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ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

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# EXECUTIVE SUMMARY

In order to develop a better understanding of older workers' decisions to leave the labour force early, and how this may vary over the economic cycle, this report examines early retirement patterns in Ireland. We find that people with medium and higher levels of education are more likely to retire early. This may result from more highly educated people having accumulated higher wealth and so being in a more favourable position to retire. But whatever the reason, the result is interesting in the context of extending working lives. It is generally accepted that more highly educated people will be better placed to work longer given the nature of their occupations. The analysis here suggests that policy measures will have to be more intense if those more likely to retire early (the more highly educated) are to be maintained in the workforce.

# CHAPTER 1

## Introduction

In order to develop a better understanding of older workers' decisions to leave the labour force early, and how this may vary over the economic cycle, this report examines early retirement patterns in Ireland before and after the Great Recession. As we are examining early retirement, we focus on retirees aged 40–64 years. While it is the case that all of these individuals have retired before the state pension age of 66 years, not all of the them can be categorised as early retirees. However, the Central Statistics Office's Quarterly National Household Survey (QNHS) longitudinal data, which are used to undertake the analysis contained in this report, include a question that specifically captures whether an individual is an 'early retiree' or not.

In this report, we use the QNHS data to examine changes in the rates and determinants of early retirement in Ireland in 2006 and 2012: 2006 was selected as the year to capture the pre-recession period in Ireland, and 2012 the post-recession phase as this was the year that the economy turned the corner on the economic crisis, with Gross National Product (GNP) growing by 1.6 per cent.[1] This research assesses the impact on early retirement behaviour of the dramatic changes that have taken place in the Irish economy since the onset of recession in 2008. In particular, the study examines the impact of various socio-economic characteristics, such as age, education, marital status, gender, and regional location, on people's decision to retire early from the labour force, and on how such impacts have changed pre- and post-recession. In summary, the study seeks to address the following questions:

- How has the incidence of retirement among individuals aged 40–64 changed between 2006 and 2012, in terms of both the overall retirement rate and, in particular, the retirement rate of 'early retirees'?
- What is the socio-economic profile of early retirees in both periods, and how does this group's profile compare with other groups of people of similar age who are no longer in the labour force (e.g. normal retirees, retirees with an illness/disability, retirees who have not worked for 8 years or more)?
- What are the main characteristics (age, gender, education, etc.) driving the early retirement decision, and has the relative importance of these factors changed following the Great Recession?

[1] Duffy, D., K. McQuinn, C. Morley and D. Foley (2015). *Quarterly Economic Commentary, Autumn 2015*. Dublin: Economic and Social Research Institute.

- To what extent can any change in the rate of retirement be attributed to changes in the population profile of retirees over time?

# CHAPTER 2

# Data

The data used in this paper come from the Central Statistics Office's Quarterly National Household Survey (QNHS) longitudinal datafile. The QNHS is Ireland's labour force survey, providing employment, unemployment and inactivity estimates every quarter. The survey is continuous and it targets all private households in Ireland. The total sample of households for each quarter is approximately 39,000. Households are asked to take part in the survey for five consecutive quarters. In each quarter, one-fifth of the households surveyed are replaced and the QNHS sample involves an overlap of 80 per cent between consecutive quarters and 20 per cent between the same quarters in consecutive years. Participation in the QNHS is voluntary. Nevertheless, the response rate is quite high (approximately 85 per cent in recent years).[2]

The analysis presented in this report is based on Quarter 2 (Q2) QNHS data from 2006 and 2012, which are the two time points that we use to capture the pre- and post-recessionary periods in Ireland. Given that the focus of the study is on early retirement, we restrict our analysis to those aged 40 to 64 years of age. All data are weighted to ensure that the results presented are representative of the population.

[2] Information provided by the CSO.

# CHAPTER 3

# Descriptive statistics

## 3.1 RETIREMENT RATES

Table 3.1 presents the retirement rate in Ireland for various years between 2006 and 2015, for all retirees aged 40–64 years and then separately for those who report that they took 'early retirement'. Calculation of these two rates is based on those aged 40 to 64 who have retired from the labour force and who had previous employment experience. The *main labour status* variable[3] that is derived by the CSO was used to identify those who had retired from employment, along with those in the labour force (i.e. employed and unemployed). From the entire sample of retirees aged 40–64, the variable capturing the *main reason for leaving your last job or business* allows us to specifically identify early retirees.[4]

Based on the data presented in Table 3.1, the overall retirement rate for individuals aged 40–64 in Ireland increased over the recessionary period, from 5.8 per cent in 2006 to 6.3 per cent in 2012. However, as the economy has recovered the rate of retirement has declined, standing at 5.3 per cent in 2015.

When we look at the early retirement rate, it also increased over the period of the recession, from 1.7 per cent in 2006 to 2.4 per cent in 2012, and has fallen since the recovery in the economy (1.9 per cent in 2015).

[3] The categories for this variable are: (i) working for payment or profit; (ii) looking for first regular job; (iii) unemployed, having lost or given up previous job; (iv) actively looking for work after voluntary interruption of working life (for 12 months or longer) for personal or domestic reasons; (v) student or pupil; (vi) engaged on home duties; (vii) retired from employment; (viii) unable to work due to permanent sickness or disability and (ix) other.

[4] The categories for this variable are as follows: (i) dismissed or made redundant; (ii) a job of limited duration has ended; (iii) looking for children or incapacitated children; (iv) other personal or family responsibilities; (v) own illness or disability; (vi) education or training; (vii) early retirement; (viii) normal retirement; (ix) compulsory military or community service; and (x) other reasons. There is also a 'not applicable' category for this variable, which captures individuals that 'did not work in the last 8 years'. In the analyses conducted in this paper, we examine 'early retirement', 'normal retirement', 'own illness or disability' and 'did not work in the last 8 years' as distinct categories, while all the remaining categories for this variable (e.g. education or training, other personal or family responsibilities) are combined into a category called 'Other' in the analyses.

