Parental Leave Act also gives all employees limited paid leave for family emergencies (force majeure leave) - 3 days in 12 months.

[7] There is no legal entitlement to paternity leave (i.e. time off for the father at the birth of a child) in Ireland.

Care of older people and disabled people in Ireland was traditionally undertaken in the home or community by a female relative. O'Hagan (2005) argues that state provision for such care, which comprises home help services, care assistance and respite care, is characterised by under provision, inequitable access and lack of appreciation of the needs of carers. The notable exception is carer's leave, which allows employees to take a break of up to 65 weeks to provide full-time care for an elderly or disabled person: carers may also be entitled to a modest payment, subject to certain conditions. The maximum period of carer's leave was extended to 104 weeks in 2006. Payments available to carers are carer's benefit, which is conditional on PRSI contributions, or carer's allowance, which is means tested.

Compared to other EU countries, Irish public policy on caring has much in common with the US and the UK. Here there is a strong emphasis on market forces and individual freedom, with relatively little intervention by the State in the economic arrangements of the family, and it is not seen as the government's role to provide childcare. The two main exceptions to that are the relatively generous maternity leave provision, and the introduction of carer's leave. Notably much of the extension of parental leave rights in Ireland has been on foot of EU legislation (Russell *et al*., 2009). Some commentators have identified tensions in Irish government policy: employment policy explicitly aims to increase participation rates for all women, yet health/welfare policy is predicated on there being one unpaid, female adult in the home who does the caring work (Cullen *et al*., 2004; O'Hagan, 2005; O'Connor and Murphy, 2008).

1.4.2 Working Time Flexibility

While caring policy may affect women's decision to participate in the labour market, the ability to vary working hours to take account of family demands may also influence both whether women participate in the labour market and what jobs they do. Such measures could include: the right for parents (or others) to reduce hours when caring for small children; flexible working time or flexitime; job sharing and working from home.

In Ireland there is no legislative right for parents to work part-time, as is the case in, for example, France, Germany, Holland, Finland, Belgium and France (Gornick and Meyers, 2003). The closest 'de-facto' part-time work for parents in Ireland is parental leave, though whether this can be taken weekly is at the discretion of the employer, and each parent is limited to 14 weeks per child.

Other provision is at the discretion of the employer. Survey estimates are that the rate of take up of flexitime reported for employees in Ireland was around 23 per cent in total: 26 per cent among women and 20 per cent for men (Russell *et al*., 2009, using 'The Changing Workplace' Employee Survey). This is close to the EU average (Evans, 2001). The rate of job sharing (6 per cent of employees) and home working (8 per cent of employees) was much lower. In general, flexible working arrangements are more prevalent in the public sector than the private sector (Russell *et al*., 2009).

1.4.3 Taxation, Welfare and Minimum Wage Policy

The Irish tax system - like the UK system - initially treated married couples as a unit for income tax purposes, with the wife's income being aggregated along with that of her husband. Compared to two cohabiting single persons, a married couple received a marriage subsidy if the wife was not earning an independent income, or earned a very low one. But if the wife's earnings were greater, she, and the couple, faced a substantial tax penalty - a married couple with both partners in employment could face a much higher tax bill than an unmarried couple in identical circumstances. The

Supreme Court ruled that this feature of the tax system was unconstitutional. The response chosen by the government, and implemented in Budget 1980, was to allow doubled rate bands and doubled allowances to all married couples. Married couples were permitted to minimise their tax liabilities by assigning allowances and rate bands freely to either partner. This structure operated from 1980 up to 2000.

The Budget for the year 2000 introduced a move towards greater independence of taxation, by means of what was termed "individualisation" of the standard rate tax band. This involved restricting the extent to which tax bands are transferable between spouses. By December 2001 the proportion of the band which was transferable had fallen to about one-third, remaining at that level after Budget 2003. Callan, van Soest and Walsh (2009) analysed a change similar to the "individualisation" process and estimated that it could add between 2 to 3 percentage points to the participation rate of married women. While significant, this has to be seen in the context of increases in married women's participation of more than 1 percentage point per annum over a 30 year period.

Welfare changes are likely to have had a more modest impact on labour market participation, though the introduction of active labour market policies may have boosted employment rates. Callan and Doris (1999) found that the introduction of the National Minimum Wage could have boosted participation in the labour market by about 2 per cent overall, but with the strongest impact being on single women with low educational qualifications.

Given very high rates of poverty among lone parents, and low rates of labour market participation compared to other European countries, consideration has been given in Irish policy to reforming the income supports and activation for lone parents (Department of Social and Family Affairs, 2006). Such reforms would be in line with practice in many European countries, and would help reduce poverty among lone parents, though depend crucially on childcare supports being available, which is a challenge in the Irish context (Callan *et al*., 2008). Another key decision in the design of the system is whether activation be compulsory, though once again, compulsion is predicated on the existence of excellent childcare support, a demand for labour and capacity within Active Labour Market Programmes (Callan *et al*., 2008; O'Connor and Murphy, 2008; Murphy, 2008). The issues around activation are not just practical. From an equality perspective, Murphy (2008) highlights how activation policy sits in an ambiguous policy context in Ireland, aiming as it does to maximise some mothers' employment (i.e. lone parents), while other policy continues to support the domestic roles of other (married) mothers, as discussed above. She questions whether it is fair or consistent to fiscally support some parents' choice of full-time parent care while obliging other parents to work part-time when their child reaches the age of seven.[8] Activation must also be viewed in the context of the relatively low educational qualifications of lone parents and of the earnings they are likely to command (Fahey and Russell, 2001b). The analyses of participation and low pay contained in the current study provide further data for this debate.

1.5 Outline of the Report

Chapter 2 will examine changes in participation over the last decade, comparing the trends among different groups of women (and men) over the last decade. It will consider whether divisions among women in terms of access to the labour market

[8] The proposals from government suggest that the requirement would be to seek part-time work, of at least 19 hours (Department of Social and Family Affairs, p. 99). No conditions would be imposed until the youngest child is 5 years, when the child is aged between age 5 and 7 years, more active and compulsory engagement would take place such as meetings with a Job Facilitator (ibid. p. 24).

have declined with the increase in employment opportunities. The chapter will also track changes in the level of participation, i.e. changes in the hours of work, and set Irish participation rates in comparative European context.

Chapter 3 will consider factors shaping labour market participation. Previously it tended to be highly educated women with no children who were most likely to participate in the Irish labour market - is this still the case, or has the boom 'drawn others in'?

Chapter 4 will consider the labour market outcomes associated with changing participation, with particular reference to equality issues. Here we focus on earnings and occupations. We first outline existing findings on the gender gap in average pay levels. We then conduct new analyses of low pay by comparing the extent to which women are concentrated amongst the low paid in 2005 compared to ten years earlier (using EU SILC and Living in Ireland surveys). We will also investigate whether the changes in participation have been associated with changes in the occupational composition of the female labour force. We will examine this in a number of ways. First, by outlining the changes in the occupational positions of men and women over the last ten years using Census data. Then we look at managerial roles by gender using a large survey of employees in 2003. We also conduct a brief longitudinal analysis of occupational change following a return to work.

The social implications of changing patterns of female participation are considered in Chapter 5. Here the focus is on work-life conflict/quality of life and attitudes to women's employment. This chapter will draw on existing research, complemented by some new analyses, to shed light on the social meaning of these changes, and reflect on how these factors themselves may influence future participation trends.

The final chapter brings together the findings to form conclusions and to draw out policy implications. It also considers the prospects for women's labour market participation in the future.

2. TRENDS IN WOMEN'S LABOUR MARKET PARTICIPATION

2.1 Introduction

This chapter describes the changing pattern of female participation in the Irish labour market over the last decade, using data from the Quarterly National Household Surveys (*QNHS*).[9] We focus on this recent period because it has been one of rapid change. The steep rise in participation witnessed in the mid to late 1990s has continued apace despite predictions that the rates had reached a ceiling and would not increase further without very significant policy change. The period under investigation has seen some important policy developments as outlined in the previous chapter, including the introduction of parental leave, extension of maternity leave, and tax individualisation. It is, therefore, of significant policy interest to explore the changes between 1998 and 2007.[10]

The chapter examines trends among different groups of women (and men) over the last ten years, for example, participation levels are compared across marital status, family status, age, nationality and education. This analysis will assess whether divisions among women in terms of access to the labour market have declined with the increase in employment opportunities during the economic boom or if they remain entrenched. It can also highlight who remains outside the labour market. In the final section of the chapter we track changes in the *level* of participation i.e. changes in hours of work. Have women's hours of work increased alongside the rise in participation? Part-time work expanded rapidly in the early 1990s but has remained relatively stable since the late 1990s. This chapter will also place Irish trends in an international context, by comparing key indicators across EU countries.

While the focus of our attention is recent change, these figures must be placed in the context of longer term trends in labour market participation. As outlined in the previous chapter establishing long-term trends is difficult due to the unreliability of the historical data on women's labour force activity. However, more reliable time series data exists from 1983 onward and this suggests that women's participation hovered around 40 per cent for most of the 1980s and then took off sharply from 1989 rising to 47 per cent by 1995 and 55 per cent by 2000 (see Figure 2.1 below). While discussing trends over the last ten years we will note where recent changes are in fact a continuation of much longer term trends.

2.2 Definitions

In the analyses that follow we adopt the International Labour Organisation's (ILO) definitions of employment status where possible. Employed persons are those who during the reference week worked for pay or profit for at least one hour or who were temporarily absent from employment due to for example illness or holidays. The unemployed category includes those who were without work during the reference week, were available for work and actively seeking work in the past four weeks or who had already found work. The unemployed and the employed together constitute the economically active, those who are neither employed nor unemployed are

[9] The *QNHS* was introduced in 1998 to replace the Labour Force Survey. While *QNHS* and the LFS data are comparable on most questions, changes in occupational coding and improved measurement of part-time work mean that it is desirable to use the *QNHS* for the main analysis of recent trends.

[10] Long-term trends in female participation in Ireland have received detailed attention elsewhere, Callan and Farrell (1991); Fahey (1990); Walsh (1992) and changes in the early years of the Celtic Tiger are discussed in Fahey *et al*. (2000).

economically inactive. The participation rate or activity rate is the proportion of the total population that are employed or unemployed.

The advantage of adopting the ILO definitions is that they are consistent across time and across countries and so allow more accurate comparison. Another advantage is that women working part-time are all included as labour market participants, even though some may describe their main status as 'looking after the family and home'. The implications of adopting the ILO measure as opposed to the principal economic status (PES) measure that is also available in the Irish datasets are twofold. First, the low minimum hours threshold means that those working for even a very short number of hours are included with the economically active. One group particularly affected are students working part-time: on the PES measure these are more likely to define themselves as 'in education' but in the ILO measure they are included with the employed. Second, the more stringent measure of unemployment in the ILO definition means that those who are unemployed but not actively searching for work, are defined as economically inactive, although they may define themselves as unemployed under the PES measure.

2.3 Participation Rates by Age

Participation in the labour market is strongly structured by age and this is regulated by employment legislation. There are strict limits to employing young people under the age of 16 years. Retirement age and pension systems place restrictions on participation among those aged 65 years and over, although self-employment and some employers allow employment beyond this cut-off (see Fahey and Russell (2001a) for further discussion of preferred retirement age). Overall activity rates will, therefore, be strongly influenced by the age cut-offs selected. Participation rates are commonly reported for the whole population aged 15 years and over; using this selection we find a participation rate of 54 per cent for women and 73 per cent for men in 2007. Restricting the age group to those aged 20 to 64 years increases the participation rate to 67 per cent for women and 87 per cent for men (Table 2.1).

Before restricting our focus to the population aged 20 to 64 years, we look at participation across the whole age spectrum. Levels of labour market participation among those under age 20 years are strongly influenced by participation in education. Participation in education has increased over recent decades, so that only a minority of those under 20 years are economically active. The figures for 2007 show that one-quarter of women in the 15 to 19 year age group were economically active, compared to 29 per cent of young men.

Rates of participation among those over retirement age are very low, especially for women. In 2007 only 4 per cent of women aged 65 years or older were active in the labour market, compared to 16 per cent of men in this age category. The majority of men's participation among those aged over 64 years is self-employment, with older farmers making up a significant portion of this group (see Fahey and Russell, 2004, p. 21). Farming and other forms of self-employment are much less common among women and this contributes to the diverging gender patterns in this age group.

Table 2.1: Changes in Participation Rates 1998-2007 by Age Group

	Women			Men		
	1998	2007	Change	1998	2007	Change
15-19 years	23.0	25.3	*2.4*	31.1	28.7	*-2.4*
20-24 years	69.4	69.8	*0.4*	76.8	80.4	*3.6*
25-34 years	73.4	78.6	*5.2*	93.3	92.4	*-0.9*
35-44 years	59.4	68.8	*9.4*	93.4	93.4	*0.0*
45-54 years	46.4	67.1	*20.7*	87.1	89.1	*2.0*
55-59 years	30.7	48.7	*18.0*	71.8	77.9	*6.1*
60-64 years	17.6	31.4	*13.8*	52.7	60.5	*7.8*
65+ years	3.0	3.9	*0.9*	15.0	16.2	*1.2*
All aged over 15 years	46.7	54.1	*7.4*	74.9	73.4	*-1.5*
All 20-64 years	56.7	67.0	*10.3*	85.2	87.0	1.8

ILO definition of employment status.

QNHS 1998 and 2007.

Rates of economic activity among women peak in the 25 to 34 years age group: 79 per cent of this age group were in the labour market in 2007. These were followed by women aged 20 to 24 years (70 per cent) and those aged 35 to 54 years (67-69 per cent). For women, participation drops steeply after age 54 years. Age related patterns of participation are similar for men in some respects, with high rates of activity among those aged 25 to 35 years, and dropping off among those aged 55 years and over. In contrast to the female pattern, men's participation rates remain very high among the 35 to 44 years age group, Gender differences in participation are therefore particularly wide for that age cohort.

Differences in participation by age are likely to reflect age/life cycle effects and cohort effects. A cohort effect is due to the different historical time period rather than age per se, and is likely to play a role in explaining low participation among older women. Older women faced a very different labour market early on in their careers and this is likely to have a long term effect on their activity levels. For example, women in the 60-64 age group in 1998 would have been 30 years old during the period 1964 to 1968, and those aged 55 to 59 in 1998 were 30 years old in the period 1969 to 1973. This was a period before the Employment Equality Act 1977 was introduced, when the Marriage Bar prohibiting the employment of married women in the civil service was still in operation, and when there were strong norms against women working outside the home as well as legislative and trade union opposition (see Kennedy, 2001). Moreover, the tax and social welfare systems during this period discouraged, and in some respects penalised, married women's involvement in the workforce. Therefore, the low levels of participation among these women in the 1998 survey partly reflects this historical context as well as any directly age related drop off in participation, for example, due to deteriorating health or early retirement.

2.4 Trends in Participation by Age Group

Changes in participation between 1998 and 2007 show a divergent trend for men and women. Among the core 20 to 64 age group women's participation increased by 10 percentage points in nine years whereas men's increased by less than 2 per cent. Taking the whole adult population aged 15 and over the increase was 7 per cent for women while there was a modest decrease for men (-1.5 per cent).

The most rapid growth in participation over the period was among women aged 45 to 54. This age group has recorded an astonishing 21 percentage point increase in activity rates since 1998. Double digit increases in participation rates are also recorded among women aged 50 to 59 years and 60 to 64 years. There has been least change in participation rates among women in the youngest age groups (15 to 25 years) and among those post-retirement age.

2.5 Participation Rates by Family Characteristics

As outlined in Chapter 1 a range of institutional and attitudinal factors have resulted in low participation rates among women with children. These factors include a lack of affordable childcare, comparatively low governmental provision for combining work and caring (e.g. leave schemes), welfare and tax systems that support male breadwinner household arrangements and traditional attitudes about gender roles.

There have been a number of relevant policy developments over the period of 1998 to 2007. Investment in childcare was increased under the National Development Plan resulting in greater provision of places, although there was no subsidy towards costs for the vast majority of participants. In 2007 the Early Childcare Supplement was introduced, which provided all families with young children with a tax-free payment of €1100 per year for each child under the age of six.[11] The payment was not linked to labour market status and, therefore, is unlikely to have had a significant influence on participation levels. Policy changes that are likely to have a greater influence on women's continued participation in the labour market are increases in the maternity leave provision, and the introduction of Parental Leave in 1998 (see Chapter 1 for details). These changes are most likely to affect women with young, pre-school children. However, the facilitation of more continuous participation among mothers of young children is likely to lead on to greater participation among those with older children as the cohort ages. Nevertheless, the obstacle posed by the under-development of after-school care is still considerable (Working Group of the National Childcare Co-ordinating Committee, 2005).

The figures presented in Table 2.2a show that rates of labour market participation increased both among women with children under 15 years of age and those without. We distinguish between parents with a child under the age of 5 (pre-school) and those whose youngest child is aged 5 to 15 years.[12] Over the period in question the participation rate among women with children under 5 increased by 6 percentage points, meaning that by 2007 just over 60 per cent of this group were active in the labour market. However, the rate of increase among these mothers did not match the even more rapid rise in participation among women with school age children (13 per cent) and women with no children under 15 years (10 per cent).[13] Therefore, the gap in participation rate between mothers with pre-school children and other women has widened marginally over the last decade, but the gap between women with school-age children and those without has narrowed considerably.

However, these figures understate the level of difference between women with and without children because they do not control for age. If we compare women aged 20 to 44 years we see that women in that age category without children have a much higher rate of labour market participation (see Figure 2.1), some 23 percentage points higher than among women in the same age category with children under 5

[11] The payment was halved from May 2009 and abolished at the end of 2009.

[12] The *QNHS* data only include children resident in the household and apply the age cut-off of 15 years.

[13] If one calculates the change as a proportion of the 1998 figure (i.e. taking into account the different starting points), the rate of increase is 11.8 per cent for children less than 5 years, 24.4 per cent for children aged 5 to 15 years and 17.4 per cent for no children under 15 years.

years and 17 per cent higher than women with children aged 5 to 15 years. Within this more confined age category there has been a narrowing of the gap between mothers and non-mothers, particularly for those with school-age children. The ratio of activity rates of those with children under 5 years compared to women with no children changed from .68 to .72, while the ratio of those with children aged 5-15 years to those with no children under 16 years rose from .71 to .80.

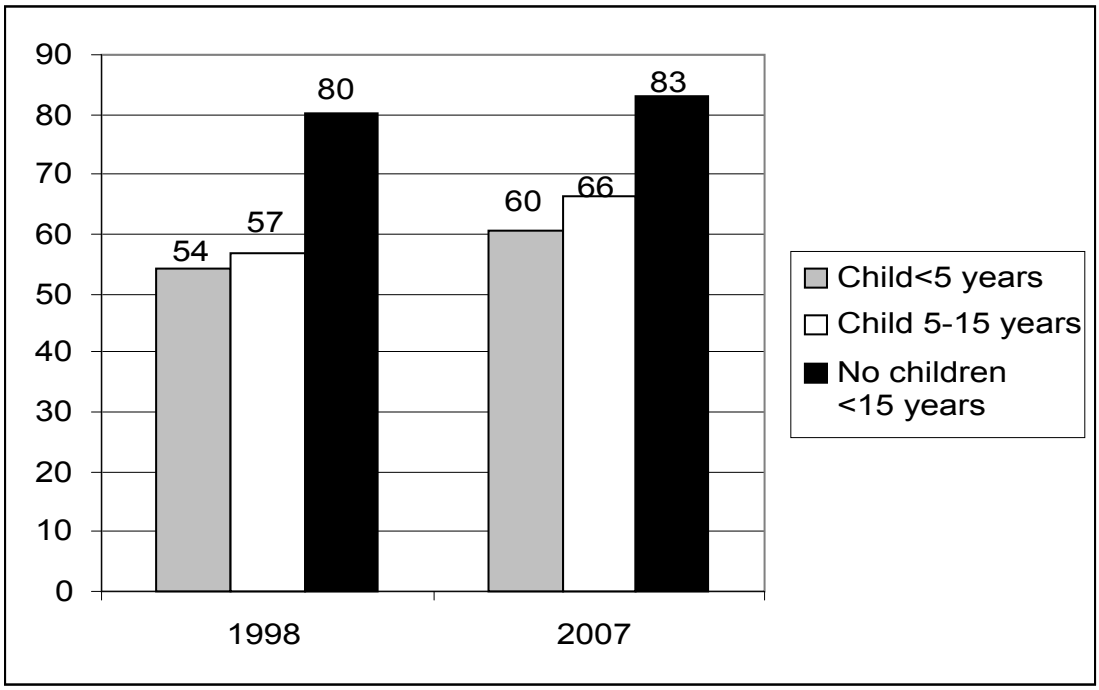
Table 2.2a: Participation of Parents by Age of Youngest Child (% Active)

	Women			Men		
	1998	2007	Change	1998	2007	Change
Child<5 years	53.8	60.2	6.4	95.6	95.4	-0.2
Child 5-15 years	52.2	65.0	12.8	91.8	93.2	1.4
No children <15 years	59.3	69.6	10.3	80.6	83.8	3.2
All	56.7	67.0	10.3	85.2	87.0	1.8
N (active)	17,896	27,030		26,988		

Respondents aged 20 to 64 years.

ILO definitions of employment status.

Figure 2.1: Participation Rates of Women by Parental Status Among Women Aged 20-44 Years



There is a divergent relationship between fatherhood and participation: fathers with children under 15 years are more likely to be active in the labour market than other men. This is a feature shared with many other countries and time periods (Deven *et al*, 1998).

2.5.1 Lone Parenthood and Participation

Labour market participation among lone mothers remained stable between 1998 and 2007 (58 per cent in both years) while rates for married mothers increased from 52 per cent to 64 per cent. This means that over the period of study the participation rate of married mothers overtook that of lone mothers. A very different pattern emerges if

we distinguish between older and younger children. In 1998, 51 per cent of lone mothers with children under 5 years were active in the labour market but by 2007, the activity rate of this group had declined to 45 per cent. Consequently, in 2007 there was a much wider gap in the activity rates of lone mothers and married[14] mothers of pre-school children than there had been in 1998.

In contrast, participation increased among lone parents whose youngest child was aged 5 to 15 years, from 63 to 78 per cent over the nine year period. As a result, rates of participation were higher among lone mothers than married mothers in this category (68 per cent versus 64 per cent). The activity rates also hide a much higher rate of unemployment among lone mothers, especially in 1998. Moreover, it should be noted that previous studies (Fahey and Russell, 2001b) have found that lone parents are more likely to occupy lower occupational positions than other mothers and were highly concentrated in supported employment (e.g. the community employment scheme). The roll back of the Community Employment Scheme over recent years suggests that supported employment is likely to account for a lower proportion of lone parents' economic activity in 2007 than in 1998 and may account for some of the decline in participation amongst the mothers of pre-school children.

Table 2.2b: Trends in Participation Among Lone Mothers (Per Cent Active)

	1998	2007
Lone mothers child <5 years	51.5	44.9
Lone mothers child 5-15 years	63.3	67.6
Lone mothers All	57.8	57.5
Married* Mothers child <5 years	54.2	63.6
Married Mothers child 5-15 years	50.3	64.2
Married Mothers All	52.1	63.9

* Married or cohabiting.

2.5.2 Marital Status and Participation

Changes in participation between 1998 and 2007 also vary by marital status. The greatest increases have been among the groups with lower levels of participation in 1998, namely married and widowed women. Participation among married women increased by 12 percentage points over the period, which meant that by 2007, 61 per cent of married women were in the labour market. This trend is a continuation of a long-term narrowing of the gap between married women's and single women's participation (see Fahey, Russell and Smyth, 2000). In 1983 the gap between married women and single women's participation rates was in the order of 35 percentage points, and was partly due to the shadow cast by the Marriage Bar, which was only removed in 1973. The gap between the activity rates of married and single women is now at a historically low level.

The pattern of changes by marital status are consistent with the trends by age group outlined above. Married and widowed women have an older age profile than single women and we saw that increased participation was greatest among women aged over 45 years. The analysis in Chapter 3 will separate out the effect of age and other factors.