TABLE 3.1 RETIREMENT RATES IN IRELAND FOR INDIVIDUALS AGED 40–64: 2006–2015

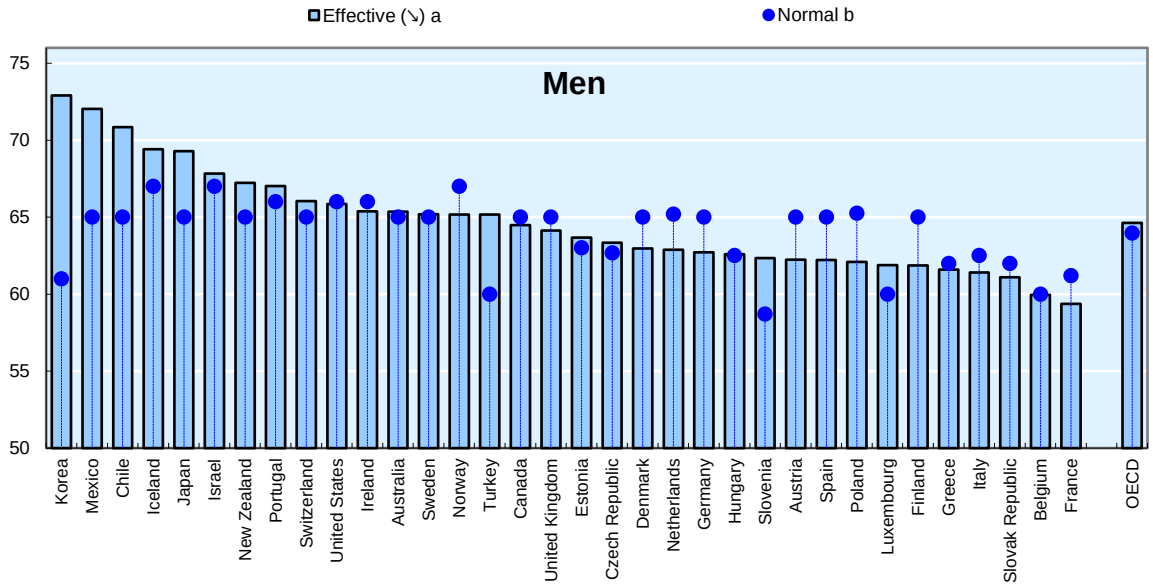
| Year | All retirees | | Early retirees | |
|---|---|---|---|---|
| | *Per cent* | *Number* | *Per cent* | *Number* |
| 2006 | 5.8 | 53,116 | 1.7 | 14,620 |
| 2010 | 6.0 | 61,568 | 1.7 | 16,598 |
| 2012 | 6.3 | 67,672 | 2.4 | 24,990 |
| 2015 | 5.3 | 60,415 | 1.9 | 20,648 |

*Source:* *Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*
*Note:* *The retirement rate is calculated by dividing the number of retirees by the labour force (for people aged 40–64 years).*

Figures 3.1 and 3.2 illustrate the average effective retirement age for males and females respectively across a range of OECD countries, including Ireland, in 2014 and how this compares with the normal age of retirement in each of the countries.[5] The average effective age of retirement is defined by the OECD as the average age of exit from the labour force during a 5-year period.[6] Based on this definition, the average effective retirement age for males for the OECD as a whole was 64.6 years in 2014. Ireland's average male age of retirement was slightly higher than this, at 65.4 years, but this figure is lower than the normal age of retirement in Ireland (66 years of age). For females, the OECD average effective retirement age in 2014 was 63.2 years. At 62.6 years, Ireland's female age was lower, and it is, in turn, considerably lower than the normal retirement age in Ireland.

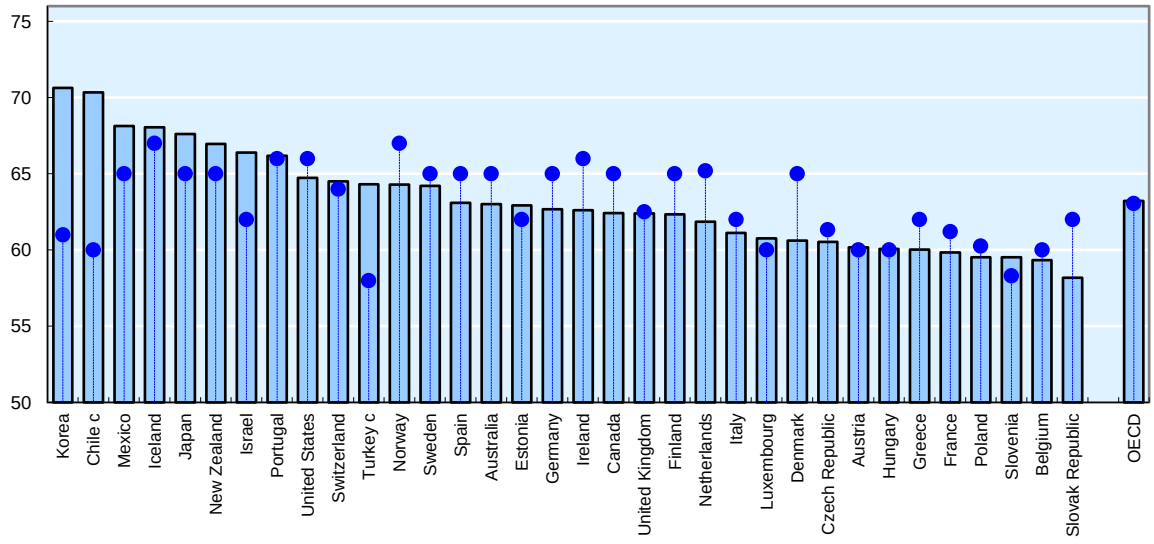
[5] The OECD defines the 'normal retirement age' as 'the age at which an individual can retire in 2014 without any reduction to their pension'.
[6] Labour force (net) exits are estimated by taking the difference in the participation rate for each 5-year age group (40 and over) at the beginning of the period being examined and the rate for the corresponding age group aged 5 years older at the end of the period.

**FIGURE 3.1 AVERAGE EFFECTIVE AGE OF RETIREMENT VERSUS THE NORMAL RETIREMENT AGE: MALES**




*Source:* *OECD estimates derived from the European and national labour force surveys, OECD Pensions at a Glance 2015 (http://oe.cd/pag – Figures 7.8 and 7.9).*

**FIGURE 3.2 AVERAGE EFFECTIVE AGE OF RETIREMENT VERSUS THE NORMAL RETIREMENT AGE: FEMALES**




*Source:* *OECD estimates derived from the European and national labour force surveys, OECD Pensions at a Glance 2015 (http://oe.cd/pag – figures 7.8 & 7.9).*

## 3.2 RETIREE PROFILES

In this section, we present profile information on retirees for 2006 and 2012. Using the *main reason for leaving your last job or business* information that is collected in the QNHS, we subdivide the retiree sample into the following

categories: (i) early; (ii) normal; (iii) did not work in the past 8 years; (iv) illness/disability; and (v) other. For comparative purposes, we present profile information for the full retiree sample as well. Given that the focus of the report is on early retirees, we concentrate on illustrating the profile of this group in the main text that follows. Some discussion of the characteristics of those who have not worked in the past 8 years is presented as well.

Based on the information presented in Table 3.2, we can see that the average age of early retirees in 2006 was 59.3 years, with very little change taking place between then and 2012 (59.6 years). This figure is slightly lower than the average age of normal retirees, which stood at 60.1 in 2006 and 60.4 in 2012. The average age of the retirees who did not work in the past 8 years is similar to that of normal retirees, while those who retired due to illness or disability have the lowest average age of all categories of retirees examined (approximately 58.5 years).

In terms of the gender profile of retirees (Table 3.2), regardless of retiree type, a higher proportion is male. However, there was a significant change in the gender profile of retirees between 2006 and 2012, with the percentage of females retiring increasing and males decreasing. This was particularly the case for early retirees: in 2006, 73.2 per cent of early retirees were male, but this figure fell to 59.9 per cent in 2012 with the percentage of females increasing accordingly.