[14] Includes married and cohabiting.

Table 2.3: Participation by Marital Status

	Women			Men		
	1998	2007	Change	1998	2007	Change
Single	75.4	76.7	1.3	81.6	84.7	3.1
Married	48.4	60.9	12.4	88.3	89.9	1.6
Widowed	32.6	49.7	17.0	64.8	64.3	-0.6
Divorced/Separated	56.7	67.5	10.8	78.8	77.2	-1.6
All	56.7	67.0	10.3	85.2	87.0	1.8

Respondents aged 20 to 64 years.

ILO definitions of employment status.

2.6 Changes in Participation by Level of Education

Level of education is one of the most powerful predictors of participation in the labour market among women. In 2007 activity rates ranged from 35 per cent for those with primary level education or below, up to 82 per cent among those with third level educational qualifications. Our trend figures show that the greatest rise in participation rates was among the least educated group. The rate of participation rose by almost 6 percentage points which represents an increase of 20 per cent on the 1998 level. There is a strong correlation between level of education and age, because it is the older age groups that have fewest qualifications. The steep rise among the lowest educational group is, therefore, consistent with the strong increases in participation amongst older women since 1998. Levels of participation among women with Leaving Certificate or college level education have shown only a small increase since 1998. The Appendix table at the end of this chapter shows the figures behind the percentages, this shows that there are two competing trends at work, the number of women in the working age population with low qualifications is shrinking, but a higher proportion of that group are active in the labour market.

Table 2.4: Participation Rates by Level of Education

	1998 Women	2007 Women	Change	1998 Men	2007 Men
Primary	28.9	34.6	*5.7*	70.4	67.9
Inter/Group	48.4	51.4	*3.0*	90.3	87.6
Leaving Certificate	63.0	65.3	*2.3*	86.4	88.0
Post-leaving and Third Level	80.2	82.0	*1.8*	91.7	92.9
All	56.7	66.9	*10.2*	85.2	86.8

Respondents aged 20-64 years. ILO definitions of employment status.

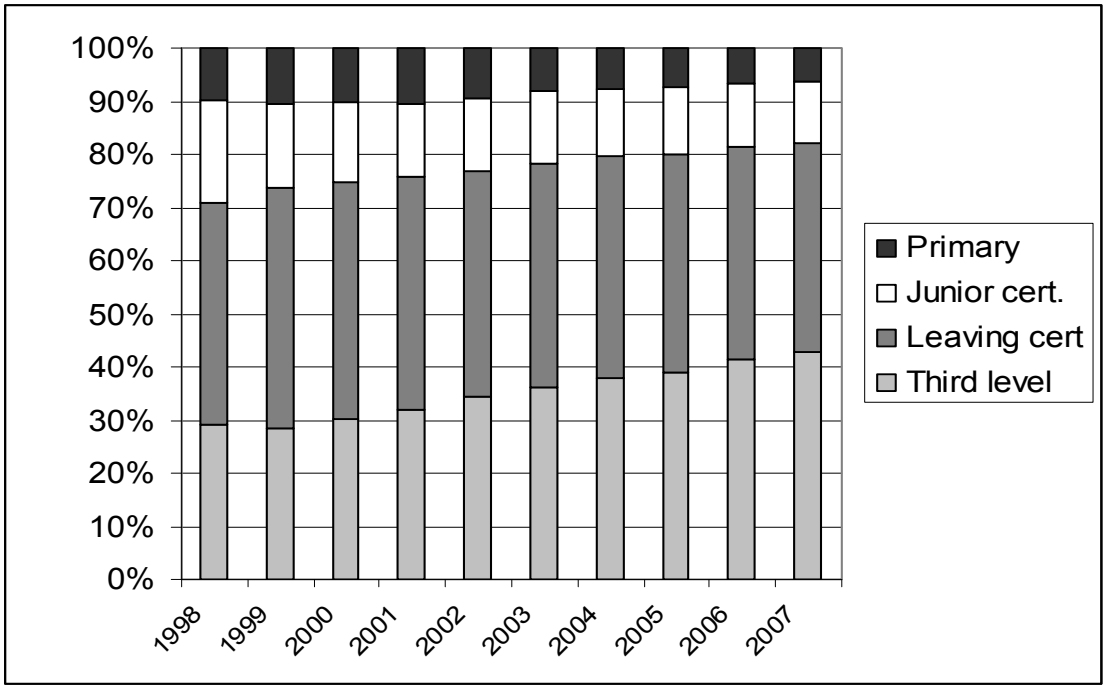
Source: 1998 Special tabulation from CSO; 2007 authors' analysis of *QNHS* 2007 micro-data.

The third level/post-leaving Cert categories changed over time. In 1998 it included: third level university, third level IT/ Post-Grad/other; and Technical College. In 2007 the categories are Post-leaving Cert (PLC), third level non-degree and third level degree and above. By grouping all post-leaving certificate level qualifications together the categories are broadly comparable over time.

This underlying change in the educational attainment of the working age population is probably even more important in accounting for changes in female participation over the same time period. Figure 2.2 presents the changing educational profile of the labour force. In 1998, 29 per cent of the female labour force had third level qualifications, by 2007, in the space of just nine years, this proportion had risen to 43

per cent.[15] The proportion of women in the other three education categories declined with the biggest drop observed in the Junior/Intermediate Certificate level. This means that the higher rate of increase in participation among women with lower qualifications was not enough to cancel out the stronger underlying trend of increased educational attainment among women. We would expect such substantial change in the educational profile of the female workforce to have implications for women's occupational achievement and pay.

Figure 2.2: Educational Composition of the Female Labour Force 1998-2007



Source: *QNHS*, Quarter 2 of each year. PES definition of status. Age 15-64 years.

2.7 Changes in Participation by Nationality

As noted in Chapter 1, migration has been a powerful force in shaping Irish levels of employment and participation. During the 1980s, and before that in the 1950s, emigration acted as a safety valve preventing unemployment spiralling beyond even the high levels recorded at the time. In the 1990s and 2000s net immigration has contributed to high employment and activity rates in Ireland. In Table 2.6 we outline changes in participation rates in the limited set of nationality categories provided in the *QNHS* micro-data. These data suggest that participation rates among women are particularly high among women from the ten new EU member states (84 per cent) and among women from the EU15 (excluding the UK). These high rates of participation among migrant women increase the overall female activity rate for Ireland by 1 per cent, since the rate for women of Irish nationality (66 per cent) is lower than the total rate (67 per cent).

Migration from the EU10 has been largely driven by labour migration in that the vast majority of this group have come to Ireland to work. The composition of migrants from the new member states also promotes high participation because of high qualification levels and a young age profile (Barrett and Duffy 2008). The 'Other' category will include women and men who require work permits to participate in the Irish labour market and includes asylum seekers who are not permitted to work in

[15] Using the narrower age restriction and the ILO definitions applied in our own analyses and the rise in percentage of the female labour force with third level education is even more dramatic; rising from 30 per cent in 1998 to 55 per cent in 2007 (see figures in Appendix Table A2.1).

Ireland, which contributes to the below average activity rates in this nationality grouping. Research has found that even after being granted refugee status members of this group still experience difficulty in securing employment (McGinnity *et al*., 2006). Changes in legislation in 2006 allowed the spouses of work permit holders to take up employment, which is likely to be one factor behind the above average increase in participation among the 'other' category between 1998 and 2007.

Increases in participation over the last decade were also particularly pronounced among male and female migrants from the EU15 (excluding the UK). It is likely that this is due to compositional changes such as a switch from migration for study to migration for employment. Further research is required to uncover the factors behind this change.

Table 2.5: Changes in Participation by Nationality

	Women			Men		
	1998	**2007**	**Change**	**1998**	**2007**	**Change**
Irish	56.5	66.4	*9.9*	85.5	86.1	*0.6*
UK	59.5	64.1	*4.6*	86.0	87.0	*1.0*
EU15 excluding Ireland and UK	62.2	75.2	*12.9*	73.7	89.5	*15.9*
Accession States 10		84.4			98.2	
Other	46.6	60.1	*13.4*	69.0	84.7	*15.8*
American	58.5	61.1	*2.6*	78.9	88.0	*9.1*
All	56.7	67.0	*10.3*	85.2	87.0	*1.8*

Respondents aged 20-64 years.

Note these results are based on PES definition of employment status.

In 1998 the Accession States are included in the 'Other' category.

2.8 Ireland in Comparative Context

Across Europe, countries have developed distinctive approaches to the organisation of employment, social support and care, allocating different responsibilities to the state, the market and the family. Researchers have developed welfare regime typologies to capture the key features of these approaches across groups of countries. The most well know of these is Esping-Andersen's *Three Worlds of Welfare Capitalism* (1990, see also 1999), which has been adapted by others to encompass the gender dimensions of social policy configurations (Daly, 1996; Lewis, 1992). It has been noted that these regimes create different incentives for women (particularly married women and mothers) to participate in the workforce. The Scandinavian countries are seen to exemplify the Social Democratic Welfare Regime, with a strong emphasis on state provision of services, predicated on high levels of labour market participation for both men and women, an individualised tax and welfare system, universal entitlements, a lower reliance on the family as a provider of care, and strong supports for maternal employment such as state provided subsidised childcare and leave scheme (Nordenmark, Halpin and Hill, 2005). These characteristics have also led the Scandinavian countries to be classified as dual-breadwinner regimes (Strandh and Nordenmark, 2006) as they promote high levels of labour market participation among women. In contrast, Corporatist or Conservative Welfare Regimes such Germany, Belgium and the Netherlands have tax and welfare systems that have supported male-breadwinner

arrangements e.g. through joint taxation (Dingeldey, 2001)[16] relatively low provision of childcare and in some cases very long leave schemes that encourage women to withdraw from the labour market after childbirth (Russell *et al*., 2005).

Ireland is usually included with the Liberal welfare regimes alongside Britain. Attributes of the liberal or market-centred welfare regime include a reliance on means tested assistance, modest universal transfers, a preference for market provided welfare and an emphasis on self-reliance mainly through paid labour. However, the relatively low state supports for childcare within the Liberal regimes means that choices for working mothers are limited. The location of Irish welfare within Esping-Andersen's typology is debated. Some elements of family and Catholic ideology embedded in the welfare regime are seen to place Ireland closer to the Conservative welfare regimes (Nordenmark, Halpin and Hill, 2005; McLaughlin, 2001).

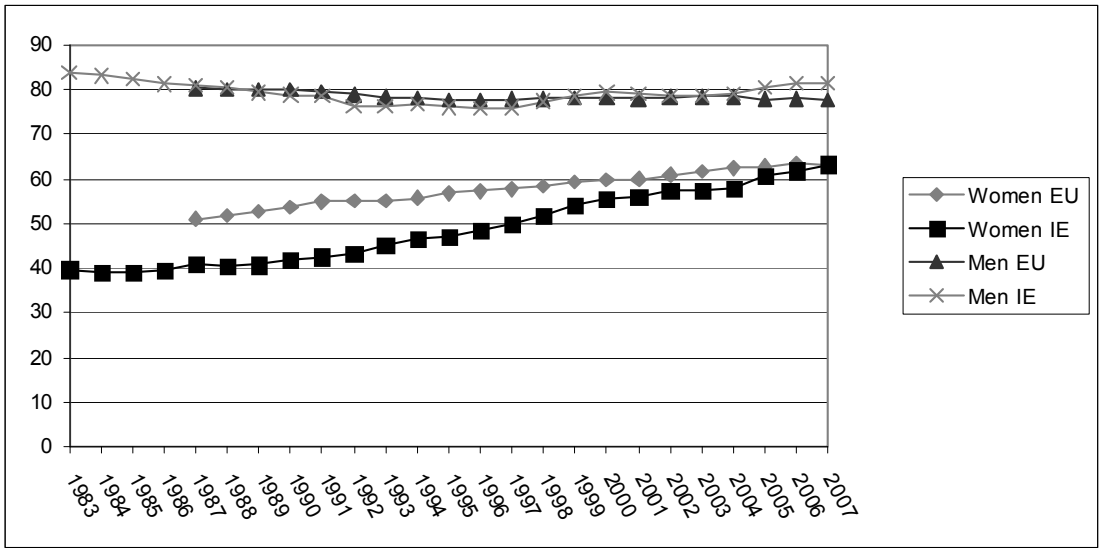
Others have identified a fourth Southern European welfare regime or 'Mediterranean Model' with minimal social security provision and a high reliance on family for economic and social supports (Daly, 1996; Ferrera, 1996). Childcare provision varies across these countries but in general it is argued that there is a lack of supports for reconciling work and family life (Saraceno, 2000).

These distinctive welfare regimes alongside factors such as economic conditions, societal attitudes, and demographic patterns, have resulted in wide variation in the participation rates of women across Europe. Despite these widely varying approaches, common goals have been set across the EU for the employment of women and related to this a target for childcare provision. A target of female employment rates of 60 per cent by 2010 was set in Lisbon, and the Barcelona European Council agreed that by 2010 member states should provide childcare to at least 90 per cent of children between the age of three and school age and to at least 33 per cent of children under three years of age (Council Decision 2003/578/EC).

The long-term rise in female participation rate in Ireland described in Chapter 1, has resulted in a convergence in Irish female activity rates and the average EU activity rates. Between 1987 and 1992 the gap was over 10 percentage points, peaking in 1991 at 12.3 per cent. In 2007 the gap between the Irish and average EU rate fell to zero for the first time. It should be noted that the composition of the EU has changed during that time period, with additional countries joining the EU in 1995, 2005 and 2007 (see note to Figure 2.3). The average EU activity rates are somewhat higher if the figures are restricted to the EU15. For example in 2007, the female activity rate for the EU15 was 64.8 compared to 63.3 reported in the graph for EU27. Therefore, Irish female activity rates had not quite converged with the average for the EU15: in 2007 the gap was 1.5 percentage points compared to a gap of 9.7 percentage points as recently as 1995.

[16] Dingeldey (2001) finds that participation among married women has increased in countries with joint taxation or "splitting" systems, and that taxation system alone cannot account for cross-country differences in participation and that only if labour market regulation, family policy and childcare also support the same model do significant effects emerge.

Figure 2.3: Activity Rates in Ireland Compared to the EU Average



European Union (EC12-1994, EU15-1995-2004, EU25-2005-2006, EU27- 2007).
Aged 15 to 64 years.

The discussion on welfare regimes underlines that the EU average is of limited usefulness in understanding the underlying processes and hides considerable variation across member states. The Scandinavian/Social Democratic welfare regime, represent a distinct cluster at the top of the table with female participation rates above 75 per cent. The Southern European countries, with the exception of Portugal, cluster towards the bottom of the table. The Liberal and Conservative/Corporatist European countries appear toward the centre of the ranking but do not separate into two distinct groups on the basis of female labour market participation. Ireland appears in the bottom half of the table closest to Spain and France. As mentioned above the new EU member states have a somewhat lower average female activity rate than the EU15, but again the mean disguises a wide range, from 40 per cent in Malta to 70 per cent in Latvia (Quarter 2 2007).

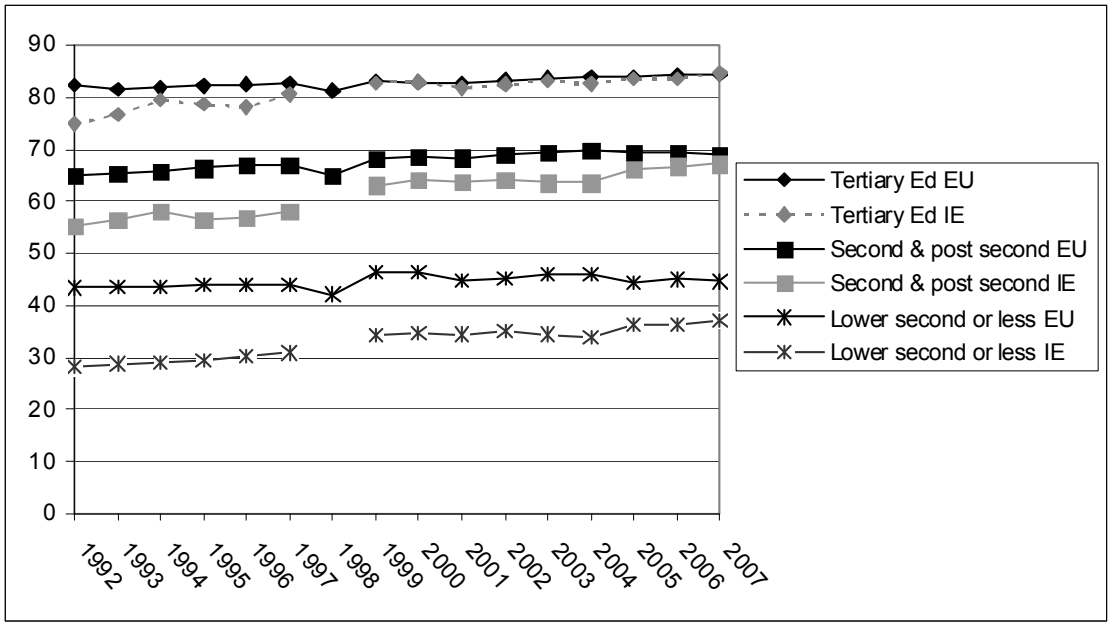
Table 2.6: Female Activity Rates in the EU15, 2007

	Female Activity Rate
Italy	50.6
Greece	55.1
Luxembourg	56.5
Belgium	60.2
Spain	61.2
Ireland	**63.1**
France	65.4
Austria	67.7
Portugal	68.6
UK	68.6
Germany	69.8
Netherlands	72.2
Finland	75.3
Denmark	76.4
Sweden	77.7
EU15	63.3

Aged 15-64 years.
Source: Eurostat Labour Market Latest Trends - 2nd quarter 2007.

In the following tables we explore whether there are groups of women for which the difference between Ireland and the EU average are more pronounced. Figure 2.4 shows that female graduates were at the vanguard of the convergence to European levels of participation. The levels of labour market participation among Irish women with third level education had already reached the EU average by 1999. Amongst women with upper secondary level (Leaving Certificate) or post-secondary level qualifications, activity rates were almost 10 percentage points below the EU average in 1992 but by 2007 the difference had disappeared. The gap between Irish women and those elsewhere in the EU is widest among those with lower secondary level qualifications or less. While there has been a reduction in the shortfall since 1992 when the difference between Irish women and those elsewhere in the EU was 15 per cent, there is still a participation gap of 7.4 per cent for the least educated group.

Figure 2.4: Female Activity Rates by Education Level, Ireland and EU



European Union (EC12-1994, EU15-2004, EU25-2006, EU27).
Aged 15 to 64 years.

2.8.1 Cross-National Patterns of Participation by Age

We explore how patterns of participation by age in Ireland compare with those in Europe in Table 2.7, and the corresponding set of graphs (Figure 2.5). In 1987 levels of economic activity among women aged under 30 years were relatively close to the EU average, and indeed exceeded that average in the 20-24 age category. A very significant gap then opened up in the age categories between 30 and 54 years, but narrowed again among the 55 to 64 years age group. By 1998 the gap between Irish women and those elsewhere in the EU15 had narrowed considerably for all age groups between 30 and 49 years. Irish women's participation rates exceeded the EU average in two age categories: 20-24 years and 25 -29 years. By the year 2007 not only had the activity gaps narrowed to less than 9 per cent in all age categories except the 40-44 year age group, but the shape of the age-related participation curve now closely resembles that for the EU15.

Figure 2.5: Age Related Activity Rates Among Women in Ireland and the EU at Three Time Points

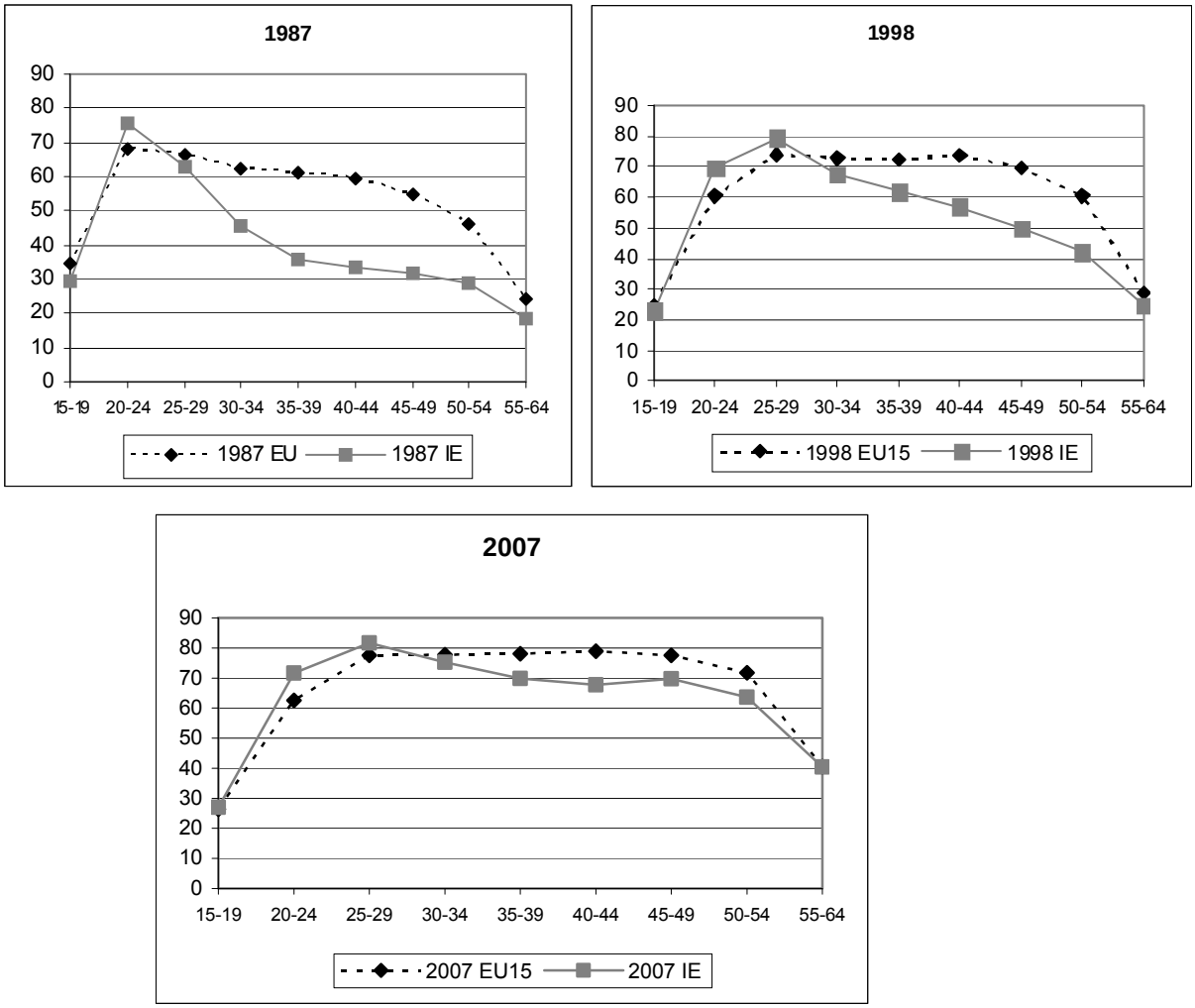


Table 2.7: Female Activity Rates by Detailed Age Category Ireland and the EU

	1987 EU	1987 IE	1998 EU15	1998 IE	2007 EU25	2007 EU15	2007 IE
15-19 years	34.5	29.3	24.7	22.9	21.7	26.4	27.0
20-24 years	68	75.5	60.3	69.4	58.6	62.6	71.6
25-29 years	66.1	62.9	73.9	79.3	76.1	77.5	81.7
30-34 years	62.4	45.8	72.6	67.4	77.3	77.8	75.2
35-39 years	61.4	35.6	72.3	61.7	78.5	78.1	69.9
40-44 years	59.6	33.3	73.4	56.8	79.7	78.9	67.7
45-49 years	54.7	31.5	69.6	50.0	78.2	77.5	69.7
50-54 years	46.4	29.0	60.3	42.1	70.9	71.7	63.6
55-64 years	24.1	18.7	28.8	24.5	38.1	40.5	40.4

1987- EU12, 1998 EU15.