TABLE 3.2 AGE AND GENDER PROFILE OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Age (years)* | |
| All | 59.7 | 59.9 |
| Early retirees | 59.3 | 59.6 |
| Normal retirees | 60.1 | 60.4 |
| Did not work in past 8 years | 60.3 | 60.8 |
| Own illness or disability | 58.5 | 58.4 |
| Other retiree type | 59.4 | 59.5 |
| | *Per cent* | |
| *Male* | | |
| All | 72.0 | 62.9 |
| Early retirees | 73.2 | 59.9 |
| Normal retirees | 75.0 | 64.3 |
| Did not work in past 8 years | 72.7 | 68.5 |
| Own illness or disability | 68.3 | 60.0 |
| Other retiree type | 64.8 | 59.9 |
| *Female* | | |
| All | 28.0 | 37.1 |
| Early retirees | 26.8 | 40.1 |
| Normal retirees | 25.0 | 35.7 |
| Did not work in past 8 years | 27.3 | 31.5 |
| Own illness or disability | 31.8 | 40.0 |
| Other retiree type | 35.2 | 40.1 |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

Table 3.3 presents the marital status and nationality of retirees. Unsurprisingly, the majority of people who retire are married, and this has changed very little over time (approximately 71 per cent in both 2006 and 2012). For early retirees, 74.7 per cent were married in 2006, increasing slightly to 75.9 per cent in 2012. On the other hand, the proportion of normal retirees who are married, and those who had not worked in the past 8 years, fell between 2006 and 2012, from 79.6 to 75.5 per cent and from 65 to 62.2 per cent respectively.

In relation to the nationality of retirees, the majority are Irish, as expected, although there was a slight decline between 2006 and 2012 from 95 per cent to 93.8 per cent. While there was no significant change in the proportion of early retirees who were Irish between 2006 and 2012, the proportion of people who took normal retirement who were Irish increased over this time period, from 92.8 per cent to 97.6 per cent. On the other hand, the proportion of those who had not worked in the past 8 years who were Irish declined between 2006 and 2012, from 95.9 per cent to 89.3 per cent.

TABLE 3.3 MARITAL STATUS AND NATIONALITY OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Single* | | |
| All | 15.6 | 13.2 |
| Early retirees | 14.3 | 10.7 |
| Normal retirees | 11.6 | 9.7 |
| Did not work in past 8 years | 19.4 | 20.3 |
| Own illness or disability | 16.3 | 11.1 |
| Other retiree type | 15.4 | 14.8 |
| *Married* | | |
| All | 71.3 | 71.0 |
| Early retirees | 74.7 | 75.9 |
| Normal retirees | 79.6 | 75.5 |
| Did not work in past 8 years | 65.0 | 62.2 |
| Own illness or disability | 67.0 | 69.0 |
| Other retiree type | 68.3 | 65.1 |
| *Widowed* | | |
| All | 6.4 | 7.9 |
| Early retirees | 3.5 | 5.5 |
| Normal retirees | 5.0 | 7.3 |
| Did not work in past 8 years | 8.2 | 10.4 |
| Own illness or disability | 9.0 | 6.8 |
| Other retiree type | 8.2 | 14.0 |
| *Divorced* | | |
| All | 6.8 | 7.9 |
| Early retirees | 7.5 | 7.9 |
| Normal retirees | 3.8 | 7.6 |
| Did not work in past 8 years | 7.4 | 7.1 |
| Own illness or disability | 7.7 | 13.1 |
| Other retiree type | 8.1 | 6.1 |
| *Irish* | | |
| All | 95.0 | 93.8 |
| Early retirees | 94.7 | 94.2 |
| Normal retirees | 92.8 | 97.6 |
| Did not work in past 8 years | 95.9 | 89.3 |
| Own illness or disability | 98.3 | 94.8 |
| Other retiree type | 93.4 | 94.3 |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

The geographic location of retirees is presented in Table 3.4. Given the concentration of employment in Dublin, the largest proportion of people who retire live in Dublin: this stood at 26.8 per cent in 2006 and increased by a percentage point to 27.8 per cent in 2012. However, this overall figure for Dublin in 2006 was not driven by those taking normal retirement (19 per cent), but by

early retirees (33.8 per cent), retirees with an illness or disability (30 per cent) and the 'other retiree type' category (31.7 per cent). There was, though, a big increase in the proportion of normal retirees living in Dublin between 2006 and 2012, rising by 10 percentage points to 29 per cent. At the same time, the percentage of early retirees living in Dublin fell between 2006 and 2012 (to 28 per cent), as did those with an illness or disability (to 25.5 per cent) and the 'other retiree type' group (to 30.4 per cent). After Dublin, the two main geographic locations where retirees reside are the South-West and the Border region. This is also true for early retirees, with the South-East being another location where a high percentage of early retirees live.

TABLE 3.4 GEOGRAPHIC LOCATION OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Border* | | |
| All | 12.3 | 12.5 |
| Early retirees | 15.1 | 11.0 |
| Normal retirees | 12.3 | 17.2 |
| Did not work in past 8 years | 10.5 | 13.9 |
| Own illness or disability | 9.0 | 7.1 |
| Other retiree type | 13.6 | 8.8 |
| *Midlands* | | |
| All | 6.7 | 3.7 |
| Early retirees | 6.5 | 4.1 |
| Normal retirees | 6.5 | 2.2 |
| Did not work in past 8 years | 7.7 | 2.8 |
| Own illness or disability | 4.2 | 4.8 |
| Other retiree type | 5.9 | 7.1 |
| *West* | | |
| All | 8.7 | 9.7 |
| Early retirees | 5.6 | 11.5 |
| Normal retirees | 11.7 | 5.2 |
| Did not work in past 8 years | 9.3 | 11.1 |
| Own illness or disability | 11.9 | 11.3 |
| Other retiree type | 5.9 | 7.4 |
| *Dublin* | | |
| All | 26.8 | 27.8 |
| Early retirees | 33.8 | 28.0 |
| Normal retirees | 19.0 | 29.0 |
| Did not work in past 8 years | 22.8 | 26.2 |
| Own illness or disability | 30.0 | 25.5 |
| Other retiree type | 31.7 | 30.4 |
| *Mid-East* | | |

| | 2006 | 2012 |
|---|---|---|
| All | 9.8 | 7.8 |
| Early retirees | 6.8 | 9.2 |
| Normal retirees | 15.6 | 7.8 |
| Did not work in past 8 years | 8.6 | 6.7 |
| Own illness or disability | 9.7 | 2.9 |
| Other retiree type | 10.1 | 9.5 |
| *Mid-West* | | |
| All | 9.5 | 10.4 |
| Early retirees | 7.5 | 8.7 |
| Normal retirees | 9.1 | 13.3 |
| Did not work in past 8 years | 11.7 | 11.7 |
| Own illness or disability | 11.9 | 9.9 |
| Other retiree type | 6.2 | 7.4 |
| *South-East* | | |
| All | 11.9 | 11.2 |
| Early retirees | 12.3 | 9.8 |
| Normal retirees | 11.7 | 8.1 |
| Did not work in past 8 years | 12.6 | 13.8 |
| Own illness or disability | 8.6 | 13.0 |
| Other retiree type | 12.5 | 15.9 |
| *South-West* | | |
| All | 14.4 | 16.9 |
| Early retirees | 12.4 | 17.6 |
| Normal retirees | 14.2 | 17.2 |
| Did not work in past 8 years | 16.9 | 13.9 |
| Own illness or disability | 14.6 | 25.6 |
| Other retiree type | 13.0 | 13.5 |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

When we examine the education profile of retirees (Table 3.5), we see that, at just over a third, the largest fraction had only a 'primary or less' education qualification in 2006. However, this overall figure masks underlying differences between the retiree type categories. Specifically, the overall primary or less educational attainment figure for 2006 was mainly driven by retirees who had not worked in the past 8 years (45.2 per cent) and those with an illness or disability (47 per cent). The proportion of early retirees with a primary or less education qualification in 2006 was 25 per cent, with this figure being lower for normal retirees (19.4 per cent). Almost a quarter of early retirees had a higher degree or above qualification in 2006. This proportion was 19 per cent for normal retirees, and much lower for those who had not worked in the previous 8 years (9.7 per cent) and retirees with an illness or disability (6.6 per cent).

TABLE 3.5 EDUCATIONAL ATTAINMENT PROFILE OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Primary or less* | | |
| All | 33.5 | 16.8 |
| Early retirees | 25.1 | 9.7 |
| Normal retirees | 19.4 | 9.4 |
| Did not work in past 8 years | 45.2 | 31.1 |
| Own illness or disability | 47.0 | 16.5 |
| Other retiree type | 36.0 | 25.3 |
| *Lower secondary* | | |
| All | 14.0 | 14.9 |
| Early retirees | 13.2 | 13.0 |
| Normal retirees | 13.0 | 11.6 |
| Did not work in past 8 years | 13.9 | 15.9 |
| Own illness or disability | 14.2 | 18.6 |
| Other retiree type | 18.3 | 24.5 |
| Upper secondary | | |
| All | 19.3 | 21.2 |
| Early retirees | 18.3 | 19.6 |
| Normal retirees | 27.3 | 23.7 |
| Did not work in past 8 years | 16.7 | 22.1 |
| Own illness or disability | 13.9 | 19.7 |
| Other retiree type | 19.8 | 20.2 |
| *Post-secondary* | | |
| All | 7.1 | 8.7 |
| Early retirees | 7.8 | 8.9 |
| Normal retirees | 7.2 | 7.2 |
| Did not work in past 8 years | 6.4 | 6.4 |
| Own illness or disability | 9.3 | 11.3 |
| Other retiree type | 4.5 | 14.9 |
| *Ordinary degree* | | |
| All | 8.9 | 14.3 |
| Early retirees | 10.3 | 18.7 |
| Normal retirees | 11.2 | 17.6 |
| Did not work in past 8 years | 6.8 | 7.6 |
| Own illness or disability | 8.5 | 14.4 |
| Other retiree type | 7.2 | 6.5 |
| *Higher degree or above* | | |
| All | 15.4 | 23.1 |
| Early retirees | 23.8 | 28.2 |
| Normal retirees | 19.0 | 29.5 |
| Did not work in past 8 years | 9.7 | 16.4 |
| Own illness or disability | 6.6 | 19.5 |

| | 2006 | 2012 |
|---|---|---|
| Other retiree type | 12.9 | 8.5 |
| *Educational attainment unknown* | | |
| All | 1.7 | 1.1 |
| Early retirees | 1.5 | 1.9 |
| Normal retirees | 3.0 | 1.2 |
| Did not work in past 8 years | 1.6 | 0.6 |
| Own illness or disability | 0.7 | – |
| Other retiree type | 1.5 | – |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

We can see from Table 3.5 that there was a significant change in the education profile of retirees between 2006 and 2012, with the percentage with a primary or less qualification falling to 16.8 per cent (from 33.5 per cent) and the proportion with an ordinary degree or higher qualification increasing from 24.3 per cent to 37.4 per cent. While the proportion of all retiree types with a primary or less qualification fell between 2006 and 2012, the fall was predominantly driven by a decline in the percentage of retirees with an illness or disability (16.5 per cent), early retirees (9.7 per cent) and those who had not worked in the past 8 years (31.1 per cent) with this education level. The growth in the percentage of retirees with an ordinary degree or higher qualification between 2006 and 2012 was due to the increase in early retirees (from 34.1 to 46.9 per cent), normal retirees (from 30.2 to 47.1 per cent) and retirees with an illness or disability (from 15.1 to 33.9 per cent) with this qualification.

Most retirees, regardless of type, are part of a couple with no children (Table 3.6), followed by being part of a couple with children. These details remain the same regardless of the time point examined (2006 or 2012), although there was a slight increase in the proportion of retirees who were part of a couple with no children between 2006 and 2012 (from 42 to 44.8 per cent) and a very small decline in the percentage that were part of a couple with children (from 29.6 to 28.9 per cent). Regarding early retirees, the proportion that were part of a couple with no children fell between 2006 and 2012, from 46.2 to 43.9 per cent, while the percentage of normal retirees and retirees that had not worked in the past 8 years that were in this family unit type increased, from 42.9 to 48.6 per cent and from 38.3 to 47 per cent respectively. On the other hand, there was an increase in the proportion of early retirees that were part of a couple with children between 2006 and 2012, from 29.3 to 35.1 per cent, with declines for the other two aforementioned retiree groups for this family unit type.

TABLE 3.6 FAMILY INFORMATION OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Family unit type – couple, no children* | | |
| All | 42.0 | 44.8 |
| Early retirees | 46.2 | 43.9 |
| Normal retirees | 42.9 | 48.6 |
| Did not work in past 8 years | 38.3 | 47.0 |
| Own illness or disability | 37.6 | 39.1 |
| Other retiree type | 44.6 | 39.1 |
| *Family unit type – couple, children* | | |
| All | 29.6 | 28.9 |
| Early retirees | 29.3 | 35.1 |
| Normal retirees | 35.1 | 31.4 |
| Did not work in past 8 years | 25.4 | 17.5 |
| Own illness or disability | 31.7 | 32.0 |
| Other retiree type | 28.6 | 32.0 |
| *Family unit type – lone parent* | | |
| All | 5.9 | 4.5 |
| Early retirees | 5.3 | 4.8 |
| Normal retirees | 5.5 | 4.9 |
| Did not work in past 8 years | 7.0 | 2.8 |
| Own illness or disability | 5.5 | 6.9 |
| Other retiree type | 5.9 | 6.9 |
| *Family unit type – not a member of a family unit* | | |
| All | 22.5 | 21.7 |
| Early retirees | 19.2 | 16.1 |
| Normal retirees | 16.6 | 15.2 |
| Did not work in past 8 years | 29.3 | 32.7 |
| Own illness or disability | 25.2 | 22.0 |
| Other retiree type | 20.9 | 22.0 |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

Table 3.7 presents some household information for retirees; specifically, whether their partner is present in the household and the number of employed adults in the household. For all types of retirees, the partner is present in the majority of retiree households. Apart from the 'other retiree' group, this figure has increased slightly between 2006 and 2012.