2.8.2 Cross-National Differences in Parental Employment

Finally, we compare patterns of female employment by parental status across Europe, note that we are switching from participation to employment because of the lack of published comparable figures on the former. Figures produced by the OECD

show that in 2005 the levels of labour market activity of Irish mothers were not far below that of the average for 19 EU countries. Participation among Irish mothers with children under 16 years, was 58 per cent compared with an average figure of 60 per cent for 19 EU countries for which data is available. The EU average disguises quite a wide degree of variation, from a rate of 83 per cent in Sweden and 76 per cent in Denmark and to a low of 46 per cent in Poland and 48 per cent in Italy. This contrasts markedly with the comparative situation of Irish mothers as recently as 1991 when the Irish activity rate was 19 percentage points below the EU12 average; however, in the space of just five years the gap had closed to 14 percentage points by 1996[17] (see Fahey *et al.,* 2000).

Table 2.8: Maternal Employment Rates in the OECD, Women Aged 15-64 Years, 2005

	By Age of Youngest Child				By Number of Children Under 15 Years		
	0-16	**<2**	**3-5**	**6-16**	**1 child**	**2 children**	**3 children**
Hungary	45.7	13.9	49.9	58.3	53.7	48.3	24.6
Poland	46.4	..	..	..	42.7	35.6	28.5
Italy	48.1	47.3	50.6	47.5	48.3	41	27.4
Slovak Republic	48.4	23.1	46.6	60.4	56.4	49.4	31.5
Greece	50.9	49.5	53.6	50.4	48.4	44.4	37.4
Spain	52	52.6	54.2	50.9	51.1	44.7	38.5
Czech Republic	52.8	19.9	50.9	67.6	57.4	52.5	34.4
Germany	54.9	36.1	54.8	62.7	58.4	51.8	36
Luxembourg	55.4	58.3	58.7	52.7	56	49.8	33.8
Ireland	**57.5**	**55**		**59.9**	**55.4**	**52.5**	**42.3**
Belgium	59.9	63.8	63.3	56.9	58.3	58.5	39.4
France	59.9	53.7	63.8	61.7	62.2	57.6	38.1
United Kingdom	61.7	52.6	58.3	67.7	67.1	62.4	42.3
Austria	64.7	60.5	62.4	67.5	67.7	60.1	46.5
Portugal	67.8	69.1	71.8	65.4	63.5	59.2	46.1
Netherlands	69.2	69.4	68.3	69.4	70.1	70.6	59.9
Finland	76	52.1	80.7	84.2	71.2	70.9	60.1
Denmark	76.5	71.4	77.8	77.5	..	..	..
Sweden	82.5	71.9	81.3	76.1	80.6	84.7	75.6
EU-19	**59.5**	**51.1**	**58.2**	**63.2**	**59.4**	**55.2**	**41.2**

From OECD (2007) Table 3.2.

Statistics Denmark (1999 data); Statistics Finland (2002 data); UK Office of National Statistics (2005 data); all other EU-countries, European Labour Force Survey (2005 data), except for Italy which concerns 2003.

Levels of female labour force involvement are linked to the number of children as well as their ages. The financial costs of formal childcare can become prohibitive when there are two or more children involved. The OECD figures show that Irish participation rates are below average for women with one child under 15 (55 per cent compared to EU19 figure of 59 per cent) and for women with two children (53 per cent versus 55 per cent). However, Irish women with three children are marginally more likely to be employed than the EU average (42 versus 41 per cent). In Ireland the pattern appears to be that the greatest drop in employment comes after a women's first birth, with a further significant drop when a women has a third child. This contrasts with the situation in France and the UK where there are high levels of employment among women with one or two children and then a very sharp drop in employment among women with three children. Further longitudinal analysis is needed to confirm this process at an individual level in Ireland. These international

[17] EU12 average excludes the three member states that joined in 1994, Sweden, Austria and Finland.

comparisons should also be interpreted in the context of the higher fertility rates among Irish women. Irish women are much more likely to have three or more children than women elsewhere in the EU (Fahey and Speder, 2005), so the relationship between motherhood and employment will have a greater impact on overall female employment and participation in Ireland.

2.9 Level of Participation - Hours of Work

In addition to the overall gender difference in participation there is also significant differentiation in the nature of that participation in terms of hours worked. Studying the hours of work means that the analysis must be confined to those in employment. In 1998 the average number of hours worked per week by women in paid employment was 33 hours compared to 42.9 hours among men. By 2007 women's average hours of paid work had declined to 31.3 while the average for men had fallen to 40.4 hours. These changes have led to a slight narrowing of the gender gap in hours of paid work. The drop in average hours for both sexes is part of a longer term reduction in working hours. Average hours for men were 46.7 in 1989 and 36.4 hours for women (see O'Connell and Russell, 2007).

Table 2.9: Hours of Work for Women and Men 1998-2007

	Women		Men	
	1998	2007	1998	2007
1-19 hrs	12.3	13.6	2.8	2.4
20-29	16.9	19.8	4.1	4.1
30-34	5.3	7.3	1.8	1.9
35-39	31.8	37.4	22.8	35.9
40-44	19.4	12.8	25.2	24.4
45+	7.2	3.6	26.4	17.6
Variable	7.2	5.5	16.9	13.8
	100.0	100.0	100.0	100.0
Average hours	*33.0*	*31.3*	*42.9*	*40.4*

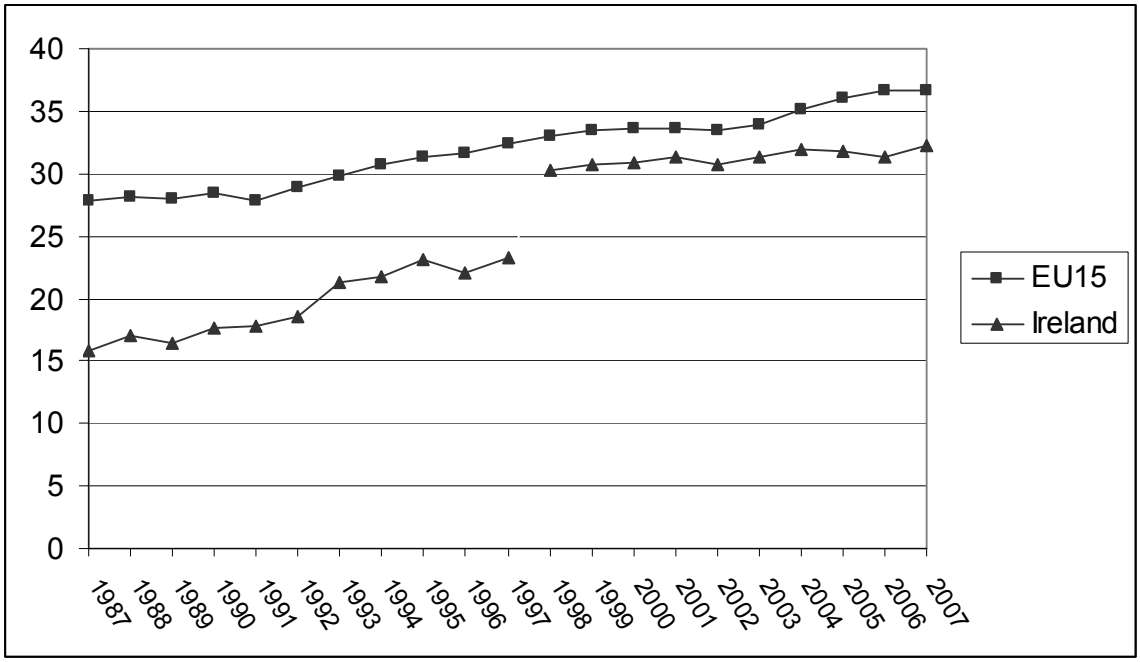
ILO employed.

Average excludes those on variable hours.

The downward trend in average work hours for women was partly driven by the increase in part-time work (i.e. under 30 hours per week), however, this is not the whole story as there has been a downward shift in hours among women working full-time: this is demonstrated by the increase in the proportion of women working 35 to 39 hours and the decrease in the proportions in the top two hour categories. The 35 to 39 hour week is also the category that has expanded most among men, between 1998 and 2007.

Taking a longer term view of the evolution of part-time work shows that the steepest increase in part-time working occurred between 1987 and 1997. The jump between 1997 and 1998 is due to definitional changes instigated when the *QNHS* was introduced (see CSO for further discussion). The increase in part-time work since 1998 has been modest in comparison, rising from 30 per cent of female employment to 32 per cent in the nine years up to 2007. The steady rise in the availability of part-time working options between 1987 and 1997 are sure to have played a role in the growth of female participation over that period, however, it is unlikely to account for the continued rise in activity levels since then.

Figure 2.6: Part-time Employment as a Percentage of Total Employment Among Women



Note: In Ireland, there was a change in series from the LFS to the *QHNS* in 1998, changes in definitions resulted in a higher number of part-time workers being identified.
Source: Eurostat website http://epp.eurostat.ec.europa.eu. Date of extraction 6/6/08.

2.10 Conclusions

This chapter has examined the changes in women's labour force participation between 1998 and 2007. The analysis show that many women have been attracted into the labour market over this period, and that this increase has been widely spread. The groups that have experienced the greatest rates of increase over the last decade are older women, married women, widowed women, those with the lowest educational qualifications, those without young children, and women from other EU countries (with the exception of the UK). A number of these factors are clustered together, i.e. there is an overlap between age, marital status, family status and educational qualifications.

The recent expansion of the labour market appears to have drawn in some of those with previously low rates of activity, not included in the first wave of the economic boom. Some of the increased participation among older women may reflect a cohort effect, whereby some of the women who entered the labour market in the late 1970s and early 1980s (when conditions for female employment were more advantageous than in the 1960s and early 1970s), stayed in the labour force and are now in older age categories. The other major change over the last decade has been the increased participation of migrant workers, particularly those from old and new EU member states. High levels of qualifications and relative youth contribute to the high levels of participation among these groups.

It is difficult to assess the impact of policy changes such as the expansion of maternity and parental leave on participation among women with young children. Rates of participation increased for this group over the period but at a slower pace than for women without children. However, when the comparison is confined to those aged 20 to 44 years there was a slight narrowing of the participation gap between

mothers of pre-school children and those without children under 15 years. The gap between mothers of school-age children and women with no children narrowed more significantly over the period. In the following chapter statistical models are used to establish whether differences in the participation rates of those with and without children have narrowed when other characteristics such as education and earning capacity are held constant. Lone mothers represent one of the very few groups of women whose participation in the labour market has stalled over the last ten years.

The changes described here mean that women's activity rates in Ireland are now on par with the average for the EU. However, Irish rates are still considerably lower than in the countries with the highest activity rates such as Denmark, Sweden, Finland and are close to the rates prevailing in Conservative Welfare Regimes that encourage the 'male breadwinner' arrangement rather than the 'dual-earner' model. Convergence with European averages has not yet occurred for some groups, particularly the least educated and those in the 35 to 39 years age group.

In the next chapter we will consider how these changes have influenced the relative importance of different factors in the decision to participate in the labour market. In Chapters 4 and 5 we go on to consider the economic and social implications of the very significant changes in participation outlined. We can then begin to answer questions such as - Have changes in the rates and composition of the female work-force reduced gender inequalities in the labour market and have they led to an improvement or deterioration in quality of life?

Appendix 2.1

Table A2.1: Education Levels Among Women Active in the Labour Market and Population (Thousands)

	Women 1998			Women 2007		
	Active '000	Pop '000	% Active	Active '000	Pop '000	% Active
No formal/primary education	59.0	205.1	28.8	55.6	160.5	34.6
Lower secondary	113.4	234.2	48.4	96.0	186.7	51.4
Upper secondary	246.0	390.6	63.0	241.4	369.7	65.3
Post Leaving	176.7	220.2	80.2	473.3	577.3	82.0
All	595.1	1050.1	56.7	866.3	1294.2	66.9

Note: Women aged 20-64 years. ILO Employment Status.
Sources: 2007, own calculations using *QNHS* microdata, 1998 figures, special tabulation from CSO.

3. FACTORS SHAPING FEMALE LABOUR FORCE PARTICIPATION

3.1 Introduction

What are the main factors shaping female participation in the labour market at present? Has the importance of different influences changed since the 1990s? Answers to these questions are important in establishing the context for policy interventions aimed at increasing female participation in the labour market.

In order to explore these issues, we begin by reviewing studies of the factors shaping the growth in female participation in other EU countries (Section 3.2). In Section 3.3, we identify the impact of rising levels of educational qualifications on the composition of the population and the labour force and examine the extent to which further growth in female participation may arise from this source. Broader labour supply models of the influences on participation are considered in Section 3.4. These capture the influence of key factors such as the potential wage a woman could earn in the paid labour market, her age, and the presence or absence of pre-school or school-age children. New estimates, based on data from the CSO's "EU Survey on Income and Living Conditions for 2005", are compared with similar estimates from the 1990s. Key findings are drawn together in the concluding section.

3.2 International Studies of Factors Influencing Women's Participation

The international literature includes many studies of women's labour market participation (see, for example, the reviews by Blundell and MaCurdy, 1999 and Meghir and Philips, 2008). Key influences emerging from these studies include:

- the wage level that can be commanded by a woman in the labour market, which depends crucially on the educational level attained;
- the number and ages of children in the family;
- the presence or absence of a partner, and if present, the earnings of a partner;
- tax and social welfare rules, particularly the tax treatment of couples.

Across countries, the strength of different influences can vary for a number of reasons, including differences across countries in individual preferences, social norms, tax and welfare regulations and the institutional context (e.g., childcare and education). New results on key factors influencing participation in Ireland are presented in the next section, and compared with previous studies. Here we focus on a different issue: how to explain past growth in female labour market participation. To what extent is it due to changes in some of the underlying factors e.g., growth in real wages, whether driven by increased levels of education or by other factors? To what extent is it attributable to differences in how individuals respond to the set of factors outlined above?

First we review the relatively small number of international studies addressing these issues. In the Netherlands, women's participation rose from just over 30 per cent in 1979 to close to 60 per cent by 2000. Schettkat and Yocarini (2001) find that most of the rise in labour force participation by married women was "a 'structural' effect resulting from the higher educational attainment of Dutch women. Higher education created the pool of potential labor supply which became effective when labour

demand expanded, largely in response to foreign demand". They do find, however, that during the 1990s changes in behaviour contributed as much to rising labour force participation as the educational factor. Vlasblom and Schippers (2004) focus on the shorter period 1992-1999 and find an even larger role for changes in behaviour in both the Netherlands and Germany. But quite different results are found when applying their methods to four other EU countries (the UK, France, Spain and Italy). For these countries changes in the educational composition of the female population does account for most of the observed change in participation.

Euwals *et al*. (2007) look at growth in female participation in the Netherlands from 1992 to 2002, using an age-period-cohort model. Total growth in female participation was 13 percentage points. Much of the growth in participation came in the form of part-time work They find that the female participation rate tends to be higher when the labour market is relatively tight - the net upswing between 1992 and 2002 accounting for 2 percentage points of the growth in participation. The increase in education levels over the period accounted for a further 2 percentage points. Two other factors combine to account for the bulk of the change: a decline over time in the impact of children on labour market participation, and "unobserved cohort effects". The latter captures the idea that the cohort born in say, 1970, differs from the cohort born in 1950 in ways which are not captured by education levels or other measured factors.

Attanasio *et al*. (2008) examine the participation choices of cohorts of American women born in the 1930s, the 1940s and the 1950s. They suggest that there have been two key elements underpinning the observed changes in participation, which has been particularly strong over the child-rearing part of the life cycle. The first is an increase in female wages, both in real terms and relative to men (and so a decline in the gender wage gap). The second is a fall in childcare costs. Taken together, these two factors have increased the net financial return to employment for women with children.

For the UK, Gomulka and Stern (1989) decomposed growth in participation over the 1970 to 1983 period into components attributable to (a) changes in characteristics of the female population, such as age or education and (b) changes in behavioural decisions[18] for a given set of characteristics (i.e., the coefficients in the labour supply equation). They found that over the 1970s and early 1980s it was changes in behaviour rather than in characteristics which were most strongly linked to the change in participation. By contrast, Gutierrez-Domenech and Bell (2004), using the same methodology, found that "two-thirds of the growth in female participation over the 1984 to 2002 period was associated with changes in the socio-demographics of the female population, especially education and fertility". The remaining one-third was linked with variations in behaviour (women with the same observable characteristics responding differently) and/or by changes in other variables not taken into account by the model. There were, however, variations in the relative importance of changing characteristics and changing behaviour over the period. Between 1984 and 1992 changes in behaviour were more important (as was the case between 1970 and 1983). This was the period during which female participation rose most sharply. In the latter period, changes in behaviour tended to reduce participation, but changes in characteristics more than offset this.

Gregg *et al*. (2007) note that in the UK the participation rate for married women with children has risen relative to the participation rate for married women without children. They focus on changes in this gap as reflecting factors which affect married

[18] It should be noted that changes in variables not measured or changes in unobservables would also contribute to this component.

women with children but not married women without children. Such factors include changes in employment and social security rights contingent on maternity, as well as childcare costs. One of the most notable impacts was "…a dramatic increase in part-time employment in the year after a birth. Previous cohorts of mothers had mainly stayed at home until the child reached 2-5 years of age". Initially, it was higher earning women who took advantage of the maternity leave rights. After 1990, when more independent tax treatment of couples was introduced, participation increased sharply among women in the middle third of the potential earnings distribution.

Overall these studies show that the factors influencing growth in women's participation can vary considerably, both across countries and over time. For some countries and time periods, the main drivers of growth in participation have been structural, associated with changing levels of education and hence of the wage that could be commanded in the labour market. For other countries or different time periods structural factors have had a more limited role, and changes in behaviour have come to the fore. Changes in behaviour can, in turn, be due to changes in individual preferences or social norms. But it is also possible for changes in behaviour to stem from changes in the options or choices available - for example, because of the infrastructure or financing of childcare. Cyclical factors also play a role, with an upswing being associated with higher participation. Thus, the prolonged boom in the Irish economy during the 1990s and the first half of the current decade have tended to boost female participation. The current recession is therefore likely, other things being equal, to lead to a reversal of these cyclical influences. None of the international studies provides a complete decomposition in these terms, and it is outside the scope of the current study. Nevertheless, it is useful to be aware of these considerations when considering the Irish situation, to which we now turn.

3.3 Education and Women's Labour Market Participation: Retrospect and Prospect

We have seen in Chapter 2 (Table 2.4) that women's labour market participation rates rise sharply with their level of education. In 1998 women with no qualification beyond primary level had a participation rate of about one in four. By contrast, the participation rate for women with a third level qualification was about three in four. There has also been a marked shift in the educational profile of the total population. In 1994, just under a quarter of all women had no qualification beyond primary level, and about one in six had a third level qualification. By 2007 the proportion with no qualification beyond primary level had halved, and the proportion with a third level qualification had doubled. To what extent did this change in the educational profile of the population give rise to increased female participation in the workforce?

In order to explore this question, we classify the population by 5 year age-bands and by four levels of educational qualification (none beyond primary, lower second level, upper second level and third level). We can then divide observed rise in participation rates into two parts:

The first part is associated with the shift in educational and age composition of the female population.

The second part is associated with the rise in participation rates for given levels of educational qualification and age band.

The female participation rate for those aged 20 to 64 years rose from 50 per cent in 1994 to 67 per cent in 2007. Our analysis finds that shifts in educational/age

composition of the female population could account for about 40 per cent of the total rise in female participation.

To what extent can further growth in female labour market participation be expected to arise from this source? We use forecasts of the population by age group and educational category from the ESRI's *Medium-Term Review* (Fitz Gerald *et al*., 2008) to examine this question. Female labour market participation had reached 67 per cent by 2007. Changes in educational composition and the age structure of the population over the 13 years between 2007 and 2020 could be expected to raise that figure by about 4 percentage points. This compares with a rise of between 6 and 7 percentage points in the preceding 13 years. Thus some growth can be expected to arise from this source, but at a slower pace than over the past decade or so. However, a considerable factor driving the large increase in female participation in Ireland during recent years was the growth in demand for labour. The country was near full employment and women and migrants helped satisfy such high labour demand. As we enter a recessionary period and the demand for labour declines female participation will likely be affected. As mentioned by McGinnity (2004), women may class themselves in 'home duties' as opposed to 'unemployed' and may be deemed as non-participants when, in fact, they would enter employment if such an option existed.

3.4 Influences on Women's Participation: Econometric Analyses

Chapter 2 described large increases in female participation in the labour market during the past decade and more. We focus here on identifying the factors that affect this participation decision, and quantifying the strength of key influences. Standard approaches in the extensive literature on this subject focus on the influence of wages (summarising the economic reward from participation) and a range of other factors (demographics, the presence or absence of children, the ages of children if present etc.). We follow a similar approach here, building on the work of Doris (2001) which looked at the changing responsiveness of labour supply in the 1990s in Ireland. Her paper made use of the 1994 and 1998 waves of the Living In Ireland Survey. We use data for 2005, drawn from the CSO's Survey on Income and Living Conditions (SILC) survey.

First we describe the sample used in our estimation of labour supply. (Details are given in Table 3.1 below). We want to focus on influences on participation in the main working age groups, rather than the particular processes influencing choices regarding participation in third level education for the young, or retirement decisions for the elderly. For these reasons, we start by focusing on persons in the age group 22 to 65 years. We also omit any students above the age of 22 years who are still in full-time education. The next step is to exclude the self-employed and farmers from the analysis. This is standard in the economic literature, as the incentives faced by the self-employed (including farmers) cannot be summarised by an hourly wage, and hours of work for the self-employed are rather difficult to measure accurately. As spousal income is a likely influence over the participation decision we must also exclude the spouses of the self-employed and farmers. We exclude those who are not in employment due to illness or disability as their illness/disability is likely to be a large factor in their decision not to participate. (For an analysis of labour force participation by those with a disability see Gannon (2005), Gannon and Nolan (2005) and Gannon and Nolan (2006)). Finally, we exclude the cases where necessary information is missing (e.g., on variables such as income, spousal income, educational attainment, years of experience/years out of the workplace and number and age of children. This leaves a sample of 4,748 persons of whom 2,525 are

female. Two-thirds of the female sample (1,692 cases) are participating in the workforce.

Table 3.1: Criteria Defining the Sample Used for Labour Supply Analysis, 2005

Criterion	Number of Cases Excluded	Number of Cases Remaining
Initial sample excluding 22-65 year olds		7,678
Exclude students	74	
Exclude: Self-employed, farmer	1,324	
Exclude: Ill or disabled	387	
Exclude: Cases with missing values	1,145	
		4,748
Of which male		2,223
Of which female		2,525

The wage that a woman could expect to earn in the labour market is well-established as a as a key influence on participation (for surveys see Meghir, 2008; Killingsworth, 1983). Of course, wages are only observed for persons actually in employment, so that some means has to be found of predicting the likely wage which would be earned by those who are not employed. “First generation” labour supply research predicted the wage for the non-employed based on the relationship between observed wages (for the employed) and relevant labour market characteristics (such as age, experience and educational attainment). This neglected the fact that the set of persons for whom wages were observed was self-selected, posing the problem that unobservable factors influencing the decision to participate (such as motivation or innate skill) may also influence the wage a woman commands in the workplace. This means that estimates of wages obtained on this basis are subject to what is termed “selection bias”.

Developments in econometric methodology have helped to overcome this problem, and arrive at estimates of wages which are unbiased. Given that this provides wage estimates for all women, not just those in the labour market, it is possible to estimate models of labour market participation (or more generally, labour supply including the hours of work dimension as well as participation).

The selection correction model we use to estimate wages is due to Heckman (1979). This involves two parts - an initial equation predicting participation on the basis of variables relevant to the wage (e.g. age, education) and other variables not relevant to the wage equation (number and ages of children). The results of this first equation are used to derive a correction factor which enters as a separate variable (conventionally termed λ) in the main wage equation. We can then predict a wage for the non-participants based on their personal characteristics and the value of the correction factor. The results of the Heckman model for 2005 may be seen in Table 3.2.