TABLE 3.7 HOUSEHOLD INFORMATION OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Presence of partner of person in same household* | | |
| All | 71.5 | 73.8 |
| Early retirees | 75.5 | 79.0 |
| Normal retirees | 78.0 | 80.0 |
| Did not work in past 8 years | 63.5 | 64.5 |
| Own illness or disability | 69.4 | 71.1 |
| Other retiree type | 73.2 | 64.6 |
| *Number of employed adults in the household: zero* | | |
| All | 56.4 | 60.9 |
| Early retirees | 52.8 | 53.5 |
| Normal retirees | 52.8 | 57.3 |
| Did not work in past 8 years | 63.2 | 75.9 |
| Own illness or disability | 56.3 | 52.2 |
| Other retiree type | 53.4 | 68.7 |
| *Number of employed adults in the household: one* | | |
| All | 31.5 | 31.2 |
| Early retirees | 35.2 | 37.2 |
| Normal retirees | 34.0 | 32.1 |
| Did not work in past 8 years | 25.0 | 20.8 |
| Own illness or disability | 32.1 | 37.9 |
| Other retiree type | 35.4 | 25.9 |
| *Number of employed adults in the household: two* | | |
| All | 8.5 | 6.5 |
| Early retirees | 8.0 | 7.0 |
| Normal retirees | 8.8 | 9.0 |
| Did not work in past 8 years | 8.4 | 3.4 |
| Own illness or disability | 9.5 | 9.8 |
| Other retiree type | 8.2 | 4.0 |
| *Number of employed adults in the household: three and above* | | |
| All | 3.6 | 1.3 |
| Early retirees | 4.1 | 2.3 |
| Normal retirees | 4.5 | 1.7 |
| Did not work in past 8 years | 3.5 | – |
| Own illness or disability | 2.1 | – |
| Other retiree type | 2.9 | 1.4 |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

While over 50 per cent of retiree households have no working adults present, there is at least one working adult in just over a third of these households. In relation to early retirees, there was a slight increase in the proportion of households with no employed adults between 2006 and 2012, from 52.8 to 53.5 per cent, while the number of early retiree households with one employed adult

increased marginally as well, from 35.2 to 37.2 per cent. For retirees who had not worked in the past 8 years, there was a sizeable increase in the percentage of these households with no employed adult between 2006 and 2012, from 63.2 to 75.9 per cent; and a drop in the proportion with one employed adult, from 25 per cent to 20.8 per cent.

In Table 3.8 we can see that between 2006 and 2012 the proportion of retiree households where one adult was working and one adult was not fell from 43.6 to 39.1 per cent.

TABLE 3.8 WORKING STATUS OF ADULTS LIVING IN THE RETIREE'S HOUSEHOLD AND JOBLESS HOUSEHOLDS: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *At least one adult working and one adult not working* | | |
| All | 43.6 | 39.1 |
| Early retirees | 47.2 | 46.5 |
| Normal retirees | 47.2 | 42.8 |
| Did not work in past 8 years | 36.8 | 24.2 |
| Own illness or disability | 43.7 | 47.8 |
| Other retiree type | 46.6 | 31.3 |
| *All adults not working*[1] | | |
| All | 56.4 | 60.9 |
| Early retirees | 52.8 | 53.5 |
| Normal retirees | 52.8 | 57.3 |
| Did not work in past 8 years | 63.2 | 75.9 |
| Own illness or disability | 56.3 | 52.2 |
| Other retiree type | 53.4 | 68.7 |
| *Jobless household* | | |
| All | 56.2 | 60.2 |
| Early retirees | 52.1 | 52.2 |
| Normal retirees | 52.8 | 57.3 |
| Did not work in past 8 years | 63.2 | 74.9 |
| Own illness or disability | 56.3 | 51.2 |
| Other retiree type | 53.4 | 68.7 |

*Source:* *Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*
*Note:* *1. This excludes all adults in the household aged 18–24 who are studying and inactive, and also all adults aged 65 and above who are inactive.*

For early retiree households, this decline was much smaller, from 47.2 to 46.5 per cent; while for the households of retirees who had not worked in the past 8 years the decline in this figure was much larger, from 36.8 to 24.2 per cent.

In 2006, 56.2 per cent of retirees lived in jobless households (Table 3.8), and this

figure had increased to 60.2 per cent in 2012. There was no change in the percentage of early retirees living in jobless households between 2006 and 2012 (approximately 52 per cent). while for retirees who had not worked in the previous 8 years the percentage living in a jobless household increased quite considerably, from 63.2 to 74.9 per cent.

Table 3.9 presents information on the period of time since retirees last worked. The proportion of retirees who had not worked for 4 years or more fell from 56.3 to 49.9 per cent between 2006 and 2012. For early retirees, 38.8 per cent had not worked for 4 years or longer in 2006, with this figure declining to 33.3 per cent in 2012. In 2006, another third of early retirees had not worked for between 2 and 4 years: again, this figure had declined slightly by 2012 (to 28.3 per cent).

TABLE 3.9 TIME SINCE RETIREES LAST WORKED: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Less than 1 month* | | |
| All | 1.1 | – |
| Early retirees | 0.7 | – |
| Normal retirees | 2.4 | – |
| Did not work in past 8 years | – | – |
| Own illness or disability | 1.5 | – |
| Other retiree type | 2.4 | – |
| *1 to 11 months* | | |
| All | 9.7 | 18.2 |
| Early retirees | 14.0 | 25.2 |
| Normal retirees | 15.8 | 28.5 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 10.2 | 12.1 |
| Other retiree type | 13.5 | 19.4 |
| *12 to 23 months* | | |
| All | 10.1 | 9.8 |
| Early retirees | 15.7 | 13.1 |
| Normal retirees | 14.2 | 13.5 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 7.3 | 10.2 |
| Other retiree type | 19.6 | 13.6 |
| *24 to 47 months* | | |
| All | 20.9 | 21.5 |
| Early retirees | 30.8 | 28.3 |
| Normal retirees | 30.4 | 28.9 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 28.9 | 30.2 |

| | 2006 | 2012 |
|---|---|---|
| Other retiree type | 26.7 | 25.3 |
| *4 years or longer* | | |
| All | 56.3 | 49.9 |
| Early retirees | 38.8 | 33.3 |
| Normal retirees | 37.2 | 29.1 |
| Did not work in past 8 years | 100.0 | 100.0 |
| Own illness or disability | 52.1 | 47.6 |
| Other retiree type | 37.9 | 41.6 |
| *Time since person last worked unknown* | | |
| All | 1.9 | 0.6 |
| Early retirees | – | – |
| Normal retirees | – | – |
| Did not work in past 8 years | 6.3 | 2.4 |
| Own illness or disability | – | – |
| Other retiree type | – | – |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

When we examine the previous sector of employment of retirees (Table 3.10), we can see that the largest proportion were employed in industry in 2006 (11.9 per cent), but by 2012 this had shifted to public administration and defence (13.7 per cent), education (14.2 per cent) and health and social work (11.8 per cent). Early retirees followed a similar previous employment sector pattern to the overall retiree sample, with most having previously worked in industry in 2006 (18.1 per cent), and this changing to public administration and defence (17.5 per cent), education (23.7 per cent) and health and social work (14.8 per cent) by 2012.