Looking at the results in Table 3.2 we see that wages rise with the level of education attained. Results for 2005 show no significant premium attaching to Junior Cycle qualifications with the return to education rising as the level of educational attainment rises. Wages increase with experience, but at a declining rate. Conversely, wages fall with time spent out of the labour market, but also at a declining rate.

Table 3.2: Female Wage Regression, 2005

Variable	Coefficient	
Wage Equation:		
Intermediate/Junior Certificate	0.026	
Leaving Certificate	0.274	***
Diploma	0.421	***
Degree/Higher Degree	0.867	***
Years of Experience	0.048	***
Years of Experience^2	-0.001	***
Years Out of Labour Market	-0.023	***
Years Out of Labour Market^2	0.0005	***
Constant	1.72	***
Lambda	0.231	***
Participation Equation:		
Intermediate/Junior Certificate	-0.046	
Leaving Certificate	0.016	
Diploma	0.146	
Degree/Higher Degree	0.373	***
Years of Experience	0.087	***
Years of Experience^2	-0.002	***
Years Out of Labour Market	-0.129	***
Years Out of Labour Market^2	0.002	***
Youngest Child Aged 0-4 years	-0.816	***
Number Children Aged 5-12 years	-0.275	***
Constant	0.799	***
Number of Observations	2525	

Note: statistical significance at the 1 per cent, 5 per cent, 10 per cent levels are indicated by ***, ** and * respectively.

Table 3.3 below shows the effect of various factors such as wage, spousal income, age and children have on the decision of women to participate in the workforce. In our analysis we separate our sample into 'qualified' and 'unqualified' women. Unqualified women are those who do not have a Leaving Certificate qualification. Qualified women are those with a Leaving Certificate or higher qualification. This allows us to analyse whether the factors influencing participation differ in magnitude amongst women due to their educational attainment. As can be seen from the table the participation rate for unqualified women is substantially lower than that of qualified women (51 per cent compared to 76 per cent). The coefficients of a probit model are not directly interpretable so we focus on the marginal effects. These look at the effect of various factors on the 'average' woman's likelihood to participate. For the "predicted log wage" we report not the marginal effect, but an elasticity, as this is most easily related to other results in the literature. The figure shown is the elasticity of the participation decision with respect to wage i.e. the percentage change in the probability of participation in response to a 1 per cent change in the wage. This provides a measure of how sensitive the decision to participate in the workforce is to changes in wage rates. (The Heckman model in Table 3.2 was used to predict an hourly wage for the non-participants in the sample based on their characteristics, such as age, education and number of children.)

Table 3.3: Results of the Probit Model of Female Participation, 2005

	Unqualified Women			Qualified Women		
	Coeff.	Marginal Effect		Coeff.	Marginal Effect	
Predicted Log Wage	2.79	2.26#	***	1.91	0.66#	***
Spouse's Net Income	0.00	0.00		0.00	0.00	
Age	-0.04	-0.02	***	-0.05	-0.01	***
Number of Children Aged 0-4	-0.50	-0.20	***	-0.62	-0.17	***
Number of Children Aged 5-12	-0.18	-0.07	**	-0.32	-0.09	***
Number of Children Aged 13-18	0.16	0.06	**	-0.04	-0.01	
Constant	-3.92			-1.64		
N	877			1,632		
Participation Rate	51%			76%		

#Indicates an elasticity.

Note: statistical significance at the 1 per cent, 5 per cent, 10 per cent levels are indicated by ***, ** and * respectively.

The wage elasticity for women with very low educational qualifications is greater than that for women with second- or third-level qualifications. Their participation decision will, therefore, have a larger reaction to changes in wages than qualified women. A 10 per cent rise in the wages commanded by unqualified women would lead to a 23 per cent rise in the probability of their taking up employment. For women with second- or third level qualifications, a 10 per cent rise in wages would see the participation probability rise by nearly 7 per cent.

There is no significant impact of spousal income/earnings on the participation decision for either qualified or unqualified women. This is a common, though not universal, finding in the literature. On average, as a woman gets older she is less likely to participate. This result is consistent across qualified and unqualified women. Having a child in the pre-school age category (0 to 4 years) makes it less likely that a woman will be in employment. Children in the 5 to 12 years age category also reduce the likelihood of participation but by lesser amounts than pre-school children. Having children in the 13 to 18 year age category has no statistically significant impact on participation probability for qualified women but has a positive effect for unqualified women. As mentioned by Doris (2001) it may be that as children get older and spend more hours in school this can help facilitate women to work outside the home. Older children may also incur extra expenditure and this can also drive the participation decision. Wage elasticity, age and the presence of pre-school children are the main drivers of the participation decision with all three being significant at the 99 per cent level.

The nature of these influences can be clarified by examining predicted probabilities of participation in more detail focusing on changes in wages, age and the number and age category of children (if present) as we have identified these above as being the main drivers in the participation decision. The marginal effects shown above are useful for analysis of the 'average' female in the sample; however they show us exactly that, an 'average' effect. By moving away from the average we can examine in more detail the impact wages, age and children have for a range of different individuals who differ from the average in particular respects.

Table 3.4: Predicted Probabilities of Participation (All Women) at the Average Wage

Number of Children	Age		
	25	**35**	**45**
No Children	0.94	0.87	0.76
One Pre-school Child	0.84	0.71	0.54
Two Pre-school Children	0.66	0.48	0.31
1 School Age Child	0.90	0.80	0.66
1 Pre-school, 1 School Age Child	0.76	0.60	0.42
1 Teenage Child	n.a.	0.88	0.77

We can see from Table 3.4 above the declining probability of participation with age in general. A high predicted probability of participation exists for women with no children, ranging from 94 per cent for a 25 year old falling to 76 per cent for a 45 year old, a fall of 18 percentage points. Where, in addition, there is a school age child, the probability of participation starts somewhat lower for a 25 year old and falls more sharply with age. A very similar pattern exists for women of the same ages but with one teenage child present in the family.

There are strong negative effects on the probability of participation associated with the presence of pre-school children. Having one pre-school child reduces the probability of participating for a 25, 35 and 45 year old by 10, 16 and 22 percentage points respectively. The effect of two pre-school children is stronger again reducing the participation probability for a 25 year old by 28 percentage points and the corresponding probability for a 35 year old by 39 percentage points. We see, therefore, that the impact of younger children (0-4 year age category) increases with the age of the mother. The presence of school age children reduces participation probability but by a lesser amount ranging from a 4 percentage point reduction for a 25 year old (compared to childless women of 25) up to a 10 percentage point reduction for 45 year old women. The combination of one pre-school and one school age child also has a large negative effect on the participation probability (18 percentage point reduction for a 25 year old and a 27 percentage point reduction for a 35 year old).

Table 3.4 shows the effects of age and children on participation at the average female wage. We now move on to include the impact of alternative wage levels on a woman's participation probability. We examine the effect of earning half, 1.5 times and twice the average wage in the case of a woman having one pre-school and one school age child.

Table 3.5: Predicted Probabilities of Participation at Differing Wage Levels

	Age		
	25	**35**	**45**
1 Pre-school child, 1 school age child; half average wage	0.41	0.25	0.13
1 Pre-school child, 1 school age child, average wage	0.76	0.60	0.42
1 Pre-school child, 1 school age child; 1.5 times average wage	0.95	0.89	0.78
1 Pre-school child, 1 school age child; twice average wage	0.98	0.96	0.90

Table 3.5 shows that the probability of participation varies strongly with the level of the wage that can be commanded by the woman in the labour market. At the average wage and the case (in Table 3.4) of one pre-school, one school age child the probability stood at 76 per cent for a 25 year old, 60 per cent for a 35 year old and 42 per cent for a 45 year old woman, evaluated at the average wage. For a wage at half the average level, there are very substantial falls in the participation probability falling

to 41 per cent for a 25 year old, 25 per cent for a 35 year old and just 13 per cent for a 45 year old. Conversely, for wages at 50 per cent above average or twice the average wage there are strong positive effects on the likelihood of participation. There is roughly a 20 percentage point increase in probability for a 25 year old earning 1.5 to 2 times the average wage. For a 35 year old the average effect about 30 percentage points, again making it highly likely that women in this category will participate in the labour market.

How have these influences changed as between the 1990s and 2005? We can explore this issue by looking at similar work carried out by Doris (2001) for 1994 and 1998. Doris looks at the factors influencing labour market participation as we have done above but uses slightly different definitions of 'qualified' and 'unqualified' women. She defines unqualified women as those with a maximum of primary education. As the numbers with primary education only or below have fallen dramatically in Ireland in recent years it would have been unfeasible to use such a definition for 2005 data as detailed analysis could not be performed due to small sample numbers in this category. Although this means that our results are not directly comparable to hers it can be argued that for the 1990s a definition of 'primary or below' was appropriate for unqualified persons but in 2005 a more appropriate definition of unqualified is that of below Leaving Certificate education.[19]

Table 3.6 shows us the elasticities and marginal effects for 1994 and 1998. For unqualified women the wage elasticity rose between 1994 and 1998. The wage elasticity of participation for unqualified women (no qualification beyond primary level) was significantly higher than for qualified women. We can see in Table 3.3 that the same holds for 2005, when "unqualified" is defined as not having at least a Leaving Certificate. Thus, the participation of women with no qualifications does depend sensitively on the wage which they can command. However, it remains the case that women with higher qualifications are more likely to be able to command higher wage levels and are thus more likely to be found participating in the labour market.

For 1994 and 1998 there is a statistically significant, but small, effect of husband's income on the participation of married women - higher income tending to depress participation slightly. By 2005 this effect is not significantly different from zero for women with or without educational qualifications. The individualisation of the income tax bands may have played a role in this. Under the "income splitting" system in place from 1979 to 2000, the effective tax rate on married women's earnings was, apart from some small allowances, the same as the tax rate on the last pound of her husband's earnings. Individualisation introduced greater independence into the tax affairs of husbands and wives, increasing the incentive to participate. Callan *et al*. (2009), using a detailed labour supply model accounting for tax structures, estimated that the introduction of individualisation may have boosted participation by between 2 and 3 percentage points. While appreciable, this is small in relation to longer-run trends in participation.

Other things being equal, women's participation is lower at higher ages. The strength of this effect is similar as between 1994 and 1998, but may have weakened somewhat by 2005. The effect of pre-school age children appears to be similar for qualified and unqualified women, and constant as between 1994 and 1998. In 2005, the impact of pre-school children on participation remains around this level i.e. the likelihood of female participation in the labour market is reduced by between 16 and

[19] Also, the majority of women with primary education only fall in the older age bracket we, therefore, may obtain spurious results that are due to a cohort or age effect as opposed to an education effect.

Table 3.6: Results of the Probit Model of Female Participation: 1994, 1998

	Unqualified Women						Qualified Women					
	1994			1998			1994			1998		
	Coeff.	Marginal Effect		Coeff.	Marginal Effect		Coeff.	Marginal Effect		Coeff.	Marginal Effect	
Predicted Log Wage	1.904	1.94#	***	3.503	2.80*	***	2.036	0.74*	***	1.668	0.58#	***
Spouse's Net Income	0.001	0.000	*	0.00	0.000		-0.001	0.000	***	-0.001	0.000	***
Age	-0.07	-0.021	***	-0.08	-0.029	***	-0.06	-0.021	***	-0.07	-0.021	***
Number of Children Aged 0-4 years	-0.65	-0.198	***	-0.46	-0.174	***	-0.59	-0.205	***	-0.53	-0.164	***
Number of Children Aged 5-12 years	-0.2	-0.059	***	-0.28	-0.105	***	-0.22	-0.075	***	-0.18	-0.056	***
Number of Children Aged 13-18 years	0.008	0.002		0.152	0.057	*	0.145	0.05	***	0.056	0.018	
Constant	0.497			-1.28			0.033			0.605		
N	737			342			1,703			1,015		
Participation Rate (%)	26.1			37.4			61.9			70.1		

#denotes an elasticity.

Note: statistical significance at the 1 per cent, 5 per cent, 10 per cent levels are indicated by ***, ** and * respectively.

Source: Doris (2001).

21 per cent due to the presence of a child under four years of age. The presence of school age children also tends to reduce the probability of labour market participation. This impact is smaller than for pre-school children, more stable over time and more similar between women with and without educational qualifications. The impact of teenage children is not significantly different from zero before 2005 or for qualified women in 2005 but a small positive effect exists for unqualified women in 2005, perhaps reflecting an increased likelihood of such women to return to work once their children are of a certain age.

Thus, while participation rates have risen for women with children as well as those without children, results here suggest that participation rates are still significantly affected by the presence of children. This is particularly so for pre-school children, and still more so for the pre-school children of mothers without educational qualification. These findings have to be interpreted in a broader context.

The impact of children on labour market participation can be seen as a composite effect. It includes a "preference" component, whereby women with young children place a higher value on time spent at home than others, and a "cost" effect, whereby the cost of childcare reduces the net financial reward from employment. The strength of the effect as identified by the analysis can then be affected by changes in the net balance between rewards from employment and the costs of childcare. This in turn can be affected by taxation policy, in particular the tax treatment of married couples, as discussed earlier. It can also be affected by changes in individual preferences (and social attitudes) regarding full- or part-time labour market participation and full- or part-time child-rearing.

3.5 Conclusions

As seen in the literature factors influencing Irish female participation in the labour market can be placed into three main categories, structural or compositional factors such as demographics, the 'boom' effect of a high demand for labour and a behavioural effect whereby government policies influence female participation, such as tax individualisation and childcare provision.

Rising levels of education have increased the wages which Irish men and women can command in the labour market. Over the past decade or so this has contributed to continuing increases in participation rates for women. Looking to the next decade or so, this factor will have less impact. There will also be a shift in the age composition of the population away from the young adults, for whom female participation rates are highest, towards the middle and older age groups with somewhat lower female participation rates.

Macroeconomic conditions (long-term growth and business cycle influences) also affect wage rates, which continue to have a strong effect on participation decisions. This is particularly true for women with lower levels of education as indicated by their higher relative wage elasticity (Tables 3.3 and 3.6). During the Celtic Tiger years a boom in labour demand helped drive up wages and ensured the availability of employment. As we are now in recession falling labour demand and its impact on wages are likely to have a negative effect on female participation rates.

While participation rates have risen for women with children, the presence of children in the family, and particularly of pre-school children, continues to make participation less likely. This observed effect may arise from a combination of a "preference" component and a "cost" effect, with childcare costs reducing the net reward from employment. The balance between these varies across individuals, and can change

over time, and is also affected by policy decisions regarding the structure of taxation and of childcare supports.

Appendix 3.1: Influences on Women's Wages, 1994, 1998 and 2005

Table A3.1: Female Wage Regressions 1994, 1998, 2005

	1994		1998		2005	
Variable	**Coefficient**		**Coefficient**		**Coefficient**	
Wage Equation:						
Intermediate/Junior Certificate	0.134	***	0.126	***	0.026	***
Leaving Certificate	0.375	***	0.451	***	0.274	***
Diploma	0.568	***	0.664	***	0.421	***
Degree/Higher Degree	1.117	***	1.127	***	0.867	***
Years of Experience	0.062	***	0.045	***	0.048	***
Years of Experience^2	-0.110	***	-0.066	***	-0.001	***
Years Out of Labour Market	-0.027	***	-0.018	***	-0.023	***
Years Out of Labour Market^2	0.071	***	0.052	***	0.000	***
Constant	0.773	***	1.060	***	1.720	***
Lambda	0.104	***	-0.001		0.231	***
Participation Equation:						
Intermediate/Junior Certificate	0.244	***	0.044	***	-0.046	***
Leaving Certificate	0.428	***	0.08	***	0.016	**
Diploma	0.424	***	0.479	***	0.146	***
Degree/Higher Degree	0.790	***	0.482	***	0.373	***
Years of Experience	0.112	***	0.099	***	0.087	***
Years of Experience^2	-0.281	***	-0.275	***	-0.002	***
Years Out of Labour Market	-0.136	***	-0.126	***	-0.129	***
Years Out of Labour Market^2	0.226	***	0.182	***	0.002	***
Youngest Child Aged 0-4 years	-0.603	***	-0.633	***	-0.816	***
Number Children Aged 5-12 years	-0.166	***	-0.177	***	-0.275	***
Constant	0.022	*	0.659	***	0.799	***
Number of Observations	2,437		1,357		2,525	

Note: statistical significance at the 1 per cent, 5 per cent, 10 per cent levels are indicated by ***, ** and * respectively

Source: 1994, 1998; Doris (2001). 2005; own calculations using SILC.

There is quite a stable "ladder" of wage premia for 1994 to 1998, with the lowest premium attached to Junior Cycle second level qualifications, higher premia for a Leaving Certificate or third level Diploma, and the highest value for a third level degree. Results for 2005 show no significant premium attaching to Junior Cycle qualifications, and falls in the premia attaching to other levels. Wages increase with experience, but at a declining rate. Conversely, wages fall with time spent out of the labour market, but also at a declining rate.

4. RISING PARTICIPATION: LABOUR MARKET OUTCOMES

There are alternative and contradictory predictions about the effect of increasing female participation on gender inequalities in the labour market. On the one hand, increased female participation in the labour market is likely to reduce gender differences in pay in the medium to long term if it takes the form of women spending less time out of employment when they have children. More continuity in employment may also result in women moving further up the occupational hierarchy. On the other hand, an expansion of participation to include lower skilled women, women with little work experience, migrant women or groups with additional difficulties e.g. lone parents, those with health restrictions, might lead to a greater concentration of women in lower end occupations and to wider differences in pay. This process could also lead to greater inequalities between different groups of women in the labour market. In this chapter we focus on these twin issues of pay and occupational attainment and how they have changed over the last decade. Our concern is to describe trends over the recent period rather than to analyse the determinants of gender inequalities in pay and occupational position.

We first review evidence on changes in the gender pay gap drawing on other work recently completed as part of the Equality Authority/ESRI Programme of Research on Equality and Discrimination (McGuinness *et al.,* 2009a). Next we conduct an analysis of the gender composition of the low paid over the period. We move on to original analysis of occupational change in the period 1996 to 2006, using Census data, and present the resulting change in the distribution of female and male workers by detailed occupational group. We reflect on the implications for gender segregation in the Irish labour market. We then explore vertical segregation, looking at managerial roles by gender using a large survey of employees from 2003. We conclude by presenting an illustrative analysis of occupational change in the individual work careers of women returning to the labour market using longitudinal data. The chapter draws on a variety of sources and considers a range of issues to sketch a picture of how changes in participation has affected the kind of jobs women do, and the remuneration they get relative to men.

4.1 Trends in the Gender Pay Gap

Gender differences in the average level of pay per hour have been the subject of a number of ESRI studies since the 1980s, the most recent of these draws on data from the National Employment Survey in 2003 (Barrett, Callan *et al*., 2000 ; Callan and Russell, 2003; McGuinness *et al.,* 2009a). The results from these studies suggest that the raw gap declined between 1994 and 2000, rose between 2000 and 2003 and subsequently fell between 2003 and 2006 (see Table 4.1). It should be noted that the data series change over period, which may account for some of the variation. The latest figures from the NES and EU SILC could indicate that increased continuity in women's employment since the mid-1990s is feeding into a narrowing of the gap between men and women, however, further analyses of the most recent results is necessary.

The decomposition of the raw gender gap into elements that can be explained by different characteristics of men and women and differential rewards is important for understanding the factors that lie behind the pay gap. The results of such analyses are summarised in Table 4.2 and suggest that the amount of the gap that was accounted for by time out of the labour market increased between 1987 and 2000,

but there was a sharp drop in the portion of the wage gap explained by other factors (principally educational levels and years worked) (Callan and Russell, 2003). The most recent results for 2003 (McGuinness *et al.,* 2009a) are not directly comparable as the models contain a wider range of control factors and the data is collected from employers rather than employees as in the previous studies. The analysis show that controlling for human capital (educational attainment, age, experience, employment tenure and membership of a professional body but not time-out) accounts for only 17.5 per cent of the pay gap (ibid, Table 3.1) which suggests that the unexplained portion of the gap has risen in recent years.

Table 4.1: Trends in the Gender Pay Gap in Ireland

	Women	Men	F/M Ratio
1987 SIDP	£4.27	£5.33	80.1
1994 LIS	£6.38	£7.71	82.7
1997 LIS	£7.55	£8.88	85.0
2000 LIS	£8.77	£10.29	85.2
2003 NES	€14.93	€17.74	84.2
2005 EU SILC	€15.20	€17.06	88.5
2006 NES (March)	€17.74	€20.28	87.5
2006 NES (October)	€17.67	€20.50	86.2

Sources: NES figures from McGuinness et al. (2009); 1987 figures from Callan and Wren; 1994, 1997; 2000 figures from Russell and Gannon (2002), 2005 figures own analysis of EU SILC.

Table 4.2: Results of Decompositions of the Gender Pay Gap

	Raw Gap (log)	Residual (% Unexplained)	Adjusted Pay Gap[1]
1987 SIDP	28.9	50.8	14.7
1994 LIS	17.1	25.9	4.4
1997 LIS	19.8	29.1	5.8
2000 LIS	17.5	39.0	6.8
2003 NES	21.7	(36.0)[2]	(7.8)[2]

[1] Adjusting for human capital characteristics only.

[2] The NES results are not directly comparable because the model includes a much wider range of controls (family structure, job/firm characteristics, industry and occupation).

Sources: NES figures from McGuinness *et al*. (2009a); 1987 to 2000 figures from Callan and Russell (2003).

4.2 Low Pay and Gender

While the gender pay gap figures look at differences in average earnings it is also informative to examine how recent changes have impacted on the very bottom of the earnings distribution. Low pay is an important dimension of inequality because of its link to poor quality employment and because it is an important indicator of the economic incentives facing low-skilled women making decisions about re-entering employment. There is also a growing policy interest in the 'working poor'.

In addition to the changes in participation discussed extensively in this report, the most important change in relation to low pay was the introduction of the minimum wage in April 2000. It was set at a rate of £4.40[20] and has been increased on six

[20] IR£1 is approximately €1.27.

occasions since then (see Table 4.3). The national minimum wage currently stands at €8.65 per hour. There is a separate rate for those aged under 18 years, set at 70 per cent of the adult rate. There is also a lower rate for new entrants, i.e. employees in their first two years of employment and exemptions in the case of formal apprenticeships and other trainee schemes.

Table 4.3: National Minimum Wage Levels Since Introduction

	National Minimum Wage Per Hour	Under 18s Per Hour
April 2000	£4.40 (€5.59)	£3.08 (€3.91)
July 2001	£4.70 (€5.97)	£3.29 (€4.18)
October 2002	€6.35	€4.45
February 2004	€7.00	€4.90
May 2005	€7.65	€5.36
January 2007	€8.30	€5.81
July 2007	€8.65	€6.06

Studies undertaken to assess the likely impact of the NMW suggested that women would be major beneficiaries of this policy change as they accounted for a disproportionately high percentage of the low paid (Nolan, 1998; Nolan and McCormick, 1999). Barrett, Callan *et al.* (2000a) calculated that the proposed level of £4.40 would lead to a reduction of under 1 percentage point in the male/female wage gap. The effect of minimum wages in reducing inequality depends in part on whether those above the threshold attempt to reassert wage differentials and the extent to which the minimum wage keeps pace with earnings growth.

In assessing changes in the level of low pay among female and male employees we adopt the measure of low pay used in previous Irish and international research on this topic: the percentage of workers earning less than two-thirds of median hourly earnings (Barrett *et al.,* 2000). As in the case of poverty lines, the choice of threshold is somewhat arbitrary and the choice made will lead to different results. As a check we also report the main results using a lower cut-off of half the median. The results below show that the trends and findings generally hold for both measures. Another shared limitation of relative earnings or income thresholds of this sort is that they may not adequately reflect changes in the absolute levels of earnings, because the value of the threshold changes over time. We conduct new analysis on the EU SILC 2005 to provide more up-to-date figures on low pay. The measures are constructed in a manner that maximizes continuity with those used in the Living in Ireland Survey, nevertheless, the change in series could lead to differences in the measures of earnings. Hourly earnings are calculated on the basis of current usual earnings and usual hours worked. We do not include information on bonuses etc. which were collected for annual earnings because of the difference in period, these payments are treated in a similar way in the Living in Ireland studies. Previous research suggests that such additions to salary are unequally distributed by sex and tend to widen the pay gap between men and women (Russell *et al*., 2005).