TABLE 3.10 PREVIOUS SECTOR OF EMPLOYMENT OF RETIREES: 2006 AND 2012

| | 2006 | 2012 |
|---|---|---|
| | *Per cent* | |
| *Agriculture, forestry and fishing* | | |
| All | 4.7 | 1.3 |
| Early retirees | 7.0 | 1.7 |
| Normal retirees | 7.3 | 0.4 |
| Own illness or disability | 9.1 | 3.3 |
| Other retiree type | 2.4 | 3.0 |
| *Industry* | | |
| All | 11.9 | 8.1 |
| Early retirees | 18.1 | 11.3 |
| Normal retirees | 10.5 | 7.5 |
| Own illness or disability | 16.5 | 6.5 |
| Other retiree type | 27.2 | 19.2 |
| *Construction* | | |
| All | 5.5 | 4.2 |
| Early retirees | 6.5 | 2.7 |
| Normal retirees | 4.1 | 4.2 |
| Own illness or disability | 16.2 | 8.7 |
| Other retiree type | 9.7 | 17.3 |
| *Wholesale and retail* | | |
| All | 5.7 | 4.0 |
| Early retirees | 6.8 | 3.1 |
| Normal retirees | 7.8 | 4.9 |
| Own illness or disability | 9.0 | 7.9 |
| Other retiree type | 10.9 | 12.2 |
| *Transportation and storage* | | |
| All | 5.8 | 4.0 |
| Early retirees | 8.4 | 6.2 |
| Normal retirees | 7.6 | 4.7 |
| Own illness or disability | 7.7 | 3.7 |
| Other retiree type | 9.5 | 4.8 |
| *Accommodation and food storage* | | |
| All | 3.0 | 0.8 |
| Early retirees | 3.5 | 0.2 |
| Normal retirees | 5.1 | 2.1 |
| Own illness or disability | 4.5 | 2.7 |
| Other retiree type | 4.4 | – |
| *Information and communication* | | |
| All | 3.3 | 2.5 |
| Early retirees | 8.3 | 4.9 |
| Normal retirees | 2.9 | – |
| Own illness or disability | 0.8 | 3.0 |

| | 2006 | 2012 |
|---|---|---|
| Other retiree type | 2.7 | 5.1 |
| *Financial, insurance and real estate* | | |
| All | 3.2 | 4.2 |
| Early retirees | 7.9 | 5.4 |
| Normal retirees | 2.7 | 5.9 |
| Own illness or disability | 2.5 | 2.6 |
| Other retiree type | 1.6 | 8.2 |
| *Professional, scientific and technical* | | |
| All | 1.5 | 1.4 |
| Early retirees | 2.6 | 2.1 |
| Normal retirees | 1.7 | 1.3 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 0.7 | – |
| Other retiree type | 3.1 | 3.6 |
| *Administrative and support services* | | |
| All | 1.1 | 1.6 |
| Early retirees | 1.0 | 1.3 |
| Normal retirees | 1.3 | 2.7 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 3.7 | 4.9 |
| Other retiree type | 1.6 | 1.3 |
| *Public administration and defence* | | |
| All | 7.2 | 13.7 |
| Early retirees | 5.1 | 17.5 |
| Normal retirees | 21.9 | 26.4 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 6.5 | 13.6 |
| Other retiree type | 5.3 | 4.6 |
| *Education* | | |
| All | 8.4 | 14.2 |
| Early retirees | 16.0 | 23.7 |
| Normal retirees | 12.8 | 17.7 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 6.5 | 11.6 |
| Other retiree type | 5.6 | 7.7 |
| *Health and social work* | | |
| All | 5.8 | 11.8 |
| Early retirees | 7.2 | 14.8 |
| Normal retirees | 8.7 | 16.3 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 12.9 | 24.8 |
| Other retiree type | 4.7 | 8.1 |

| | 2006 | 2012 |
|---|---|---|
| *Creative, arts and entertainment* | | |
| All | 0.8 | 0.7 |
| Early retirees | 1.3 | 0.9 |
| Normal retirees | 0.5 | 1.9 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 2.4 | – |
| Other retiree type | 0.8 | – |
| *Other services* | | |
| All | 1.0 | 1.2 |
| Early retirees | 0.5 | 1.5 |
| Normal retirees | 1.7 | – |
| Did not work in past 8 years | – | – |
| Own illness or disability | 0.6 | 2.4 |
| Other retiree type | 3.8 | 4.9 |
| *Unknown* | | |
| All | 1.5 | 2.2 |
| Early retirees | – | 2.6 |
| Normal retirees | 3.4 | 4.2 |
| Did not work in past 8 years | – | – |
| Own illness or disability | 0.6 | 4.2 |
| Other retiree type | 6.7 | |

*Source: Constructed using microdata from the CSO'S Quarterly National Household Survey (Q2).*

# CHAPTER 4

# Econometric analysis

In this section of the report, we begin by examining the impact that various socio-economic and demographic factors have on the early retirement decision of individuals aged 40–64 years. This analysis is undertaken by initially estimating a binary probit model of the early retirement decision, where the dependent variable equals 1 if a person aged 40 to 64[7] reported that they retired early from the labour force and zero otherwise (Table 4.1). Following this, we estimate separate early retirement decision models for 2006 and 2012, with the same dependent variable (Table 4.2, middle columns). We then estimate a pooled 2006 and 2012 early retirement decision model and include a series of 2012 year interaction terms to test for significant differences in the determinants of the early retirement decision between 2006 (i.e. the pre-recession period) and 2012 (i.e. the economic recovery period). If we find significant coefficients on the year interaction terms, whether the effects for the socio-economic and demographic characteristics examined are positive or negative, this tells us that the change observed for the specific characteristic's impact on the early retirement decision between 2006 and 2012 is significant (Table 4.2, final column). The coefficients produced through probit model estimation are not readily interpretable. Thus, we calculate marginal effects after estimating the overall and individual year probit models in order to identify the impact on the early retirement decision of a one-unit change in the socio-economic and demographic characteristics. All regressions are weighted to ensure that the results are representative of the population in Ireland at the time points examined.

We also carried out an Oaxaca decomposition on the change in retirement rates between 2006 and 2012 in order to investigate how much of the change is explained by the changing characteristics of retirees (the endowment effect) and how much is due to different returns to these characteristics (the coefficient effect).[8] However, given that the change in the early retirement rate between 2006 and 2012 was less than a percentage point (see Table 1), we found that the decomposition analysis was not very informative, therefore this analysis is not presented in the report.[9]

## 4.1 DETERMINANTS OF THE RETIREMENT DECISION

Table 4.1 presents the marginal effect results from our overall early retirement

[7] With previous employment experience.
[8] The coefficient effect relates to changes in the marginal impact of characteristics on the probability of retiring early in 2012 relative to 2006.
[9] Available upon request from authors.

decision model. We estimate a basic specification, which does not control for individuals' sector of employment,[10] and then a full specification where sector is controlled for. We also include a year control (2012) in these models.