Table 4.4: Gender and Low Pay: Proportion Below Low Pay Thresholds

	< Half Median				< Two-Thirds Median				
	F %	M %	All %	Value €/£	F %	M %	All %	F:M Ratio	Value €/£
1994	14.6	9.2	11.4	£3.00	30.5	17.8	23.0	*1.7*	*£4.00*
2000	6.9	4.6	5.6	£4.01	23.6	13.4	18.0	*1.8*	*£5.34*
2005	5.7	5.1	5.4	€6.53	21.7	15.8	18.6	*1.4*	*€8.71*

All employees.

Sources: 1994 figures Nolan (1998); 2000 authors' analysis of Living in Ireland 2000; authors' analysis of 2005 EU SILC.

For the first period, between 1994 and 2000, the proportion of employees defined as low paid fell on both the thresholds examined. The decline was of a similar order for men and women, when the different starting points are taken into account. Taking the two-third's threshold, the percentage of female employees who were low paid fell from 31 to 24 per cent (a decline of 22 per cent of the original figure) and the percentage of male employees below the threshold fell from 18 to 14 per cent (a decline of 25 per cent of the 1994 figure). Between 2000 and 2005 there was a continued decline in the proportion of low paid female employees from 24 to 22 per cent, but there was a slight rise in the proportion of male employees falling below the threshold. This led to a situation of continuity in the overall rate of low paid employees over the second period.

Comparing the ratio of females to males falling below the threshold we see that the ratio declined somewhat in the latter half of the period (2000-2005). This shows that women continue to be over-represented in the low paid group. We can further examine this issue by looking at the composition of the low paid. In 1994, 54 per cent of the low paid were women and in 2000 this had risen slightly to 59 per cent, in 2005 this had dropped again to 55 per cent. To put this in context, in 2005 women represented 48 per cent of the total sample of employees.

Table 4.5: Gender Composition of the Low Paid

	< Half Median			< Two-Thirds Median		
	1994	**2000**	**2005**	**1994**	**2000**	**2005**
Men	47.9	44.6	44.7	45.9	42.2	44.5
Women	52.1	55.4	55.3	54.1	59.3	55.5
All	100.0	100.0	100.0	100.0	100.0	100.0

Part-time work is strongly associated with low pay and is also clearly gendered (see Chapter 2). Part-time workers are defined as those working less than 30 hours per week, which is a widely used definition in the literature. First comparing rates we see that in 2000, 35 per cent of part-timers were low paid, compared to 14 per cent of full-time workers. Consequently, part time workers are over-represented among the low paid (see Figure 4.1). By 2005, the rates of low pay among part-timers had decreased to 29 per cent while the rate among full-time workers increased from 14 to 16 per cent.[21]

Table 4.6: Part-time Work and Low Pay (% < Two-Thirds Median Hourly Earnings)

	1994	**2000**	**2005**
Part-Time	36.4	35.3	29.1
Full-Time	20.5	14.2	15.7
All	23.0	18.0	18.6
Ratio PT/FT	1.78	2.49	1.85

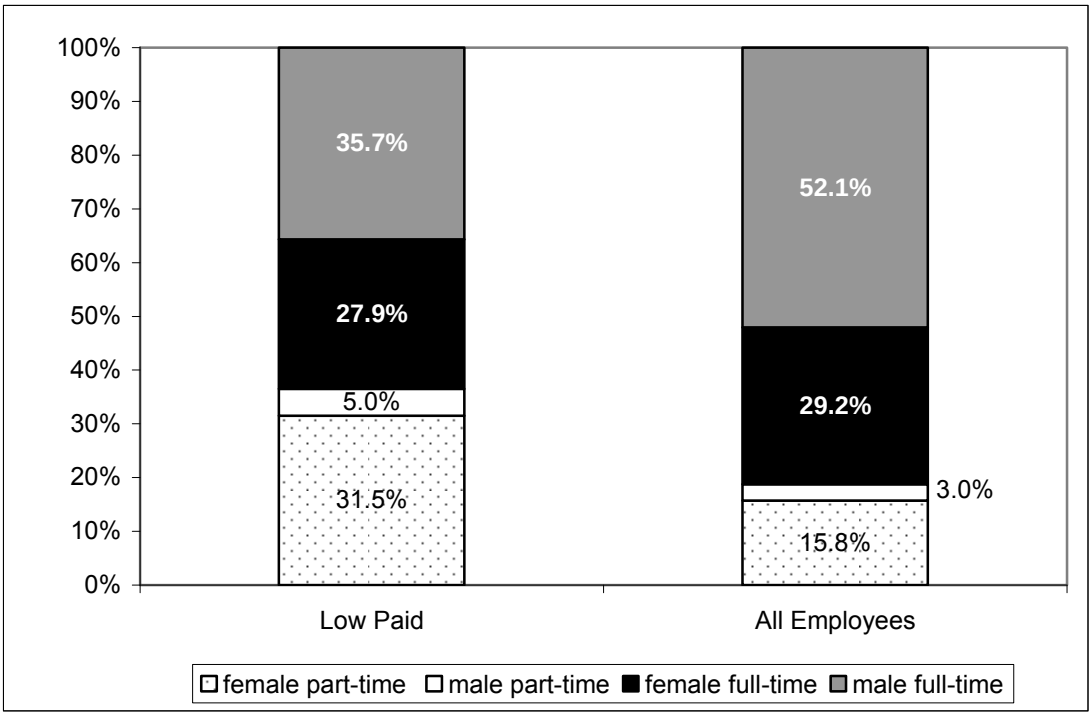
Part-time <30 hours per week.

Source: 1994 - Nolan (1998); 2000 - LIIS 2000 own analysis; 2005 - EU SILC own analysis.

The continuing high rates of low pay among part-time workers mean that they are significantly overrepresented among the low paid group. Figure 4.1 compares the composition of the low paid to all employees. This shows that in 2000, although part-timers only represented 18 per cent of all employees, they accounted for 37 per cent of the low paid. The link between part-time work and low pay occurs for both men and women, however as the figure shows it is women who make up the majority of part-time workers and this contributes to their concentration among the low paid.

[21] The female part-time employment rate appears to be rather high in EU SILC 2005, standing at 39.6 per cent compare to estimates of between 31 and 32 per cent for the *QNHS* for the quarters between 2004 and 2005.

Figure 4.1: Composition of the Low Paid Compared to All Employees, 2000



How do the Irish figures compare to elsewhere in Europe? Blázquez and Salverda (2009) provide estimates of the incidence of low pay for four EU countries (see Table 4.7). Ireland falls midway between the countries examined. The overall rate of low pay in Ireland is closest to the Spanish rate (19 per cent compared to 18 per cent) but in Spain low pay is more concentrated among female employees. It should be noted that the rates of pay are considerably lower in Spain than in Ireland and that the median point differs across the countries.

Table 4.7: Low Paid as a Percentage of Employees, Four Countries, 2001

	Female	Male	All
Denmark	12.3	11.3	11.8
Italy	11.7	9.0	10.1
Netherlands	30.3	16.3	22.5
Spain	25.2	13.4	18.2

Low pay defined as below two-thirds of median hourly earnings of all employees.

Source: Blázquez and Salverda (2009).

4.2.1 Summary

There has been an overall decline in the rate of low pay over the period this is not surprising given that the period in question was one of strong economic growth and very low unemployment. The introduction of the minimum wage and subsequent increases in its level is also likely to have contributed to the decline in the percentage of low paid workers from 23 to 19 per cent. Despite this overall decline the trends in results suggest that the very rapid increase in female participation over the last decade has not been associated with any change in the gender distribution of low pay. The relative risk of being low paid is still 1.3 times higher for female employees than male employees. So while the levels have dropped the relativities have remained the same. There has been a small decline in the low pay risk associated with part-time work but it remains considerably higher than for full-time workers, therefore, women's greater concentration in part-time continues to play a part in their exposure to low pay. Trend figures on the gender difference in average hourly pay

show a more positive picture of change suggesting that increased female participation is associated with a narrowing of the differentials between men and women, however, given the nature of the analyses here we cannot establish a causal relationship.

4.3 Gender Differences in Occupational Positions

In this section we consider the kinds of jobs women are doing and how this has changed over time. A change in the occupational distribution may influence the gender differences in pay, but is also interesting in its own right as occupational position is indicative of a range of other intrinsic and extrinsic dimensions of work e.g. level of autonomy, job satisfaction, status. As mentioned in the introduction to this chapter the effects of increasing female labour force participation are uncertain as there are competing pressures that promote occupational advancement and occupational downgrading. Shorter breaks in career for women having children should result in greater occupational advancement for women; however, increasing participation among those with lower qualifications or longer periods outside the labour market could result in a greater concentration of women in lower level occupations. Research on female returners, that is women who enter the labour market following a period of economic activity (e.g. caring for children), suggests that they are often found to experience occupational downgrading (Russell *et al.*, 2002).

Similarly, depending on the type of jobs women enter, increased participation may be associated with increased or decreased gender segregation of employment, i.e. the extent to which women do 'women's jobs'/work in female-dominated occupations. There is no automatic link between higher levels of female participation and reduced gender segregation. In fact in Sweden, a country with very high female participation, occupational segregation is high (Charles and Grusky, 2004). Conversely, increased participation may mean women make inroads into traditionally male-dominated occupations.

Discussions of gender segregation in occupations usually distinguish between vertical and horizontal forms of segregation. Vertical segregation refers to the extent to which men dominate the most desirable or privileged occupations. Horizontal segregation refers to the extent to which women are disproportionately allocated to certain types of occupation. The two often interact and it can be difficult to disentangle them. More pertinent for this chapter, is that our ability to distinguish the two empirically with the available data, is limited. The classification of occupations in the Census data is generally more informative about horizontal segregation, though in some cases we can infer skill level/position in the occupational hierarchy. Supplementary data on vertical segregation is introduced into the discussion at the end of this chapter.

A number of explanations have been proposed for why women tend to hold some jobs and men hold others, and why this segregation has persisted over many years. These explanations can be broadly divided into those that emphasise choice and preferences and those that stress exclusionary processes and structural constraints. The precise mechanisms argued to generate occupational segregation are many and varied but may include: employer discrimination; institutional discrimination; preferences; expected sanctions and labour force commitment. Many are based on essentialist stereotypes, for example, that women will excel in personal service, nurturing and interpersonal interaction, and that men excel in interaction with things and in physical labour (Gerson, 2002).[22] 'Employer discrimination' is where employers/personnel managers have internalised such stereotypes and tend to hire,

[22] This is particularly true of explanations of horizontal segregation.

fire and promote in accordance with them (Reskin and Roos, 1990; Correll *et al.,* 2007). 'Institutional discrimination' is where these essentialist views are institutionally embedded in personnel practices, education systems and firm promotions.

Human capital theory emphasises the role of preferences in producing and reproducing occupational segregation. From this perspective, women are believed to choose female-dominated occupations because they are more family-friendly and because there is a lower penalty for time spent out of the labour market. While human capital theory suggests that these preferences arise from 'rational economic behaviour' others put forward more sociological explanations of how gendered preferences arise.

The most prevalent of these theories is that gender stereotypes about the appropriate roles of men and women are learnt at an early age, through socialisation and that these shape the preferences of workers (Charles and Grusky, 2004). A variation of these 'Expected sanctions' is where workers conform to prevailing norms of masculinity and femininity for fear of sanction by, for example, parents and co-workers, even though they may not subscribe to such stereotypes themselves.

It is not the purpose of this section to consider these ideas in any detail, but rather to examine how patterns have changed as participation has risen in Ireland (see Barrett, Callan *et al*., 2000 and Russell *et al*., 2004 for a discussion of these issues in the Irish context; see Charles and Grusky, 2004 for a review of the literature more generally).

4.4 Occupational Change: 1996-2006

To examine these trends we use Census data from 1996 and 2006. This is not precisely the dates of earlier chapters, but the large sample size of the Census means that it is an unrivalled data source for examining occupational distribution and how it has changed over time. The occupational groups used in Tables 4.8 and 4.9 are known as 'occupational sub-groups' and have 25 categories. This is a compromise between the broad occupational groups, which have nine categories, and the three digit detailed occupations which have 999.

Looking back at previous trends, as a context for the changes in the 1996-2006 period, Fahey *et al.* (2000) discuss the period 1971 to 1990, the first period for which consistently defined data were available. Of the 14 broad occupational groups used, in 1971 women were underrepresented (relative to their share of total employment, which was 26 per cent) in seven: agricultural workers, managers/proprietors, skilled maintenance, foreman/supervisors, transport/communications, security workers and labourers. Women were over-represented in another 6 occupations: professionals; associated professionals; clerical workers; skilled production workers; sales and personal service occupations, and had a proportional share in semi-skilled production operatives. By 1997 women had increased their share of most occupational groups, but this broad picture remained intact. The main change was that women came to be under-represented among skilled- and semi-skilled production workers, due largely to the decline in the textile industry, and even more over-represented among clerical workers.

Focusing on the change between 1996 and 2006, Table 4.8 presents information from each Census on the number of men and women in the labour force in each occupational sub-group at the two time points. Between 1996 and 2006 the number of men in employment grew by 27 per cent but the number of women employed grew by 57 per cent. Consequently, the overall female share of employment rose from 37

to 42 per cent. In the following discussion we compare changes in female employment in occupational sub-categories to the benchmark figure of the 57 per cent growth rate in female employment. We first consider occupations where the rise in female employment was above average - distinguishing occupations where the female share increased and those where it declined (due to even stronger growth in male employment). We then consider occupations where the increase in employment was below the 57 per cent benchmark and again outline the impact of these trends on the female share of those occupations.

Strong growth was recorded for women in most occupational sub-groups. The strongest growth between 1996 and 2006 was recorded in the following subgroups: managers and executives (156 per cent); business and commerce occupations (176 per cent); social workers and related occupations (161 per cent) and the Garda Síochána (169 per cent). All of these are at the upper end of the skills hierarchy, particularly managers and executives. This strong growth also meant that the female share of these occupations also rose. The rise in the female share was particularly marked for both managers (from 32 per cent in 1996 to 42 per cent in 2006) and business and commerce occupations (from 35 per cent in 1996 to 48 per cent in 2006), and shows substantial gains made by women in traditionally male occupational groups. The rise in the female share in the Garda Síochána was also marked, though from a much lower base (8 per cent in 1996 to 19 per cent in 2006).

If we look at detailed occupations for the groups 'managers and executives' and 'business and commerce occupations', interesting patterns emerge (see Appendix 4.1, Table 1). For example, among managers and executives the strongest growth in female employment is recorded for personnel managers (over 300 per cent growth for women in the period, female share rose from 49 per cent to 66 per cent). Among business and commerce occupations, the strongest growth in female employment was in 'personnel, industrial relations and work study officers' (429 per cent growth for women in the period, female share rose from 54 per cent to 64 per cent). These trends suggest that in traditionally male-dominated occupational groups, specific occupations which require more interpersonal skills tend to record the highest growth in female employment.[23]

Other above-average growth in women's employment in the 1996-2006 period was also recorded in occupational sub-groups with a low to average female share and a relatively high skills profile (see Table 4.8). For example, scientific and technical occupations, where female employment grew by 73 per cent; 'other professional workers' (78 per cent growth); central and local government workers (86 per cent growth). In all of these the female share also increased, for example from 45 per cent to 57 per cent for central and local government workers.

[23] Though note also very high growth in occupations such as 'other financial managers' (299 per cent); legal service and related occupations (300 per cent) and 'underwriters, claims assessors, brokers and investment analysts' (380 per cent).

Table 4.8: Change in Occupational Sub Groups 1996 to 2006

Population aged 15 and over	Male			Female			Female Share	
Year	1996	2006	% Change 1996-2006	1996	2006	% Change 1996-2006	1996 %	2006 %
Occupational Group:								
Farming, fishing and forestry workers	127,627	80,117	-37.2	12,998	8,297	-36.2	9.2	9.4
Electrical trades workers	25,919	37,038	42.9	900	1,337	48.6	3.4	3.5
Engineering and allied trades workers	67,284	77,456	15.1	2,701	1,929	-28.6	3.9	2.4
Textile, clothing and leather workers	8,538	3,257	-61.9	14,078	4,159	-70.5	62.2	56.1
Food, drink and tobacco production workers	25,464	19,208	-24.6	6,875	6,868	-0.1	21.3	26.3
Chemical, paper, wood, rubber, plastics and printing workers	17,857	13,488	-24.5	5,995	5,780	-3.6	25.1	30.0
Other manufacturing workers	40,574	55,514	36.8	20,961	19,200	-8.4	34.1	25.7
Building and construction workers	106,805	178,929	67.5	2,993	4,500	50.4	2.7	2.5
Managers and executives	44,217	72,590	64.2	20,640	52,808	155.9	31.8	42.1
Communication, warehouse and transport workers	82,231	102,400	24.5	6,997	12,519	78.9	7.8	10.9
Clerical and office workers	27,555	31,089	12.8	113,949	151,111	32.6	80.5	82.9
Sales occupations	83,179	94,445	13.5	73,080	110,657	51.4	46.8	54.0
Business and commerce occupations	25,758	41,448	60.9	13,649	37,614	175.6	34.6	47.6
Computer software occupations	12,426	33,191	167.1	7,172	12,397	72.9	36.6	27.2
Scientific and technical occupations	28,300	45,301	60.1	7,019	13,677	94.9	19.9	23.2
Health and related workers	14,885	19,753	32.7	53,191	73,312	37.8	78.1	78.8
Social workers and related occupations	2,133	4,761	123.2	4,948	12,933	161.4	69.9	73.1
Religious occupations	4,659	3,106	-33.3	1,889	796	-57.9	28.8	20.4
Other professional workers	16,463	22,605	37.3	11,061	19,684	78.0	40.2	46.5
Personal service and childcare workers	49,760	64,783	30.2	76,832	140,414	82.8	60.7	68.4
Teachers	21,454	23,379	9.0	40,255	57,519	42.9	65.2	71.1
Central and local government workers	21,914	24,800	13.2	17,930	33,272	85.6	45.0	57.3
Garda Síochána	9,815	10,026	2.1	855	2,299	168.9	8.0	18.7
Army occupations	10,905	7,042	-35.4	210	400	90.5	1.9	5.4
Other gainful occupations (incl. not stated)	67,774	131,713	94.3	45,698	99,205	117.1	40.3	43.0
All occupations	943,496	1,197,439	26.9	562,876	882,687	56.8	37.4	42.4
Looking for 1st regular job	16,814	16,428	-2.3	10,778	12,944	20.1	39.1	44.1
Total in labour force	960,310	1,213,867	26.4	573,654	895,631	56.1	37.4	42.5

Source: Census of Population 2002, Vol. 6, Table 5 for 1996: *Census of Population 2006*, Volume 8, Table 5 for 2006.

One additional high-skilled area which was seen by previous researchers as a potential growth area for women is computer software occupations (Greco, 2005). Here there was above-average growth in female employment (73 per cent), but growth in male employment, at 167 per cent, exceeded that of women, so the female share fell from 37 per cent to 27 per cent for computer software occupations, making it a much more male dominated occupation. Computer software is also one of only four occupations where there has been a significant decline in the female share (see below). Another occupational sub-group recording high growth is personal service and childcare workers (83 per cent), though this is neither high-skilled nor did it have a low female share. Here the female share rose from 61 per cent to 68 per cent.

Taking 57 per cent (the overall growth in women's employment) as a benchmark, we now consider which occupational sub-groups experienced below-average growth. The areas with below-average growth tended to be in groups which already had a high proportion of women, though in many cases the female share was maintained or even increased, due to low growth in male employment. For example, female employment in clerical and office workers grew by just 33 per cent, though because male employment in this group only grew by 13 per cent, the female share rose from 81 per cent to 83 per cent. Similarly in sales, women's employment grew by 51 per cent and their share rose from 47 per cent in 1996 to 54 per cent in 2006. Women's employment grew by 38 per cent in health and health related workers, maintaining the high female here (78 per cent in 1996, 79 per cent in 2006). Women's employment growth in teaching, at 43 per cent, was also below average though the female share rose from 65 per cent to 71 per cent.

The only occupations in which female employment fell were agriculture, engineering and allied trades workers, some manufacturing occupations (most noticeably textiles, which fell by 70 per cent), and religious occupations (which fell by 58 per cent). Male employment also declined in most of these occupations, nevertheless, these also represent the small set of occupations in which the female share fell in the period.

With some notable exceptions, the general trend is that of high growth in high-skilled occupations which had a low share of women and lower growth in occupations with low to medium skills which had a higher share of women. For the most part the trends observed here represent a continuation of earlier trends (see Fahey *et al*., 2000; Hughes, 2002). The overall picture appears to be one of upskilling and at least some reduction in segregation which has been associated with the rise in women's employment in the period 1996-2006. There has certainly not been a marked growth in clerical occupations, sales, teachers and health, traditionally female-dominated occupations, which would be associated with greater occupational segregation of women. We apply a more formal test of the change in gender segregation over the period in section 4.6 below.

4.5 The Distribution of Female and Male Workers by Occupational Group

Table 4.9 presents the distribution of male and female workers by occupational group, 'slicing' the information in Table 4.8 in a rather different way. Continuing earlier trends, there was a decline in women's employment in agricultural and manufacturing occupations (see Fahey *et al.*, 2000). The marked decline in agriculture is also true for men. For women the decline in manufacturing is primarily driven by the sustained decline in numbers employed in textiles noted above.

In service sector occupations, an increasing share of women are now managers and executives (6 per cent) and working in business and commerce occupations (4.3 per cent), consistent with the rapid growth in these occupational groups described above.

However, overall women remain concentrated in a small number of occupations. In 1996, 63.4 per cent of women were employed in just 5 occupational groups: clerical and office workers; sales occupations; health and related occupations; personal service and childcare workers; and teachers. In 2006 this was true of 60.3 per cent of women.[24] This picture is different for men. While there was a concentration in building and construction workers in 2006, largely driven by the building boom, men tend to be more evenly spread across occupations than women.

Table 4.9: Distribution of Female and Male Workers by Intermediate Occupational Group

	Men		Women	
	1996	**2006**	**1996**	**2006**
Occupational Group:				
Farming, fishing and forestry workers	13.5	6.7	2.3	0.9
Electrical trades workers	2.7	3.1	0.2	0.2
Engineering and allied trades workers	7.1	6.5	0.5	0.2
Textile, clothing and leather workers	0.9	0.3	2.5	0.5
Food, drink and tobacco production workers	2.7	1.6	1.2	0.8
Chemical, paper, wood, rubber, plastics and printing workers	1.9	1.1	1.1	0.7
Other manufacturing workers	4.3	4.6	3.7	2.2
Building and construction workers	11.3	14.9	0.5	0.5
Managers and executives	4.7	6.1	3.7	6.0
Communication, warehouse and transport workers	8.7	8.6	1.2	1.4
Clerical and office workers	2.9	2.6	20.2	17.1
Sales occupations	8.8	7.9	13.0	12.5
Business and commerce occupations	2.7	3.5	2.4	4.3
Computer software occupations	1.3	2.8	1.3	1.4
Scientific and technical occupations	3.0	3.8	1.2	1.5
Health and related workers	1.6	1.6	9.4	8.3
Social workers and related occupations	0.2	0.4	0.9	1.5
Religious occupations	0.5	0.3	0.3	0.1
Other professional workers	1.7	1.9	2.0	2.2
Personal service and childcare workers	5.3	5.4	13.6	15.9
Teachers	2.3	2.0	7.2	6.5
Central and local government workers	2.3	2.1	3.2	3.8
Garda Síochána	1.0	0.8	0.2	0.3
Army occupations	1.2	0.6	0.0	0.0
Other gainful occupations (includes not stated)	7.2	11.0	8.1	11.2
All occupations	100	100.0	100	100

Source: Distribution derived from Census figures - *Census of Population 2002*, Vol. 6, Table 5 for 1996: *Census of Population 2006*, Volume 8, Table 5 for 2006.