The first point to note about the results presented in Tables 4.1 and 4.2 is that the size of the effects of any of the covariates that are significant is small, which means that the impact of any of the characteristics that are identified to affect the early retirement decision is minor.

Based on the results presented in Table 4.1, we can see that males and individuals with medium or high education levels are more likely to retire early; unsurprisingly, younger people (i.e. those aged 45–59 compared to those aged 60–64) and couples with children are less likely to take early retirement. These results hold even when we control for sector of employment, although the size of the age and education effects falls somewhat. Nevertheless, the education effects that are observed remain significant even when we control for sectors such as public administration and defence, education or industry.

The 2012 year control that we include in our model is positive and significant, which indicates that people were more likely to take early retirement in 2012 compared to 2006. Again, this result holds when we control for sector of employment. Nationality and marital status have no impact on people's decision to retire early; any regional impact that is observed either is only marginally significant (Border) or disappears when sector of employment is controlled for (Mid-East).

Turning to the sector of employment results (column 2 of Table 4.1), those employed in the information and communication, financial insurance and real estate, public administration and defence, and the education sectors are more likely to retire early compared to those in industry.[11] There is no difference in the likelihood of retiring early for those in transportation and storage and health and social work compared to industry; all other sectors of employment are less likely to retire early compared to those in industry.

[10] Previous sector of employment for those who have retired or are unemployed, and current for those who are still in employment.

[11] The 'unknowns' are also more likely to retire early compared to those in Industry, but we do not know what these individuals specific sector of employment is, and the effect is only marginally significant (at the 10 per cent level of significance).

TABLE 4.1 PROBIT MODEL OF EARLY RETIREMENT: OVERALL[1]

| | Basic specification | Full specification |
|---|---|---|
| *Year (Ref.: 2006)* | | |
| 2012 | 0.003*** | 0.002** |
| | (0.001) | (0.001) |
| *Gender (Ref.: Female)* | | |
| Male | 0.004*** | 0.004*** |
| | (0.001) | (0.001) |
| Age (Ref.: 60–64)[2] | | |
| Age 45–49 | –0.041*** | –0.034*** |
| | (0.002) | (0.002) |
| Age 50–54 | –0.022*** | –0.018*** |
| | (0.002) | (0.002) |
| Age 55–59 | –0.010*** | –0.008*** |
| | (0.001) | (0.001) |
| *Nationality (Ref.: Non-Irish)* | | |
| Irish | 0.003 | 0.001 |
| | (0.002) | (0.002) |
| *Marital status (Ref.: Married)* | | |
| Single | 0.003 | 0.002 |
| | (0.003) | (0.002) |
| Widowed | 0.003 | 0.002 |
| | (0.004) | (0.003) |
| Divorced | 0.002 | 0.001 |
| | (0.003) | (0.003) |
| *Family type (Ref.: Couple, no children)* | | |
| Couple, children | –0.005*** | –0.004*** |
| | (0.001) | (0.001) |
| Lone parent | –0.004* | –0.003 |
| | (0.002) | (0.002) |
| Not in family unit, lives alone | –0.002 | –0.001 |
| | (0.002) | (0.002) |
| Not in family unit, lives with others | –0.002 | –0.001 |
| | (0.003) | (0.002) |
| *Educational attainment (Ref.: Low)* | | |
| Medium | 0.006*** | 0.003** |
| | (0.002) | (0.001) |
| High | 0.015*** | 0.006*** |
| | (0.002) | (0.002) |
| *Location (Ref.: Dublin)* | | |
| Border | 0.002 | 0.003* |
| | (0.002) | (0.002) |
| Midlands | –0.002 | –0.000 |
| | (0.002) | (0.002) |
| West | –0.002 | –0.001 |
| | (0.002) | (0.001) |
| Mid-East | –0.003** | –0.002 |
| | (0.002) | (0.001) |
| Mid-West | –0.002 | –0.001 |
| | (0.002) | (0.001) |

| | Basic specification | Full specification |
|---|---|---|
| South-East | –0.000 | 0.001 |
| | (0.002) | (0.002) |
| South-West | –0.001 | 0.000 |
| | (0.001) | (0.001) |
| *Sector (Ref.: Industry)* | | |
| Agriculture, forestry and fishing | | –0.005*** |
| | | (0.001) |
| Construction | | –0.005*** |
| | | (0.001) |
| Wholesale and retail | | –0.005*** |
| | | (0.001) |
| Transportation and storage | | 0.002 |
| | | (0.002) |
| Accommodation and food storage | | –0.004*** |
| | | (0.001) |
| Information and communication | | 0.019*** |
| | | (0.007) |
| Financial, insurance and real estate | | 0.012** |
| | | (0.005) |
| Professional, scientific and technical | | –0.005*** |
| | | (0.001) |
| Administrative and support services | | –0.005*** |
| | | (0.001) |
| Public administration and defence | | 0.016*** |
| | | (0.005) |
| Education | | 0.012*** |
| | | (0.004) |
| Health and social work | | –0.000 |
| | | (0.002) |
| Creative, arts and entertainment | | –0.005*** |
| | | (0.002) |
| Other services | | –0.004* |
| | | (0.002) |
| Unknown | | 0.030* |
| | | (0.017) |
| Observations | 23,965 | 23,965 |
| Pseudo *R*-squared | 0.198 | 0.242 |

*Note:* *Robust standard errors in parentheses; ***p < 0.01, **p < 0.05, *p < 0.1. [1]Analysis is based on those aged 40–64 with previous employment experience who have retired early from the labour force. [2]Those aged 40–44 were dropped from the analysis as they predicted failure perfectly (i.e. all in this age category are less likely to take early retirement).*

Table 4.2 presents our separate 2006 and 2012 early retirement decision models, along with a column presenting results from the pooled 2006/2012 model with 2012 year interaction terms to test for significant changes in the estimated coefficients between 2006 and 2012. The results presented in this table are based on specifications that include sector of employment controls.

Focusing on the individual year model results first, the same early retirement

decision determinants that came through in the overall model (Table 4.1) emerge, for the most part, in the separate 2006 and 2012 year models as well. Specifically, males, older individuals (aged 60–64) and those with higher levels of education are more likely to retire early.