4.6 Formal Measures of Segregation

The most widely used measure of segregation is the Index of Dissimilarity (D). It is commonly interpreted as the percentage of men or women that would have to change occupations to bring about a perfect correspondence between the sex composition of each occupation and that of the entire labour force. The index has a minimum value of 0 if there is no occupational segregation (the same percentage female in each occupation) and a maximum value of 1 if there is complete

[24] In 1991 this figure was almost identical to that for 1996 (Hughes, 2002).

segregation (each occupation is completely female or completely male). Hughes (2002) using 218 occupations found that segregation as measured by D had declined in Ireland between 1991 and 1996 from .61 to .58. Our calculations based on the 24 occupations described here is that the Index of Dissimilarity declined marginally from .46 in 1996 to .45 in 2006.

D (and variants) have been widely used in the past but are sensitive to the size of occupations and the female labour market participation rate, therefore, an alternative measure the Index of Association 'A' has recently been proposed. This index can be interpreted as the factor by which males or females are, on average, over-represented in the occupational categories being analysed. [25] Our calculations show that the Index of Association remained stable between 1996 and 2006 (at 4.58 and 4.56 respectively).

New cross-national analysis carried out by Korpi *et al*. (2009) using the 2006 EU SILC, show Ireland's level of occupational segregation in international comparison. Their results show that in 2006 the Index of Dissimilarity (D) in Ireland was .48, the same level as in Germany, Switzerland, Sweden, Norway and Denmark, with only Finland showing a higher level of segregation. Using the Index of Association measure the research shows that Ireland was again among the countries with the highest segregation alongside the UK, the Netherlands and Finland. The authors argue, however, that these cross-country comparisons are influenced by the proportion of women not in the labour force at all, so they also recalculate the measures of segregation including homemakers as an additional category. On these calculations Ireland was found to have the highest level of gender segregation among the 14 countries included, on both indicators.

So while occupational concentration is declining among women in employment, it is happening slowly. That said, 10 years is a small window to view occupational change. Occupational forecasts predict a rising proportion of women in business, legal and other professionals, and managers and proprietors through to 2012 (Lunn *et al*., 2007). In terms of the overall occupational distribution of employment, Lunn *et al*. (2007) argue that while the increasing 'professionalisation' of the workforce is apparent for both men and women, this development is stronger among women, where the proportion working in highly-skilled occupations is rising more steeply and the proportion in non-professional occupations falling rapidly, and predicted to do so in the future (Lunn *et al*., 2007: Table 3.10).

4.7 Vertical Segregation

Vertical segregation has obvious implications for gender equality as it is concerned with the hierarchical position of women within and across occupations. As noted above, even quite detailed occupational groups are limited in what they can tell us about the extent of vertical segregation, aside from inferences about the skill level of certain occupational groups. Previous research in Ireland, though limited in this area, has highlighted how women are under-represented in most areas in management roles: in education (Lynch, 1994); in health (O'Connor, 1996); and in business; the legal profession and the judiciary; higher education; the Gardai; the Civil Service; local government and politics (Ruane and Sutherland, 1999).

[25] The Index of Association 'A' expresses the extent to which occupation-specific sex ratios deviate from the mean of such ratios calculated across all occupations. A is insensitive to occupational sizes and female labour market participation rates and more suitable for analysing occupational segregation across countries and across time. See Charles and Grusky (2004) for formal definitions and a detailed discussion.

As a way of exploring women's presence in work hierarchies, we first explore data from the Changing Workplace Employee Survey. This is a nationally representative survey of over 5,000 employees in the Republic of Ireland commissioned by the National Centre for Partnership and Performance and conducted by the ESRI (O'Connell *et al.,* 2004).[26] Table 4.10 presents responses to the question "which best describes your job: senior management/middle management/supervisor/employee." While this is clearly employee-defined and may be subject to some measurement error and variation in interpretation across occupations, it gives a good overall picture of hierarchies within dependent employment in Ireland using a large, representative sample. The data show that, overall, almost double the proportion of men (22 per cent) are in senior or middle management positions, compared to women (11 per cent). Conversely, while 78 per cent of women in employment are simply 'employees' with no management responsibilities, only 64 per cent of men are. A statistical test shows that these differences are statistically significant ($p<0.000$).

In the public sector 27 per cent of female employees have a management or supervisory position compared to 20 per cent in the private sector. However, comparing men and women *within* the two sectors we see that the gender distribution of management opportunities is rather similar. In the public sector 31 per cent of male employees have senior or middle management positions compared to 15 per cent of female employees (a male to female ratio of 2:1). In the private sector 21 per cent of men occupy such positions compared to 9 per cent of women (ratio 2.3:1).

Table 4.10: Managerial Role by Gender, 2003 (All Employees)

	All		Private Sector[1]		Public Sector	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
	%	%	%	%	%	%
Senior management	7.2	3.0	9.3	4.7	6.9	2.4
Middle management	15.0	8.1	21.9	10.7	13.9	7.2
Supervisor	13.9	10.9	15.9	11.8	13.6	10.6
Employee	63.9	78.0	52.9	72.8	65.6	79.8
	100.0	100.0	100.0	100.0	100.0	100.0
	2,733	2,394	365	617	2,369	1,776

Data Source: NCPP/ESRI The Changing Workplace Employee Survey, 2003. Weighted data.

[1] Private sector includes commercial semi-state companies.

Some of the figures above revealed that women have increased their share of managerial and professional occupations, and already have a strong presence in the associate professional category. Using the CWS results it is possible to assess whether women have achieved the same levels within these occupations. Table 4.10 presents the proportions in management for these three occupations. Within the managerial occupational group we see that men are much more likely to occupy the higher levels of management (78 per cent of men are in senior or middle management positions compared to 61 per cent of women).

A similar pattern is noted among professionals, twice as many male professionals are in senior management positions (14 per cent) than female professional (7 per cent). In fact, almost two thirds of female professionals have no supervisory or managerial responsibilities compared to less than half of male professionals. Nevertheless, female professionals are significantly more likely to occupy managerial positions than female employees in general (21 per cent in senior or middle management compared

[26] The data presented here are re-weighted by national population parameters to render them representative of the national population of employees at work in Summer 2003.

to 11 per cent for all female employees. Therefore, while the expansion of professional jobs among women has clearly increased their access to positions with more power there is still clearly a gender difference in the access to the very top jobs within the professions.

Within the associate professional group men continue to hold a higher number of senior and middle management positions than women (22 per cent compared to 12 per cent) these figures are very close to the distribution of management opportunities for men and women employees as a whole (Table 4.11).

Table 4.11: Managerial Role by Gender, 2003 (Managers, Professionals and Associate Professionals)

	Managers		Professionals		Associate Professionals	
	Male	Female	Male	Female	Male	Female
	%	%	%	%	%	%
Senior Management	30.4	24.0	14.3	7.3	5.9	2.1
Middle Management	47.7	37.0	24.3	14.0	16.0	10.3
Supervisor	15.5	22.1	14.7	13.4	16.9	13.8
Employee	6.4	16.9	46.7	65.2	61.2	73.8
Total N	388	154	259	328	237	145
	100	100	100	100	100	100

Data Source: The Changing Workplace Employee Survey, 2003. Weighted data.

A sectoral breakdown of the same indicator shows that it is in the health sector where the ratio of female to male managers is highest: 13 per cent of women compared to 17 per cent of men are in senior or middle management roles (M:F ratio 1.3:1). The ratio of male to female managers is particularly high in the financial and business services (3:1), in hotels and restaurant sector (3.7:1); and in 'other services' (3.9:1).

4.8 Longitudinal Analysis of Occupational Change Among Returners

The ideal way to examine how occupational change is operating at an individual level is to follow respondents' career paths over time. Occupational downgrading among women when they return to paid work after a period in the home is also a potential source of segregation in the labour market, if returners become clustered in low-end female-typed occupations. Previous research among female returners based on the Living in Ireland Panel Survey, which ran from 1994 to 2001, showed that when the jobs that women returned to following a spell of economic activity (usually caring for the home/family) were much more likely to be concentrated in lower level occupations in the personal service sector (e.g. Shop assistant, domestic work, cleaning etc.) when compared to their previous employment (Russell *et al.,* 2002).

That analysis was carried out at a group level, however, it is also possible to re-examine that data to investigate mobility at the individual level. To investigate this we rank occupations according to the International Socio-Economic Index of Occupational Status (ISEI) (see Ganzeboom *et al.,* 1992; Ganzeboom and Treiman, 1996). This provides a more finely differentiated status scale than conventional class schemas. The status scores for occupations range from 16 to 90 with Judges holding the highest score, and 'Farm-hands and Labourers' and 'Cleaners' holding the lowest score. We define upward and downward moves as those which entail a difference of at least five points between last job and return job. This reduces the chance that

spurious mobility is counted. For the analysis we pool all transitions from home to work over six years (1994-1999).

Table 4.12: Status of Return Job Compared to Last Job Among Women Returners: All Transitions from Home to Work

	%
Downwardly Mobile	34.4
Stable	49.6
Upwardly Mobile	16.0
Total	100
N	401

Analysis of Living in Ireland Survey Panel Survey 1994-1999.

Status is measured using the ISEI scale. Moves of less than five points are counted as stable.

Using this definition we find that a third of women returners return to a job that is of lower status than their previous job. Half of the returners remain at the same status level and 16 per cent are found to have experienced upward mobility. Using a similar status scale Jonsson and Mills (2001) found that 19 per cent of Swedish women were downwardly mobile following the birth of a child (over the period 1942 to 1991), but this fell to 7 per cent among women who took parental leave, i.e. the youngest cohort of women.[27] These results suggest that social policy and institutional arrangements can have a significant impact on the level of downward mobility experienced by returners.

Tracing these mobility patterns in greater detail, we find that downward mobility is much more common among women who have spent longer periods outside the labour market. The figures in Table 4.13 show that 42 per cent of women who were out of work for more than 10 years experience downward mobility. We anticipated that women with high qualifications would be better able to maintain their occupational position but we found that this group were just as likely as other returners to be downwardly mobile (Table 4.14). In fact women with no qualifications experienced least downward mobility, however, this is likely to be a 'floor effect' in that their previous status scores were so low they had little further to drop. Occupational downgrading was also found to be equally common amongst those who returned to full- and part-time work (table not shown).

Table 4.13: Occupational Mobility by Time Since Last Job

	Time Since Last Job			
	Under 2 years	**2-4.9 years**	**5-9.9 years**	**Over 10 Years**
Downward	23.1	35.0	34.1	41.8
Stable	59.6	53.3	45.5	41.2
Upward	17.3	11.7	20.5	16.9
	100	100	100	100
*Total N**	*104*	*60*	*44*	*177*

* The figures refer to the number of transitions rather than number of respondents.

Further longitudinal work on men's and women's careers in Ireland would require new additional panel data or the collection of detailed retrospective work histories. The new child cohort study Growing Up in Ireland will provide longitudinal data on parents employment in the future. This will allow researchers to investigate questions such as whether there is evidence of women moving into 'women's jobs' after

[27] The study used retrospective life history data, therefore, the analysis included births from 1942 to 1991. The births are divided into five periods to represent different policy periods in Sweden.

childbirth, i.e. 'occupational downgrading', as Blackwell (2001) and Macran *et al*., (1996) do for Britain; though this is not the case in Germany (Trappe and Rosenfeld, 2004).

Table 4.14: Occupational Mobility by Highest Education Level

	Highest Education Level			
	No Qualifications	**Inter/Junior Certificate**	**Leaving Certificate**	**Third Level**
Downward	23.5	44.0	36.5	34.2
Stable	63.9	38.8	42.9	57.9
Upward	12.6	17.2	20.6	7.9
	100	100	100	100
*Total N**	*119*	*116*	*126*	*38*

* The figures refer to the number of transitions rather than number of respondents.

4.9 Avenues for Future Research

Research into occupational segregation is relatively underdeveloped in Ireland. With this background, this section undertook to provide an overview of change during the period. Given the rapid rise in female participation, it would be interesting to measure the extent of change in occupational segregation using a more detailed specification of occupations than the 25 used here. It would also be of significant policy and academic interest to formally decompose aggregate changes in female employment identifying the impact of changes in the total employment in each industry/occupation (the growth effect), the impact of changes in the proportions of women workers in each industry/occupation (the share effect), and the impact of the interaction between changing industrial/occupational employment and changing proportions of women (the interaction effect). Such an approach would facilitate an assessment of the extent to which the change in female employment and participation rates can be explained by changes in the structure of demand (with sex segregation constant) or by changes in occupational or industrial sex segregation (with the structure of demand constant) (Rubery, 1988).

A final promising avenue for future research would be to develop more company case studies. These, while limited to those working in that company, allow us to combine both organisational level detail with substantial detail about women's motivations and aspirations, and tease out the processes by which women come to be under-represented in managerial positions. This has previously been carried out (Ruane and Sutherland, 1999; Lynch, 1994; O'Connor, 1996; Greco, 2005) but could be expanded to give more of a longitudinal perspective.

4.10 Conclusions

This chapter has focused on possible labour market outcomes of the increasing labour force participation of women over the last ten years. We have concentrated on the issues of pay and occupational position as key indicators of gender inequality in the labour market.

In terms of pay we found that there has been a decline in the proportion of men and women who are defined as low paid, this is in context of a booming economy and more or less full employment during the period of the mid 1990s to 2006. The period also saw the introduction of the National Minimum Wage. Despite the very rapid increase in female employment and the significant changes in the occupational position of women, there has not been any change in the gender distribution of low

pay. This suggests that male and female wages at the bottom of the earnings distribution shifted upwards at the same rate leaving the relativities unchanged.

Part-time work continues to be strongly associated with low hourly rates of pay, and there no weakening of that link over the time period (although again the rates of low pay fell for both full- and part-time workers).

There has, however, been a narrowing of the gap between men and women's mean hourly pay. The decline in the gender pay gap appears to be particularly strong between 2003 and 2006, with the latest estimates of the raw gap standing at between 11.5 per cent and 13 per cent. Increased participation among women over the last decade does not appear to be associated with a decline in women's relative earnings position that might have arisen from the inclusion of a more diverse section of the female population in the labour force. The negative pay effects of this broadening in the base of the female labour market has been cancelled out by factors such as the higher educational qualifications of the workforce and the increasing entry of women into higher skilled jobs, which are better rewarded.

The analysis of occupational changes between 1996 and 2006 shows that gender segregation has remained stable using the Index of Dissimilarity and the Index of Association.[28] Women have made inroads into some traditionally male areas, and also into jobs with a higher skills profile. Key examples of this trend are the growing share of women in business and commerce occupations and in managerial/executive occupations. There was also strong female growth in professional occupations, although some of these already had high female shares in 1996. The increasing professionalisation of the workforce is predicted to continue into the future, suggesting these trends in female occupational attainment will continue. The increasing presence of women in highly skilled occupations is consistent with the rising educational profile of the female workforce outlined in Chapter 2.

One area of rapid growth with lower skills and a high female presence is childcare - but the growth here of course is partly a result of the rise in participation, as working women need others to look after their children. Despite the significant changes in occupations, women are still concentrated in a relatively small number of occupations. This may be partly a reflection of the occupational categories which do not distinguish well between certain types of jobs, e.g. clerical and office workers. This contrasts with very detailed distinctions between different types of manufacturing jobs and reflects historical priorities in the classification of occupations that are not gender neutral.

While women have made very significant gains in terms of access to managerial positions there is still evidence of widespread vertical segregation with women less likely to occupy the more senior managerial positions. The level of vertical segregation varies across occupations, sector and by parental status. These results suggest that institutional practices influence the extent to which women can access higher levels jobs within organisations. They also suggest the continuing influence of family characteristics on women's occupational attainment, but it is outside the range of the current study to investigate the competing explanations for these patterns. The information on vertical segregation is only available for one point in time, however, a second wave of the Changing Workplace Survey has been fielded by the National Centre for Partnership and Performance and the Economic and Social Research Institute during 2009.

[28] Future research using the more detailed occupational classification consisting of 225 occupational categories will further add to our knowledge of these changes.

Appendix 4.1

Table A4.1: Detailed Occupations (3 digit) for Sub-Groups 'Managers and Executives' and 'Business and Commerce Occupations'

Population aged 15 years and over	Male			Female			Female Share	
Year	1996	2006	% *Change*	1996	2006	% *Change*	1996	2006
Occupation:			*1996-2006*			*1996-2006*	%	%
Managers and executives	**44,217**	**72,590**	***64.2***	**20,640**	**52,808**	***155.9***	**31.8**	**42.1**
101 General managers in large companies	10,574	13,832	*30.8*	3,602	3,216	*-10.7*	25.4	18.9
110 Production and works managers	10,353	16,838	*62.6*	1,637	3,848	*135.1*	13.7	18.6
120 Company financial managers	1,167	3,823	*227.6*	1,169	3,183	*172.3*	50.0	45.4
121 Marketing managers	10,275	18,145	*76.6*	5,105	12,142	*137.8*	33.2	40.1
122 Purchasing managers	998	1,537	*54.0*	305	,576	*88.9*	23.4	27.3
124 Personnel managers	1,322	2,659	*101.1*	1,273	5,164	*305.7*	49.1	66.0
139 Other financial managers n.e.s.	3,865	8,743	*126.2*	4,680	18,655	*298.6*	54.8	68.1
176 Entertainment and sport managers	1,008	1,748	*73.4*	589	1,285	*118.2*	36.9	42.4
199 Other managers n.e.s.	4,655	5,265	*13.1*	2,280	4,739	*107.9*	32.9	47.4
Business and commerce occupations	**25,758**	**41,448**	***60.9***	**13,649**	**37,614**	***175.6***	**34.6**	**47.6**
130 Credit controllers	943	849	*-10.0*	1,516	2,494	*64.5*	61.7	74.6
131 Bank and building society managers	3,704	4,883	*31.8*	2,146	3,741	*74.3*	36.7	43.4
242 Barristers and solicitors	3,926	5,328	*35.7*	2,170	4,675	*115.4*	35.6	46.7
250 Chartered and certified management accountants (incl. taxation experts)	10,733	15,373	*43.2*	4,089	11,743	*187.2*	27.6	43.3
252 Actuaries, economists, statisticians, management consultants and business analysts	2,001	4,348	*117.3*	731	2,689	*267.9*	26.8	38.2
270 Librarians, archivists and curators	284	511	*79.9*	672	1,177	*75.1*	70.3	69.7
350 Legal service and related occupations	189	512	*170.9*	432	1,729	*300.2*	69.6	77.2
361 Underwriters, claims assessors, brokers and investment analysts	3,500	7,929	*126.5*	1,327	6,373	*380.3*	27.5	44.6
363 Personnel, industrial relations and work study officers	478	1,715	*258.8*	566	2,993	*428.8*	54.2	63.6

Source: *Census of Population 2002*, Vol. 6, Table 5 for 1996: *Census of Population 2006*, Volume 8, Table 5 for 2006.

5. THE SOCIAL IMPLICATIONS OF CHANGES IN FEMALE LABOUR MARKET PARTICIPATION

Previous chapters investigated the nature of the change in female labour market participation in an exceptional period of labour market growth and the implications of these changes for women's positions in the Irish labour market. Yet the social effects of these changes are also potentially far-reaching. This chapter attempts to tease out some of the social implications of changes in female labour market participation, using the examples of work-life balance/quality of life and gender role attitudes. These are issues that are both the focus of public and academic debate, and are of policy relevance. The chapter draws on existing research, mostly by the authors, complemented by some new analyses, to shed light on the social meaning of these changes. The discussion is not meant to be comprehensive, and there are many social implications which have been omitted: the aim is to simply illustrate some wider implications of changes in labour market participation. In particular, the focus in this chapter is on adults and there is no assessment of the impact of increased women's employment on outcomes for children. Finally, while the focus of this chapter is on how work-life balance and gender role attitudes have changed in the light of increased women's employment, these factors themselves may also influence women's labour market behaviour: a very rapid rise in work-life conflict or an attitudinal backlash against increased women's employment might inhibit its future increase.

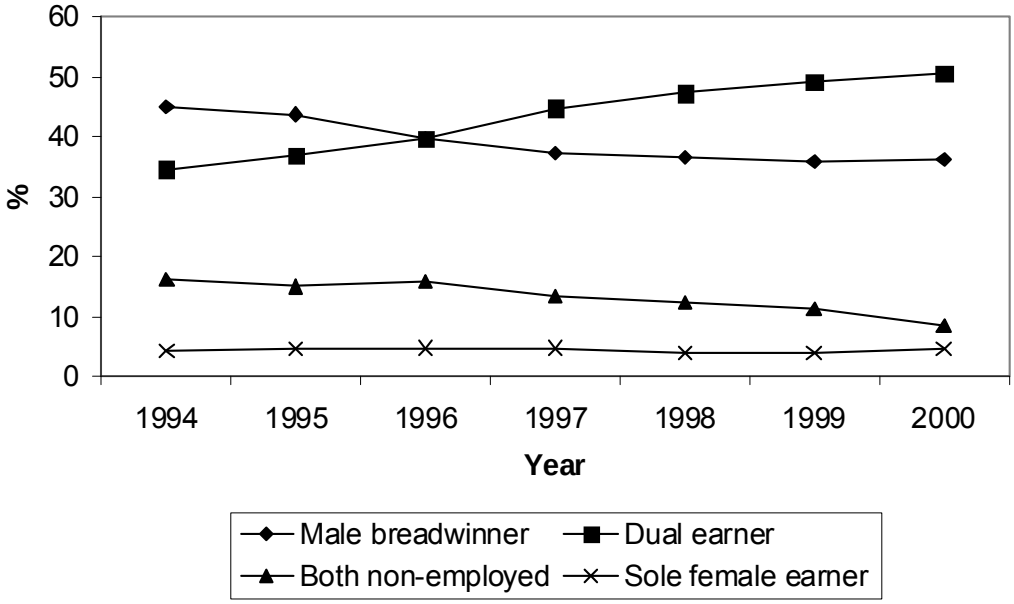
5.1 Work-Life Balance and Quality of Life

What are the consequences of these rapid changes in female and household employment for quality of life? Has the increased financial well-being and economic independence for women been gained at the cost of increasingly stressed out individuals and families who struggle to meet the competing demands on their time? Reconciling work and family commitments has increasingly become prominent in both research and policy debates throughout Europe and the US, against a backdrop of globalisation; an ageing population; rising female labour market participation and concerns over falling fertility (Jacobs and Gerson, 2004; McGinnity and Whelan, 2009). It might be expected to be particularly pertinent in Ireland given the extent and speed of the rise in female labour market participation.

Jacobs and Gerson (2004) argue that it is not an increase in individual paid work hours but the spread of the dual-earner household that has led to an increased sense of time pressure and heightened work-life conflict. Figure 5.1 looks at implications of the rise in female labour market participation for household level work arrangements in Ireland. Between 1994 and 2000, the proportion of workless households (that is, those with no adults in paid employment) among working age households declined while the share of households where all adults work grew significantly. By 2000, half of all couples were both in paid employment (dual-earners) (see Figure 5.1). This trend was evident across different types of households but the changes were particularly marked for households with dependent children; by 2000, just under half of households with dependent children (both couples and lone parents) had all adults in paid employment.

These trends resulted in a transformation of the division of paid labour within households; in 1994, the single bread-winner model predominated for couples but by 2000, this model applied to only 36 per cent of such households. More recent analysis from data for 2005 (EU-SILC) suggest that the proportion of all couples who

Figure 5.1: The Employment Status of Couples Under 65 Years, 1994-2000



Source: Derived from Russell *et al.* (2004).

adopt the male breadwinner model fell further in the period 2000-2005: just 31 per cent of couples were male breadwinner couples in 2005. The proportion of dual-earner couples remained constant (just over 50 per cent), while the proportion of other couples rose slightly.[29] It is thus clear that the growth in female employment and dual-earner families mean that an increasing number of Irish adults are now combining both caring and employment roles. There is also evidence that the gender distribution of unpaid work and caring has not adapted to this rapid change in the paid work sphere. Using time-use data McGinnity and Russell (2008) find that women in employment spend a higher number of hours on unpaid work than men holding the time spent in paid work constant, and that the gap between women and men's total committed time is wider in dual-earner households than in male-breadwinner households. What are the implications of this for work-life balance?