TABLE 4.2 PROBIT MODEL OF RETIREMENT: 2006 AND 2012 (SECTOR CONTROLS) [1]

| | 2006 | 2012 | Significant Δ 2006/2012 |
|---|---|---|---|
| | *Gender (Ref.: Female)* | | |
| Male | 0.004*** | 0.003*** | No |
| | (0.001) | (0.001) | |
| Age (Ref.: 60–64)[2] | | | |
| Age 45–49 | –0.027*** | –0.034*** | Yes |
| | (0.002) | (0.003) | |
| Age 50–54 | –0.014*** | –0.016*** | Yes |
| | (0.002) | (0.003) | |
| Age 55–59 | –0.007*** | –0.007*** | No |
| | (0.001) | (0.001) | |
| | *Nationality (Ref.: Non-Irish)* | | |
| Irish | 0.001 | 0.002 | No |
| | (0.002) | (0.002) | |
| | *Marital status (Ref.: Married)* | | |
| Single | 0.001 | 0.002 | No |
| | (0.002) | (0.003) | |
| Widow | –0.002 | 0.003 | No |
| | (0.002) | (0.005) | |
| Divorced | 0.001 | 0.000 | No |
| | (0.003) | (0.003) | |
| | *Family type (Ref.: Couple, no children)* | | |
| Couple, children | –0.007*** | –0.002 | Yes |
| | (0.002) | (0.001) | |
| Lone parent | –0.001 | –0.002 | No |
| | (0.002) | (0.002) | |
| Not in family unit, lives alone | 0.000 | –0.001 | No |
| | (0.002) | (0.002) | |
| Not in family unit, lives with others | –0.001 | 0.000 | No |
| | (0.002) | (0.004) | |
| | *Educational attainment (Ref.: Low)* | | |
| Medium | 0.002 | 0.004** | No |
| | (0.001) | (0.002) | |
| High | 0.007*** | 0.006*** | No |
| | (0.000) | (0.000) | |
| | *Location (Ref.: Dublin)* | | |
| Border | 0.002 | 0.004 | No |
| | (0.002) | (0.003) | |
| Midlands | –0.000 | –0.001 | No |
| | (0.002) | (0.002) | |
| West | –0.004*** | 0.001 | Yes |
| | (0.001) | (0.002) | |
| Mid-East | –0.004*** | –0.000 | No |
| | (0.001) | (0.002) | |

| | 2006 | 2012 | Significant Δ 2006/2012 |
|---|---|---|---|
| Mid-West | –0.003* | 0.001 | No |
| | (0.001) | (0.002) | |
| South-East | 0.000 | 0.002 | No |
| | (0.002) | (0.002) | |
| South-West | –0.003*** | 0.003 | Yes |
| | (0.001) | (0.002) | |
| | *Sector (Ref.: Industry)* | | |
| Agriculture, forestry and fishing | –0.004*** | –0.005*** | No |
| | (0.001) | (0.001) | |
| Construction | –0.004*** | –0.005*** | No |
| | (0.001) | (0.001) | |
| Wholesale and retail | –0.003** | –0.005*** | No |
| | (0.001) | (0.001) | |
| Transportation and storage | 0.001 | 0.003 | No |
| | (0.002) | (0.003) | |
| Accommodation and food storage | –0.001 | –0.006*** | Yes |
| | (0.002) | (0.001) | |
| Information and communication | 0.024*** | 0.013 | No |
| | (0.009) | (0.008) | |
| Financial, insurance and real estate | 0.012** | 0.011 | No |
| | (0.006) | (0.007) | |
| Professional, scientific and technical | –0.005*** | –0.003* | No |
| | (0.001) | (0.002) | |
| Administrative and support services | –0.006*** | –0.004** | No |
| | (0.001) | (0.002) | |
| Public administration and defence | –0.002 | 0.033*** | Yes |
| | (0.002) | (0.010) | |
| Education | 0.002 | 0.020*** | Yes |
| | (0.002) | (0.007) | |
| Health and social work | –0.004*** | 0.003 | Yes |
| | (0.001) | (0.003) | |
| Creative, arts and entertainment | –0.004*** | –0.003 | No |
| | (0.002) | (0.002) | |
| Other services | –0.006*** | 0.001 | Yes |
| | (0.001) | (0.005) | |
| Unknown[3] | – | 0.109** | Yes |
| | – | (0.050) | |
| Observations | 14,003 | 9,891 | 34,121 |
| Pseudo *R*-squared | 0.231 | 0.280 | 0.363 |

*Notes:* *Robust standard errors in parentheses; ***p < 0.01, **p < 0.05, *p < 0.1. [1]Analysis is based on those aged 40–64 with previous employment experience who have retired from the labour force. [2]Those aged 40–44 were dropped from the analysis as they predicted failure perfectly (i.e., all in this age category is less likely to take early retirement). [3]Sector unknown cases were dropped from the analysis in 2006 because they predicted failure perfectly (i.e. were less likely to take early retirement).*

There were some regional effects in the early retirement decision in 2006. Specifically, those from the West, Mid-East, Mid-West, and South-West were less likely to take early retirement in 2006 compared to those in Dublin. These geographic effects, however, are not present in 2012. The results from the 2006/2012 pooled model with the 2012 year interaction term (column 3) tell us

that the changes observed in the West and South-West coefficients between 2006 and 2012 are significant; thus, there is no longer a difference in the early retirement decision of people from the West and South-West compared to Dublin in 2012.

Couples with children were less likely to retire early in 2006 compared to couples without children, whereas this effect was no longer present in 2012. Again, the interaction model result tells us that the change in this coefficient over time is significant.

The increase in the magnitude of the (negative) effect of being aged either 45–49 or 50–54 on the decision to retire early between 2006 and 2012 is also significant.

When we examine the impact of sector of employment on the early retirement decision, we can see from the interaction model results (column 3) that the changes observed in the impact of being employed (previously or currently) in public administration and defence, education, health and social work, accommodation and food storage, and other services on this decision, compared to those in industry, between 2006 (column 1) and 2012 (column 2) are significant. It is important to note, however, that the sectoral effects observed in this report are time specific (due to the nature of labour demand that existed in the economy at the time points examined) and could vary if the analysis was conducted for different time points.

# CHAPTER 5

# Conclusions

In the analysis presented above, we began with a descriptive presentation of retirees with a focus on people who described themselves as having 'retired early'. Here we focus on a limited number of findings from this descriptive analysis. Referring back to Table 3.5, we can see that 33.5 per cent (2006) of retirees aged 40–64 had primary or less education. However, only 25.1 per cent of early retirees had this lowest level of education. Hence, early retirees have higher levels of education. Less educated retirees are more likely to have retired without having worked in the past eight years (45.2 per cent) or to have retired as a result of illness or disability (47 per cent). This pattern was repeated in 2012. By contrast, 'early retirees' are more heavily concentrated at the upper end of the education distribution; 15.4 per cent (2006) of all retirees have higher degrees or above but 23.8 per cent of 'early retirees' are in this high education category.

These findings with respect to education emerge again when we look at the econometric analysis. People with medium and higher levels of education are more likely to retire early. This may result from more highly educated people having accumulated higher wealth and so being in a more favourable position to retire. But whatever the reason, the result is interesting in the context of extending working lives. It is generally accepted that more highly educated people will be better placed to work longer given the nature of their occupations. The analysis here suggests that policy measures will have to be more intense if those more likely to retire early (the more highly educated) are to be maintained in the workforce.

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