Work-life balance, or an alternative conception, work-life conflict, is basically the idea that meeting demands in one domain makes it difficult to meet the demands in the other domain (Greenhaus and Singh, 2003). Such conflict can take two forms: from work to family and from family to work, although work tends to affect family more than vice versa (Byron, 2005), and work-to-life is the focus of this discussion. An obvious limitation of the concept is that work-life conflict is only observed for those in employment, and those with very high work-life conflict may have exited the labour market. This is particularly an issue when the employment rate is changing rapidly, so at two time points those answering the question may have different personal and household characteristics.

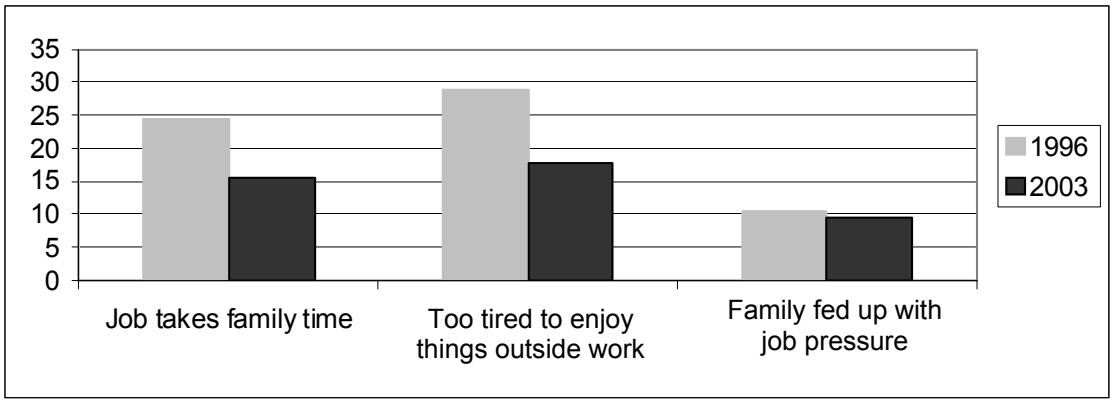
Work-life conflict has been measured in a number of ways. Some authors take 'objective' indicators of conflict by assuming, say, that part-time work is an indicator of low work-life conflict (e.g. McGinnity and McManus, 2007), but a more common definition of work-life conflict is subjective, using the assessment of the individual,

[29] 'Both non-employed' rose slightly from 9 per cent to 11 per cent; 'female breadwinner from 5 per cent to 7 per cent. Figures are based on authors' own calculations using EU-SILC data for adults living in couples aged 18-65 years, consistent with definitions from the Living in Ireland Survey presented in Figure 1.

analysing responses to a set of questions. This perspective assumes that work-life conflict is primarily a subjective experience, and allows different individuals with the same workload to record different responses. The strength of subjective indicators is that researchers avoid making assumptions about what is important to people, and avoid missing important changes in values and preferences. Yet a crucial point to recognise about subjective indicators of work-life balance, life satisfaction or feeling rushed is that they reflect the interaction between people's situation and their expectations, and expectations may adapt to the situation (Fahey *et al.*, 2003).

Here we consider a number of measures of work-life conflict over the last ten to fifteen years drawn from Eurobarometer data, a recent survey of employees and the European Working Conditions Survey. We start with three measures of work-life tension commonly used in the literature, which deal directly with the issue of whether work is increasingly intruding upon family life or life more generally.[30] Despite rapid increases in employment over the period, there is no evidence of increasing levels of work-life tensions among the employed between 1996 and 2003 (Figure 5.2). In contrast, the proportion who say their job 'often' or 'always' takes family time or that they are always or often too tired to enjoy things after work has decreased over the period.

Figure 5.2: Work-Life Tensions, 1996-2003



Source: McGinnity *et al*. (2007) using 1996 Eurobarometer 44.3; 2003 ESRI/NCPP Changing Workplace Survey.

An alternative indicator, from the European Working Conditions Survey, is a single question 'Do your working hours fit in with your family or social commitments outside work?'. This question was fielded in 2000 and 2005, so covers a slightly later time period. It has the advantage that the indicator is from a single survey for 2 time points, although the disadvantage is that similar to the Eurobarometer and the ISSP, the sample size is modest.[31] The question differs from those presented in Figure 5.2 in that it specifically addresses the issue of working hours (i.e. number of working hours and the flexibility with which they are assigned), but not, say work pressure, which may affect work-to-life spillover (thinking about work in non-work time) or the tiredness referred to in the question 'too tired to enjoy things outside work' (Figure 5.2). Table 5.1 presents results of the questions for all employed, and for men and women separately.

[30] It should be noted that the number of respondents in the Eurobarometer survey (1996) is relatively small.

[31] The sample size is around 1,500 in employment for 2000 and 1,000 for 2005. This data was kindly supplied by the European Foundation for the Improvement of Working and Living Conditions. Further details about this survey are available at the following web address: http://www.eurofound.eu.int/ewco/surveys/index.htm

Table 5.1: 'Do Your Working Hours Fit In With Your Family or Social Commitments Outside Work?', 2000 and 2005

	ALL		Men		Women	
	2000	2005	2000	2005	2000	2005
	%	%	%	%	%	%
Very well	51	42	47	36	56	50
Well	35	39	36	41	33	36
Not very well	11	15	12	17	8	11
Not at all well	4	5	5	6	3	4
Total	100	100	100	100	100	100
X^2 test of change over time (p value)		0.000		0.000		0.134

Source: Own calculations from the merged file of European Working Conditions Surveys, 2000 and 2005.

Table 5.1 shows that overall, the proportion who responded that their working hours fit in well with their family/social commitments fell by 11 percentage points, from 51 to 42 per cent, indicating a decrease in this measure of 'work-life balance' over the period (2000-2005). This change is statistically significant. The fall is most marked for men (47 per cent saying working hours fit in very well in 2000 compared to 36 per cent in 2005). For women the fall is smaller (56 per cent saying working hours fit in very well in 2000 compared to 50 per cent in 2005), and is not statistically significant.

While there has been some fall in the proportion saying that their working hours fit in very well to their life commitments, this is in the context of a total of 81 per cent (i.e. the vast majority of employed adults in Ireland) saying that their working hours fit in well or very well to other life domains in 2005.

In general women are more satisfied with work-life balance (at least in terms of working hours) than men - with 77 per cent of men and 86 per cent of women saying their working hours fit in well or very well to other life domains in 2005. This may be because on average women do fewer hours of paid work than men. More women than men work part-time, and where women do work full-time, they work shorter hours and are less likely to work long hours (over 45 hours) than men (O'Connell and Russell, 2007; McGinnity and Russell, 2008, using time-use data). To investigate this further we look at responses to the question for women, distinguishing those working part-time and those working full-time (Table 5.2).

Here we see that whereas there was a fall in the proportion of women employed full-time who responded that their working hours fitted in 'very well' with their family/social commitments between 2000 and 2005, this is not true for women working part-time. So the smaller decline for women recorded in Table 5.1 in work-life balance is actually a combination of a fall for full-time women, and no change in the responses for women working part-time. The higher work-life balance for women working part-time is entirely consistent with previous research for Ireland (Russell *et al*., 2009) and international literature (e.g. Gornick, 2007).

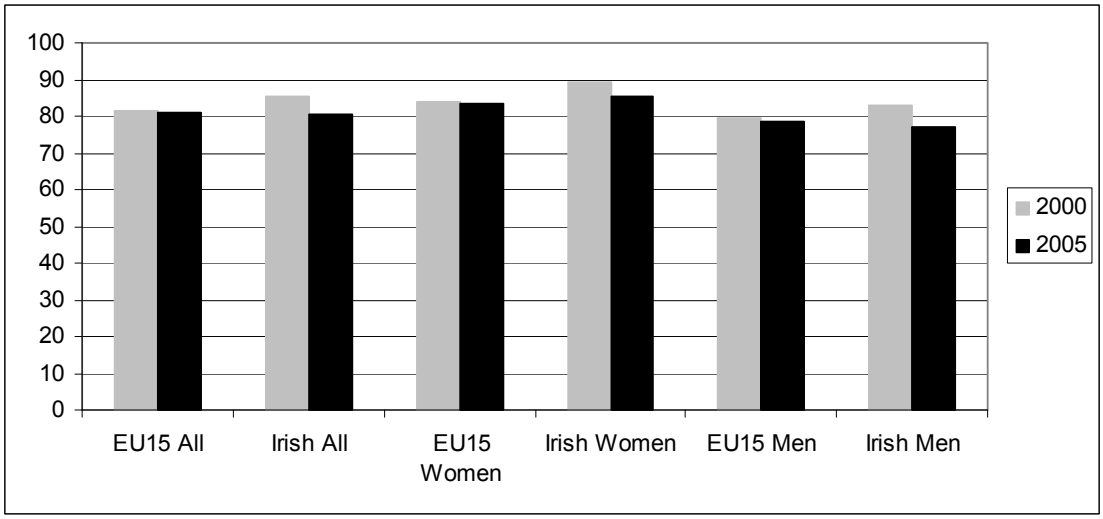
How do the trends in work-life balance in Ireland compare with trends in the European Union? Figure 5.3 compares the Irish responses to the EU15 average, namely those responding that their working hours fit in 'well' or 'very well' with family

Table 5.2: 'Do Your Working Hours Fit in With Your Family or Social Commitments Outside Work?', 2000 and 2005, Women Working Full-Time and Part-Time

	Full-time		Part-time	
	2000	2005	2000	2005
Very well	56	43	58	62
Well	33	38	33	32
Not very well	8	14	8	7
Not at all well	3	5	1	0
Total	100	100	100	100
X^2 test of change over time (p value)	0.004		0.713	

Source: Own calculations from the merged file of European Working Conditions Surveys, 2000 and 2005.

Figure 5.3: Percentage Responding Working Hours Fit 'Well/Very Well' with Family or Social Commitments, 2000 and 2005, Ireland and EU15



Notes: Own calculations from the merged file of the European Working Conditions Surveys, 2000 and 2005. Weighted average for each country, employed only. EU15 is Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Spain, Sweden, Portugal, Ireland and the UK.

or social commitments outside work.[32] Here we see stability in the EU15 for all employed respondents in the period 2000 to 2005, and the slight fall in the period in Ireland means that by 2005 Irish figures have converged to the EU15 average (81 per cent of respondents reporting that their work fits in 'well or very well' with other commitments). There is also remarkable stability in the averages over the period for EU15 men and women, compared to slight falls in Ireland. By 2005, a slightly greater proportion of Irish women report that their working hours fit in well or very well with other commitments than the EU average (85 per cent versus 84 per cent); a slightly lower proportion of Irish men report this than the EU average (77 per cent versus 79 per cent). Overall these figures suggest higher 'work-life balance' scores for Ireland using this measure in 2000, yet very close to the EU15 average in 2005.

[32] EU15 is chosen as EU27 data are only available for 2005. The EU15 average is the average scores for the 15 countries, weighted to adjust for non-response, but not re-weighted to reflect different population sizes, as large countries would then dominate the average.

Other comparative work has shown Ireland to have either similar or even lower scores on work-life conflict compared to other EU15 countries. McGinnity and Calvert (2009) investigate work-life conflict in Ireland, along with seven other West European countries using European Social Survey data for 2004. They find somewhat lower work-life conflict in Ireland compared to Denmark, Germany, Spain, France, the Netherlands, Sweden and the United Kingdom. The study also finds that in general, similar factors are associated with high work-life conflict in Ireland and in the other seven European countries they examine: longer paid work hours; unsocial working hours; high job pressure; being a professional or associate professional. What is interesting is that they find that children, particularly children under 6 years, increase work-life conflict to a greater extent in Ireland than in other countries. This may be linked to low levels of formal childcare for pre-school children in Ireland, compared to other countries. They also find that the impact of job pressure on work-life conflict is even stronger in Ireland than in the pooled model for all eight countries (see also McGinnity, 2008 for more details).

Another way of capturing a sense of how increased paid work may affect quality of life is to look at overall time spent in paid and unpaid work (caring and housework). In the article, *Work Rich, Time Poor?* McGinnity and Russell (2007), look at how increased paid work time may have contributed to 'time poverty', in the context of growing public perceptions of time pressure in Ireland. They find high total workloads among those in employment and those who care for young children or adults. The study also finds that high levels of committed time are associated with greater subjective feelings of time pressure. McGinnity and Russell (2007) conclude that recent employment growth is likely to have contributed to time poverty and feelings of time pressure.

This evidence suggests that overall there has been some increase in work-life conflict and time poverty associated with increased female labour market participation. But how does this relate to overall life satisfaction, a much broader indicator of quality of life? In an examination of the impact of high volumes of paid and unpaid work on life satisfaction, McGinnity *et al*. (2007) find that those with high volumes of work are less satisfied with their life in general, other things being equal. However, they also note that unemployment has a much greater negative impact on life satisfaction than high hours of work. Russell *et al*. (2004) also find no general decline in life satisfaction in the period 1994 to 2000, and stress that levels of satisfaction are higher for employed women than for non-employed women. Thus the impact of high workloads on satisfaction does not cancel out the positive impact of employment on well-being.

5.2 Gender Role Attitudes

In this section we investigate whether the changes in employment patterns of women in the Irish labour market have been accompanied by shifts in general attitudes towards 'appropriate' gender roles. Has the increase in Irish women's labour force participation been accompanied by a move away from traditional ideas about the gendered division of labour? Braun *et al*. (1994) argue that high female labour force participation alone does not automatically lead to liberal gender role attitudes. To further probe the link between participation and attitudes, we also consider the association between the nature of labour force participation and gender role attitudes. This section is a combination of previous research on the topic, supplemented with our own calculations using attitudinal data.

Table 5.3 presents evidence from O'Sullivan (2007), on gender role attitudes in 1994 and 2002, using a special module of the International Social Survey Programme.

Unfortunately, 2002 was the last year in which consistent data was collected. Alternative sources of data are the European Values Survey (Fahey *et al*., 2005), but here the last data point was 2000.[33] Data on trends from the European Values Survey will be used for comparison, given the similarity of questions, the subjective nature of the data and relatively small sample sizes.

The general trend shown in Table 5.3 is clearly towards less traditional gender attitudes in Ireland. By 2002, only 23 per cent of men and 18 per cent of women agreed with the statement 'a man's job is to earn money, a woman's job is to look after the home and family'. Less than half of men and women in Ireland in 2002 agreed with the question 'a job is all right but what women really want is a home and children'. There has been a substantial fall in the proportion agreeing to both these questions since 1994. This is consistent with patterns reported in Fahey *et al*. (2005) for the 1990-2000 period. In addition, the vast majority of both men (84 per cent) and women (82 per cent) felt that both husband and wife should contribute to household income.[34] Side by side with less traditional attitudes, however, is a high value placed on the role of housewife with the majority (60 per cent of men and 59 per cent of women) seeing it as just as fulfilling as working for pay, though support for the homemaker role did decline somewhat in the period. This result was also found using the European Values Survey (Fahey *et al*., 2005).

Table 5.3: Changing Gender Role Attitudes in Ireland: 1994 and 2002

	Men		Women	
	1994	2002	1994	2002
	% Agreeing		% Agreeing	
A job is all right but what women really want is a home and children	65	49	56	44
Being a housewife is just as fulfilling as working for pay	75	60	67	59
A man's job is to earn money, a woman's job is to look after the home and family	46	23	33	18
Both husband and wife should contribute to household income	84	84	90	82

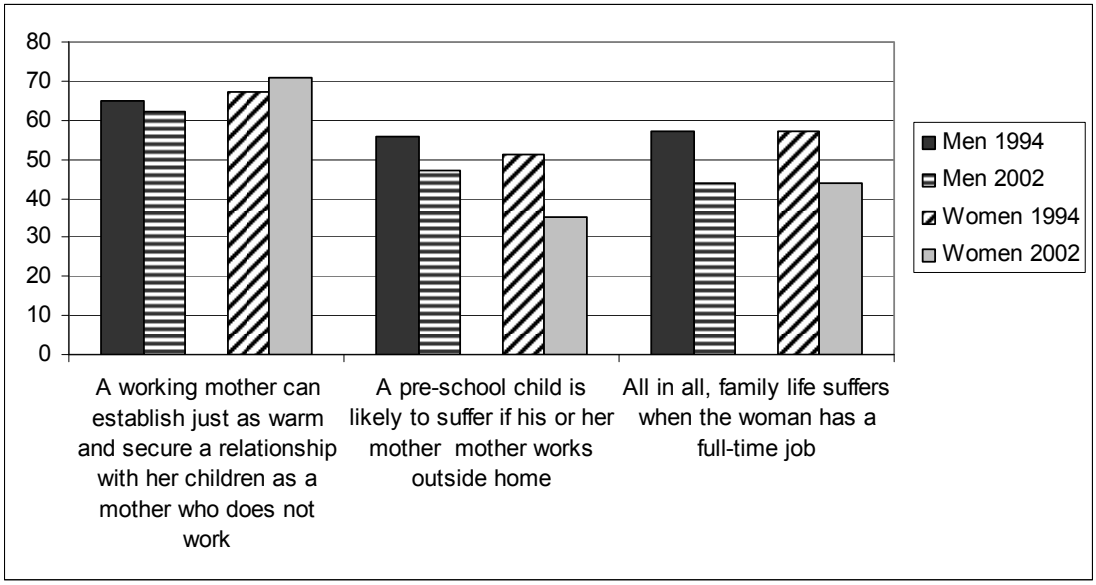
Source: O'Sullivan (2007), Table 7.2 using ISSP data.
Note: Per cent agreeing is a combination of 'agree' and 'strongly agree' expressed as a proportion of all agreeing and all disagreeing, respondents answering 'neither' are excluded.

The increase in women's labour force participation has led to much speculation about the consequences of this social change. Figure 5.4 presents responses to a number of questions on the perceived consequences of women's employment for men and women. It shows that among women, over two-thirds believe that a working mother can establish just as warm and secure a relationship with her children as a mother who does not work. This proportion has risen only slightly in the period 1994 to 2002. There has been a more dramatic shift in responses to the question 'a pre-school child is likely to suffer if his or her mother works outside the home', in 2002 less than half of women in Ireland agreed to this (44 per cent). There has also been a marked fall in the proportion who agreed that 'all in all, family life suffers when the woman has a full-time job'. In 2002 only one-third of women in Ireland agreed with this statement.

[33] The European Social Survey (2004) collected some gender role attitude data but not the same questions, they are not as comprehensive and only one data point. Other more up-to-date sources of data in Ireland, like the EU-SILC, do not collect attitude data.

[34] Here the trend is not clear, though note in Fahey *et al.* (2005) the proportion of both men and women agreeing with this question increased in the period 1990-2000, which is more plausible given the other indicators.

Figure 5.4: Perceived Consequences of Women's Employment, Women (Per Cent Agreeing)



Source: O'Sullivan (2007), Figures 7.2, 7.3, 7.4 using ISSP data.

Note: Per cent agreeing is a combination of 'agree' and 'strongly agree' expressed as a proportion of all agreeing and all disagreeing, respondents answering 'neither' are excluded, following O'Sullivan (2007).

Similar patterns are observed for men, though not as marked a shift. In fact, there was a slight fall in the proportion agreeing that a working mother can establish just as close a relationship with her children as a non-working mother, but this is not statistically significant. In general, men in Ireland hold more traditional attitudes than women, particularly on the consequences of women working, but these differences do not occur across the board (see Table 5.3).

Table 5.4: Gender Role Attitudes by Employment Status, Women, 2002

	Employed Full-time % Agreeing	Employed Part-Time % Agreeing	Not Employed % Agreeing	X^2
A job is all right but what women really want is a home and children	28	40	53	0.000
Being a housewife is just as fulfilling as working for pay	47	48	67	0.000
A man's job is to earn money, a woman's job is to look after the home and family	4	14	26	0.000
Both husband and wife should contribute to household income	83	89	81	0.589
A working mother can establish just as warm and secure a relationship with her children as a mother who does not work	81	77	65	0.002
A pre-school child is likely to suffer if his or her mother works outside home	24	32	42	0.032
All in all, family life suffers when the woman has a full-time job	25	45	52	0.004

Source: ISSP 2002, Own Calculations.

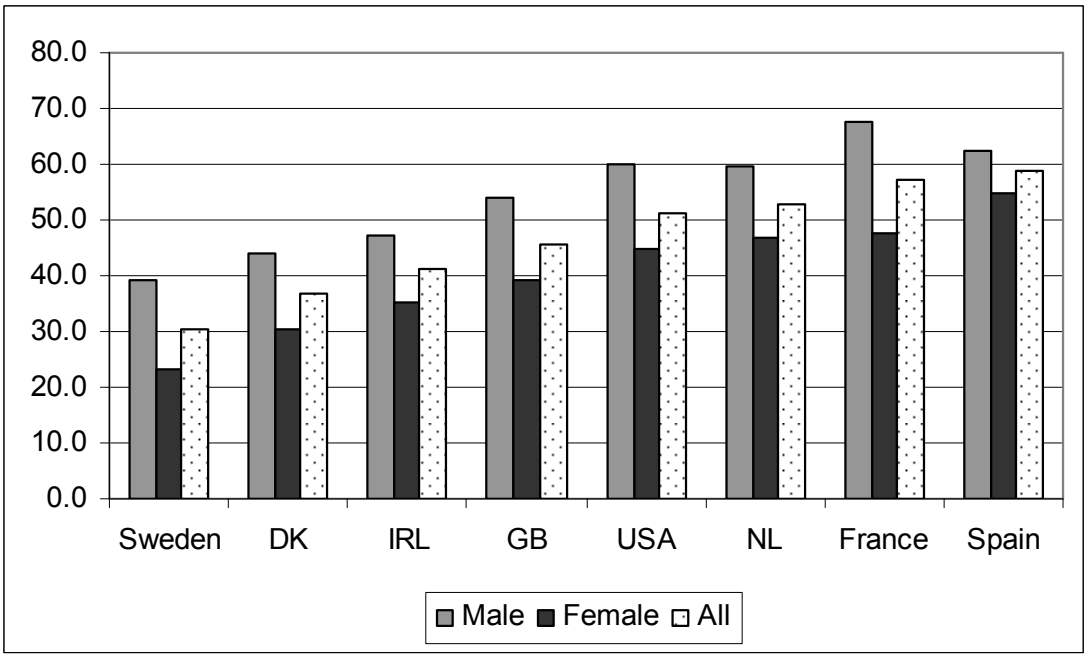
Note: Per cent agreeing is a combination of 'agree' and 'strongly agree' expressed as a proportion of all agreeing and all disagreeing, respondents answering 'neither' are excluded, following O'Sullivan (2007).

How do attitudes vary by employment status? Table 5.4 presents responses to the questions above for women who are working full-time, part-time or not at all. There is a remarkably consistent pattern, which is that attitudes to women's employment are most non-traditional for women working full-time, followed by women working part-time, followed by women not working. These differences are statistically significant, except in the case of 'both husband and wife should contribute to the household income', where responses do not vary by employment status.

Similarly, in terms of attitudes to the consequences of women's employment, working women perceive the consequences less negatively than women who are not employed, though the differences are not quite as marked as for the first three questions on gender role attitudes (Table 5.4). This pattern is consistent with Fahey *et al*. (2005), who find that adults currently in the labour force have less traditional attitudes than those who are not. Table 5.4 certainly suggests that an increase in female employment was accompanied by less traditional attitudes towards women's employment, though the direction of causality is not clear.

Putting these figures in comparative perspective shows that Irish attitudes to maternal employment are similar to those held in Britain. For example, 41 per cent of Irish respondents agree that a pre-school child suffers if his or her mother works outside the home, compared to 46 per cent of British respondents (Figure 5.5). Similarly, 45 per cent of British people agree that family life suffers as a result of women's full-time employment compared to 44 per cent among Irish respondents (Figure 5.6). These results suggest that in 2002 Irish attitudes towards maternal employment were more traditional than those in Denmark and Sweden, but less traditional than those held in the USA, the Netherlands, France and Spain.

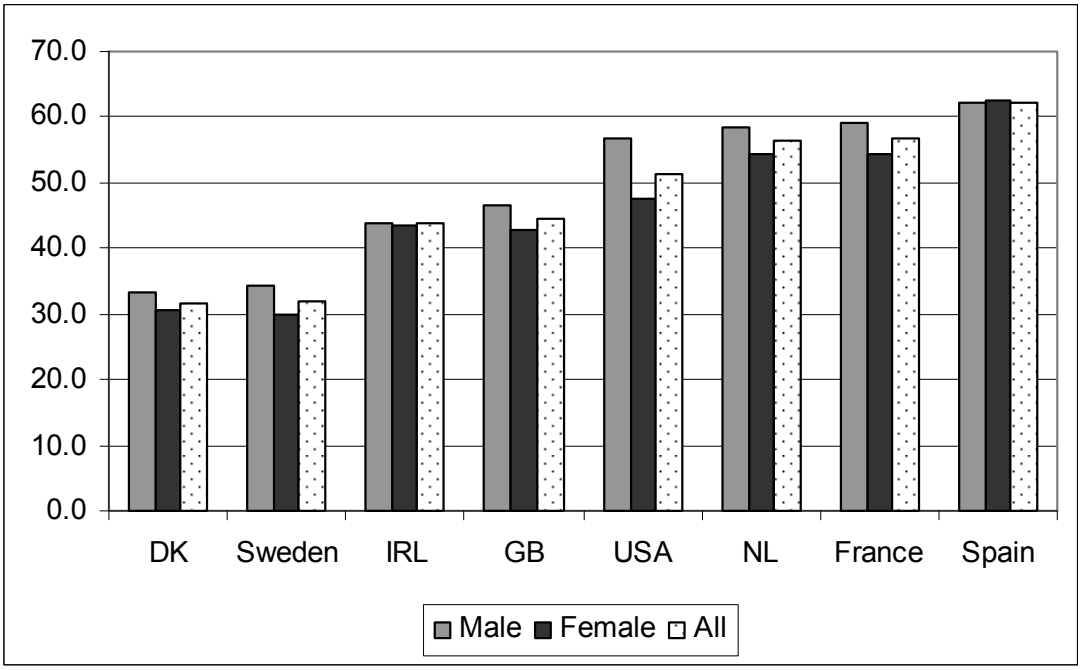
Figure 5.5: Per Cent Agreeing that a Pre-School Child is Likely to Suffer if His/Her Mother Works Outside the Home, 2002



Source: ISSP 2002, own calculations.

Note: Per cent agreeing is a combination of 'agree' and strongly agree expressed as a proportion of all agreeing and all disagreeing, respondents answering 'neither' are excluded, following O'Sullivan, 2007.

Figure 5.6: Per Cent Agreeing that All in All, Family Life Suffers When the Woman has a Full-time Job



Source: ISSP 2002, own calculations.

Note: Per cent agreeing is a combination of 'agree' and 'strongly agree' expressed as a proportion of all agreeing and all disagreeing, respondents answering 'neither' are excluded, following O'Sullivan (2007).

In conclusion, this section documented a general decline in support for the gendered division of labour in Ireland in the period 1994 to 2002. In general, respondents in Ireland in 2002 did not support the traditional male breadwinner model. Irish women are in general more positive than Irish men about the changes in gender roles, and in some cases this difference is statistically significant. This reduction in the prevalence of 'traditional' attitudes and greater support for women engaging in paid employment is continuing a trend already visible in the 1980s (Fahey *et al*., 2005). O'Sullivan argues that in comparative perspective, Ireland can no longer be treated as an anomalous case: Irish attitudes to gender roles are no longer exceptional.

5.3 Conclusion

This chapter presented evidence on two important subjective indicators relating to women's employment in the light of increases in employment rates, work-life conflict and gender role attitudes. We find some evidence that work-life conflict, a highly topical issue, has increased somewhat, though this is for the latter period (2000 to 2005) and not all the indicators point in the same direction. The increase in some indicators of work-life conflict should also be seen in the context of increased well-being among employed women compared to the non-employed, and there is no evidence to suggest that there was a decrease in overall life satisfaction in the period.

There is more indication of change in terms of gender role attitudes. There is a general tendency towards less traditional gender role attitudes, although here it is not clear to what extent the shift in attitudes was a response to, rather than a driving factor, in rising female employment levels over the same period. What we can establish is that there is no evidence of a backlash against increased women's employment.

This raises the question of whether these attitudes and experiences might feed back into future participation trends. Is there any evidence that we have reached a limit to female participation in terms of potential conflicts and quality of life? On balance, the answer is probably no, given that the potential benefits of employment for the participants would seem to outweigh the negative effects on time pressure and work-family conflict. It may be that part-time and flexible work will be more in demand, as women who were previously out of the labour market continue returning to employment. Given higher female participation rates, it seems highly likely that work-life conflict will stay on the agenda for the future.

This chapter has also documented broad support, in terms of attitudes, for increased female employment. The one area where there is less support is for employment among the mothers of young (pre-school) children, who, as we saw in Chapter 2, have lower participation rates than other women. However, these attitudinal limits, in so far as they operate, might be outweighed by shifts in childcare policy, if there are currently mothers of small children who would like to work but either cannot find or cannot afford suitable childcare. As discussed in Chapter 1, policy support for childcare is still very low in Ireland. In fact a more significant driving factor in inhibiting further increases in women's labour market participation is likely to be the fall in demand for labour overall in the Irish economy (see Chapter 1).

We have restricted our discussion of the social implications of rising female participation in the labour market to two key areas - attitudes and work-family conflict. Important avenues for future research include the consequences of increased female employment for household incomes and poverty and for child development. Research carried out using the 1996 wave of the Living in Ireland Survey showed while the average contribution of women to household income was relatively low, nevertheless, women's earnings were critical for lifting many households out of poverty; adding female partner's income reduced the rate of poor households from 29.5 per cent to 12.8 per cent (Maître *et al.,* 2003, Table 10). The average female contribution rose to 20 per cent for women working part-time and 40 per cent for women working full-time. The very significant increase in women's employment since 1996 is likely to have increased women's contribution to household income and further research is necessary to measure this change. The role of women's employment in reducing poverty is also relevant for the second avenue of research mentioned, i.e. the impact on child development. The Growing Up in Ireland study which will follow a large sample of Irish children over time will provide a major resource for studying the influence of parental employment on child outcomes in the future.

6. CONCLUSIONS

In this study we have investigated changes in women's participation in the Irish labour market since the late 1990s. The period between 1997 and 2007 was marked by strong economic growth, significant labour market expansion, including a large increase in migrant workers, and significant changes in a number of key policy areas. Therefore, it is particularly pertinent to take stock of changes in women's labour market activity over the last ten years or so.

Changing female participation is an important dimension of gender equality as the labour market is one of the key domains for the distribution of resources (alongside the family and the state). Women's participation in the labour market therefore has major implications for the gender distribution of resources (money, status, power, time). Moreover, as we consider the comparative position of different groups of women the study not only speaks to issues of gender equality but is also highly relevant for cross-cutting equality issues of age, family status, marital status and (to a lesser extent) nationality.

The extent to which women's increased participation in the labour market is associated with more equal gender distribution of resources is dependent on both the characteristics of those joining the labour market and the nature of their involvement, i.e. the types of job they occupy, their pay levels and number of hours worked. We, therefore, look in detail at changes in the occupational position of men and women at work and at the distribution of pay. The continuing increase in female participation in the labour mark*et al*so has potentially far-reaching effects outside the labour market in society more generally, for example by leading to changes in organisation of household work, consequences for caring and potentially increasing conflict between work and care demands.

The objectives of the study were fourfold:

1. To describe the nature of recent changes in female participation with a view to establishing which groups have been drawn into the labour market and to consider how patterns of participation now compare to elsewhere in the EU.
2. To examine the factors influencing participation decisions and how they may have changed over time.
3. To discuss the labour market implications of changing female participation. More specifically to examine whether these changes have been associated with a widening or a narrowing of gender differences in pay and occupational position.
4. To consider the social implications of rising female participation in terms of quality of life, work-life conflict and gender role attitudes.

It should be noted that the study is based on repeated cross-sectional data, and therefore, cannot capture the dynamic nature of the participation process. The issues of incentives and barriers are most relevant at transition points, for example, after the birth of a child when women decide to exit or re-enter employment. The discontinuation of the Living in Ireland Panel Survey in 2001 and its replacement with the EU SILC which has only a limited longitudinal component limits the possibility of such research.

The descriptive analysis of recent trends in participation (Chapter 2) showed that women's activity rates increased by 10 percentage points between 1998 and 2007. This rise was fairly widely spread. The rates of increase were highest amongst older women, married women, those with lower educational qualifications, women with children aged 5 to 15 years and women with no children under 15 years, and women from the EU.[35] Those with below average increases in participation included women with children aged under five years, lone parents and young single women. In the case of the latter group the low rate of increase in activity rate is likely to be due to a higher uptake of education. The low rate of increase for mothers of young children and the stagnation of participation rates among lone parents in a period of rapid economic growth suggest persistent barriers to employment among these groups. Despite the fact that the rates of increase were highest among women with low education, changes in the educational composition of the population meant that women in the labour force were much better qualified in 2007 than 1998. For instance, the proportion of the female workforce with third level education rose from 29 to 43 per cent.

6.1 Factors Influencing Participation

While Chapter 2 examines how participation has changed, Chapter 3 addresses the question of why has it changed and considers the relative role of different factors in accounting for changes in participation. The analyses show that changes in the educational qualifications of the adult female population and demographic changes in the age profile account for about 40 per cent of the rise in female participation between 1994 and 2007, while the other 60 per cent is due to behavioural changes or changes in other characteristics.

Women's decisions to participate in the labour market are strongly linked to the wage they can command, and since wages increase with education part of the increase in participation levels due to increased educational attainment among women operates through the wage effect. However, the strength of the relationship between participation and earnings is stronger for women with lower educational attainment. For women with low qualifications an increase of 10 per cent in wages would lead to almost a 23 per cent rise in the probability of taking up employment. For women with second or third level qualifications, a 10 per cent rise in wages would lead to an increase in participation of nearly 7 per cent. The lower wage elasticity for women with higher qualifications suggests the there are additional intrinsic motivations to participate in the labour market that increase with education. For example, a higher level of education is also associated with employment that is more satisfying, offers greater autonomy, and that is higher skilled (O'Connell *et al*., 2004).

The changes in participation that cannot be accounted for by the educational and age profile of women in the population can arise from a variety of sources. These include changes in behaviour and structural changes such as rising demand for labour and increases in wages. Changes in behaviour can likewise originate from policy developments or from shifting social norms. The models in Chapter 3 cannot formally test the influence of these factors, however, the results do shed some light on how behaviour has changed.

The econometric analysis of the detailed factors that influence participation decisions highlighted the continued impact of children on participation. Pre-school children reduce the probability of participation by between 17 and 20 per cent (other things

[35] While looking at trends across groups it is worth noting that it is groups with lower levels of participation in 1998 who have the greatest scope for increases.

being equal), and children aged 5 to 13 years reduce participation by between 7 and 9 per cent. While this is expected, it is noteworthy that the strength of the association did not decline over the period 1998 to 2005 for either qualified or unqualified women.[36] This may be associated with the persisting high costs to participation, such as childcare costs, and preferences. Children aged 13 to 18 years do not influence participation among qualified women and have a small positive impact among women with low qualifications in 2005.

The stability of the effect of children over time suggests that the policy changes over the period have not narrowed the gap in the participation rates of mothers and those without young children. However, it is also arguable that without the enhancement of maternity and parental leave the rise in employment of mothers of young children might not have occurred and the gap could have widened further. The effects of spouse/partner's income on participation disappeared over the period 1998 to 2007 and it is likely that this change is related to the introduction of tax individualisation in 2000.

The analyses confirm that age still has a strong effect on women's labour market participation but has become a weaker barrier over the period in 1998 to 2005 consistent with the descriptive findings in Chapter 2 that participation increased for older women.

6.2 Labour Market and Social Implications

A central element of the research was to consider the social and labour market implications of the sustained rise in women's participation in employment. Our study tracked developments in pay and occupational positions over the last decade to see whether rising female participation has been accompanied by greater gender equality at work. Given the nature of the data available the results can show contemporaneous developments but cannot establish causality.

Alongside the very rapid increase in female employment there has been some narrowing of the gender difference in low pay in the later part of the period examined. In 2000 female employees were 1.8 times more likely than male employees to be low paid by 2005 the ratio had dropped to 1.4. The ratio shows that despite the decline women are still over-represented among the low paid. Figures drawn from other research shows that there has also been a narrowing of the gap between men and women's mean hourly pay. The negative earnings effects of the broadening in the base of the female labour market (e.g. the inclusion of a greater proportion of older women and rising participation among women with low qualifications) was then cancelled out by factors such as the higher educational qualifications of the workforce, and the increasing entry of women into higher skilled jobs, which are better rewarded. The wider decline in the rate of low pay for both men and women was likely to be due in part to the introduction of the minimum wage and the rise in wage rates for unskilled employment during the economic boom (see McGuinness *et al.* 2009b).

The occupational trends show that over the last ten years women have made significant inroads into traditionally male areas, and also into jobs with a higher skills profile. This is not to say that vertical and horizontal segregation have been very significantly eroded. The two indices of segregation show very little change over the

[36] The definition of 'unqualified' differs between the 1998 and 2005 analyses. We have included women who have up to Junior Certificate level qualifications while Doris (2001) includes those with Primary level qualifications only. There are very few women with young children with less than Junior Certificate qualifications.

ten years observed. Men and women still occupy quite different jobs, and there are significant differences in men and women's access to middle and senior management positions. Figures from a cross-national study of fourteen countries suggested that Ireland was amongst the countries with the highest level of gender segregation in occupations in 2006. A brief analysis of women returners in the first part of the period highlighted the risk of occupational downgrading following a break from employment. Therefore, the enhanced leave schemes available which reduce the risk of a complete withdrawal from the labour market are likely to prevent such downgrading for women who avail of them.

The changes in the labour market have been accompanied by significant changes in the gender role attitudes of Irish women and men. Irish attitudes are no longer distinctive. While the increase in employment among women is associated with some increase in time pressure, especially among those combining work and the care of young children, and some reduction in satisfaction with how paid work hours fit in with family/social commitments, the trend in overall levels of work-life conflict are not uniformly negative. Some indicators show a decrease in such conflict. Moreover, studies of life satisfaction show that negative effects of work-life conflict are outweighed by the benefits of being in employment compared to non-employed or unemployed. In any case, the rapid increase in women's employment and the concomitant increase in the proportion of dual-earning couples means that work-life conflict is likely to stay on the agenda in the future.

6.3 Policy Issues

The results outlined in the report highlight a number of areas where continued policy attention is warranted, we will discuss these in brief.

6.3.1 Childcare

The results presented in Chapter 2 and 3 highlighted the continued effects of young children on women's participation. While participation has increased among mothers of young children the gap between this group and women without children remained the same between 1998 and 2005 (holding constant other factors). Lower levels of participation amongst mothers are likely to reflect both women's preferences for reducing paid work when their children are young and constraints in the form of affordability of childcare, availability of flexible working arrangements etc.

There is considerable evidence that childcare costs remain a significant barrier to participation. The recent OECD study found that Ireland had the highest childcare costs as a proportion of earnings among 26 countries (OECD, 2007).[37] While there has been a significant investment in childcare in the National Development Plan this has not succeeded in reducing childcare costs. A significant proportion of spending within the childcare strategy was allocated to the Early Childcare Supplement, and this payment was not connected to whether the child is cared for outside the home nor was it linked to the employment status of parents. Therefore, it did not create any incentive to increase labour market participation among mothers.

The new policy to provide a year of pre-school Early Childhood Care and Education (ECCE) for children aged 3 years and 7 months, 4 years and 10 months is to be introduced in January 2010. The scheme will provide 3 hours of pre-school for 5 days a week over a 38 week year. The hours and scheduling of the provision is likely to limit the labour market effects of the scheme, however, there is some flexibility in delivery so that children attending year-round care on a full-time or part-time basis

[37] Ireland was found to have the highest net childcare costs across 26 countries. The proportion of earnings was calculated for different levels of earnings and household types. (OECD, 2007).

will be subsidised to the amount of €48.50 per week over 50 weeks, which should reduce childcare costs for parents. The places are "subject to availability" and there are likely to be capacity constraints in providing the service as the latest figures from the CSO suggest that only 10 per cent of families with pre-school children used formal centre-based care as their main form of childcare (CSO, 2006).[38] The value of early education for children, particularly disadvantaged children, is very considerable and well documented (NESF, 2005), however, policies targeted at reducing the very considerable costs of childcare for low earners are also necessary to have a more direct effect on labour market participation. The range of policy objectives connected with childcare provision (social inclusion, education, gender equality, increased female employment) cannot all be met through one policy lever.

The decline in participation rates among lone parents with children under 5 years suggests there are particular issues among this group. A government discussion paper on lone parents proposes activation of those with children of school-going age. However, this is crucially dependent on the availability of affordable and good quality childcare a precondition that is not currently met. Childcare is also seen as a major barrier to employment among lone parents themselves (Russell and Corcoran, 2001; Murphy, *et al*., 2008). It has also been argued that an activation policy that compels lone parents to work is inconsistent with other elements of the welfare system that support full-time caring among married/cohabiting parents (Murphy, 2008). The activation debate also needs to be framed in the context of the quality of jobs available to lone mothers. Previous research suggests that the lone parents are over-represented among the low paid and have lower qualifications (Fahey and Russell, 2001b; Murphy *et al*., 2008; Callan *et al*., 2008) which highlights the need for education and training. There have been significant policy developments to remove welfare traps for lone parents, particularly increases in the earnings thresholds for those in receipt of the One Parent Family Payment. Nevertheless, fear of losing secondary benefits such as the medical card or rent supplement remain a barrier to employment among lone parents (Murphy *et al*., 2008, p. 63).

6.3.2 Maternity and Parental Leave

During the period under study there have been significant increases in maternity leave provision and the introduction of parental leave (see Chapter 1). While these changes do not appear to be associated with any reduction in the relative effect of pre-school children it is still possible that these effects will emerge in the longer term and that in the absence of these changes there may have been a widening of the motherhood employment gap. The positive effects of such policy interventions may also take the form of reduced pay penalties and less occupational downgrading attaching to breaks in employment around childbirth. The current study cannot capture such effects.

6.3.3 Training/Retraining

Increasing levels of participation among women with low educational qualifications brings to the fore issues of training and education. The continued over-representation of women among the low paid may be tackled through access to education and training, as the analyses in Chapter 3 shows, the earnings women can command are strongly linked to their level of qualifications. The issue of training is also crucial for

[38] There is no current estimate of the proportion of children aged 3 to 4 years who are in centre-based childcare facilities. The 2000 Census of Childcare (ADM, 2000) suggested 37,619 children aged 3 to 6 years were in centre-based childcare, which represents 18 per cent of that cohort (own calculations based of Census 2002 figures). The Equal Opportunity Childcare Programme funded 21,431 places for 3 to 6 year olds up to 2004, though not all of these were necessarily additional places. See Fahey and Russell (2006) for further discussion. Figures from the 2007 *QNHS* module on childcare were not available at the time of printing.

women returning to the labour force after a period in the home in order to prevent the type of occupational downgrading that was observed in the sample of returners investigated in Chapter 4. Access to training among returners was restricted in the past because of the requirement to be on the Live Register (see Russell *et al*., 2000). While this obstacle has been formally removed from FÁS training schemes, it is possible that increased competition for training resources due to the rise in unemployment may disadvantage returners. Furthermore, eligibility for courses under the Vocational Training Opportunities Scheme is still based on benefit status. Greater flexibility in the timing of training provision (for example part-time courses) has long been signalled as an issue for increasing access to lone parents and mothers but has yet to be addressed in a meaningful way.[39] Educational opportunities including VTOS and third-level education are also predominantly full-time.

6.4 Where To From Here?

This report documented a very rapid rise in female labour market participation in a relatively short period. Are these trends likely to continue? A number of factors were investigated in relation to the previous changes (labour demand, changing composition of the workforce, behavioural change, and policy developments) and it is worth discussing how these factors will follow through in the next period.

Changes in the composition of the female population are likely to have a positive effect on participation rates but on a lower scale than during the mid 1990s to 2007. Changes in the educational composition and in the age structure of the population between 2007 and 2020 could be expected to raise participation rates among women by 4 percentage points (compared to 7-8 per cent during the period 1994 to 2007).

Future trends in women's participation are likely to be strongly influenced by the prevailing economic conditions. During 2008 Ireland entered recession and unemployment is predicted to rise to an average of 12.2 per cent during 2009 and 14.8 per cent in 2010 (Barrett *et al.*, 2009). While the early effects of the recession were concentrated in the male-dominated construction sector, the decline in employment has now spread to the services sector, where a high proportion of the female workforce is located. Moreover, an embargo on public sector recruitment has been imposed which was a significant growth area for female employment over the last decade. The most recent *QNHS* figures show that there has been a decline of 1.9 per cent in the male participation rate and of 0.8 per cent in female participation (CSO, *QNHS* Quarter 2, 2009).

The recession has also led to a drop in wages. Earnings are forecast to fall by 1 per cent in nominal terms in 2009 and by a further 2.5 per cent in 2010 (Barrett *et al.,* 2009). Tax increases announced in the Supplementary Budget (April 2009) will further reduce net earnings. Our analysis has shown that women with low levels of qualifications are particularly responsive to the wages available. Therefore, the forecast decline in wage levels is likely to depress participation amongst this group in particular.

The effect of recession on participation rates will partly depend on the extent to which women move into unemployment (which is still counted as participation) or economic inactivity. Given the changing attitudes and the changing work experience of women

[39] Currently, the FÁS Jobs Ireland Website shows that only 104 of the 1,582 training courses for jobseekers are available on a part-time basis. The majority of these are general training e.g. job-clubs and return to work schemes, rather than specific skills training. Research has found that the effectiveness of general training is low (O'Connell and McGinnity, 1997).

it is less likely that they will disappear back into the home than in earlier periods. The processes are different for two groups - job losers and returners.

Most women who lose their jobs will have benefit entitlements and, therefore, join the live register. If they become long-term unemployed there is a greater likelihood that they will disappear from the unemployment statistics especially if they have an partner in employment, which affects access to means-tested benefits.

Women returners e.g. those re-entering the labour market after childbirth or other breaks in employment are more vulnerable to disappearing from the statistics, since they have no entitlements to unemployment benefits and, therefore, do not appear on the register. Moreover, even if they are looking for work this group are less likely to define themselves as unemployed. It is likely that potential returners will be discouraged from re-entering the job market during recession and, therefore, remain outside the labour force for a longer period which has a further negative affect on their prospects.

Therefore, tracking future participation patterns is important in examining the costs of recession and where they fall. In tackling hidden unemployment during the recession it is important that the Live Register should not be returned to as a means of rationing access to resources for jobseekers when there is a high demand for services and that access to training and education is based on need rather than benefit status.

6.4.1 Future Policy Changes

Overall the analysis presented here suggests that policy developments in relation to combining work and care for young children have not played a very significant role in the rise in participation over the last decade. Tax individualisation appears to have removed the small negative effect of partner's earnings on participation that was evident in 1994 and 1998. Analysis by Callan *et al*. (2009) suggests that individualisation boosted participation by between 2 and 3 percentage points.

Our discussion of changes over the last decade suggest that rising educational attainment has been one of the most significant factors driving increased participation. Therefore, education may be one of the most important policy domains in terms of female participation both in the past and in the future. While cohort effects will continue to raise the educational levels of the workforce in the future, policy changes that halt the expansion of third level education for instance could impact on future participation rates of women.

In the short to medium term at least, Ireland will no longer be able to rely on economic growth to draw women into the labour market, this may refocus attention on the efforts required in the policy domain for Ireland to achieve and maintain the targets set for female employment within the EU.

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