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## **Why are women more likely than men to extend paid work? The impact of work-family history on a decision to extend working life**

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### **Abstract**

Extending working life, and enabling and encouraging people to work longer, is a key policy area. That women are more likely than men to work beyond state pension age indicates that factors other than the state pension age play a role in extending working life. Financial factors are likely to be a key reason why women, and especially divorced women, are more likely than men to extend working life. It is well documented that women are less able to build a pension income due to their role as carer within the family, with their marital and fertility histories impacting upon work history. It therefore follows that gender inequalities over the life course, continue into older age to influence need, capacity and desire to undertake paid work after state pension age. This paper explores how work, marital and fertility history impact upon the likelihood of working beyond state pension age, focusing upon differences between men and women. It uses the British Household Panel Survey's retrospective data from the first 14 waves to summarise work-family histories, and logistic regression to understand the impact of work and family histories on working beyond state pension age.

Findings show that, for women, family history is important for explaining a greater propensity to work beyond state pension age, with short breaks due to caring, lengthy marriages, and late divorce and remaining single with children all being important. However, lengthy dis-attachment (due to caring) from the labour market, and thus lowered negotiating power, makes working longer more difficult. For men, even short periods out of the labour market reduces their odds of working longer. This indicates that, on the one hand, policy needs to focus upon reducing the financial need to work longer by tackling gender inequalities in the labour market. On the other, to enable those most in financial need to work longer, more help needs to be given to increase their negotiating power in the labour market.

### **Introduction**

Extending working life, and enabling and encouraging people to work longer, is a key policy for tackling pensioner poverty (Department for Work and Pensions, 2011). Life expectancy, and the number of years people spend in retirement, is increasing. In 2007-09, Men aged 65 in the United Kingdom could expect to live a further 17.6 years and women a further 20.2 years (Office for National Statistics, 2010). This places greater demand on the social security system, with a larger pot of money required to fund retirement. Working longer provides a direct means by which people can supplement their income in later life, but is also a way of building up greater state and private pension provision for the future. The average age of

retirement is currently above state pension age for women (62.4) and beneath it for men (64.5) (Office for National Statistics, 2011). That women are more likely than men to work beyond state pension age indicates that factors other than the state pension age play a role in increasing extending working life.

The primary aim of this paper is to understand why women are more likely than men to work beyond state pension age, focusing on the impact of work and family history. Most research has focused upon reasons why people, especially men, exit the labour market *before* reaching state pension age. There has been less attention on the factors associated with working *beyond* state pension age, including why women are more likely than men to extend working life. Quantitative and qualitative studies have found that tenure, ethnicity, caring status, health status, partner's working status, regional unemployment levels, and financial position are associated with working after state pension age, regardless of gender (Smeaton and McKay, 2003; Humphrey *et al.*, 2003; Sainsbury *et al.*, 2006; Barnes *et al.*, 2004; Phillipson and Smith, 2005). The main gender difference is that marital status is salient for women but not men, with divorced and separated women (but not men) particularly likely to extend working life (Smeaton and McKay, 2003).

Financial factors are likely to be a key reason for the gender difference. It is well documented that women have lower individual incomes in older age. This is a reflection of their work-family life history. Work history has a strong influence upon an individual's capability to build up a decent income in old age. The amount of state pension will be reduced if individuals have not worked the full number of qualifying years during their working life (Evandou and Glaser, 2003). Private and occupational pensions are also related to earnings, years worked and often timing of working. Those with lower earnings, fewer years worked to accrue a pension and leaving early from the scheme will therefore lose out from occupational schemes (Ginn, 2003).

Women's role as carer within the male breadwinning model of the family leads to broken work histories, part-time work and low pay and thus limited capacity to build up an independent income throughout life (Bardasi and Jenkins, 2002; DWP, 2005; Arber and Ginn, 1991, Ginn, 2003; Evandrou and Glaser, 2003; Sefton *et al.*, 2011). This results in dependency upon their husband/partner or the state for pension provision, and increased likelihood of individual poverty in old age. Interestingly, however, even women, but not men, in which family savings are high (over £20,000), are more likely to work after state pension age (Smeaton and McKay, 2003). This may indicate that women extend working life to increase their individual pension and compensate for years spent out of the labour market while caring for children, even when their partner's savings are high. Indeed, Bardasi and Jenkins (2002) suggested that the majority of the difference in low income risk between the sexes was due to differences in characteristics in relation to the labour market attachment and caring status. As a result, women with similar work histories to men may also have a similar propensity to extend paid work. Thus we would expect that the impact of work history on working longer to differ along lines of both gender and work history.

That divorced women, but not men, are more likely to work longer than married women indicates that marital and childbearing history impact differently for men and women. This is related to the expectations of the male breadwinner-female carer model of the family.

Timing of marriage, divorce, remarriage and childbearing potentially impact upon women's work histories and the ability to build up pension income (Sefton et al., 2011, Pleu, 2010, Arthur, 2003), and propensity to work longer. Men, as part of their 'breadwinning' role, are able to undertake full, continuous work, regardless of marriage, divorce and childbearing, meaning that they are better able to build up a private or occupational pension scheme independently (Price and Ginn, 2003). Family history is therefore likely to impact women more than men.

We would also expect the propensity to extend to differ along the lines of marital and childbearing histories as well as gender. This is partly because women's work histories will differ according to marital / caring history. So, never married women, without children, will be expected to have similar work histories to men and similar propensity to extend work. But, also the pension system has been designed to reflect the breadwinner/female caregiver model. As a result, married women, and widow(er)s, are able to share (a proportion of) their partner's pension if their individual entitlement is low. Divorced women, however, are entitled to fewer derived rights (Ginn, 2003), which may explain divorced women's propensity to extend paid work - broken work history but no partner's income to sustain them in old age (Bardasi and Jenkins, 2002).

It therefore appears that gender inequalities over the life course, related to the gender division of labour, continue into older age to influence financial need to undertake paid work after state pension age. That women are more likely than men to extend work beyond state pension age may be explained by the gender role difference in family life, and the impact this has upon work histories, and pension accumulation.

This paper seeks to understand how marital history and work/ caring history are important for working beyond state pension age. Specifically, the hypothesis is that, as a result of their different social roles, work-family histories impact differently for men and women, explaining women's propensity to work longer. It will, however, also explore how work-family histories impact differently for different women. Whilst there have been some quantitative studies exploring the impact of work and family history upon *income* in old age (Sefton et al, 2011; Badarsi and Jenkins, 2002, 2004; Rake, 2000 and Ginn, 2003), these have not tried to understand the role work-family history impacts upon extending paid work.

To do this secondary longitudinal data analysis is undertaken using retrospective life history data for the first 14 waves of the British Household Panel Survey (BHPS). The data crucial for the study was obtained from the BHPS's retrospective employment, marital and fertility history files. Retrospective labour market data has been collated since leaving full time education. In addition, the survey collates the same information in each successive wave for the period since the last interview. The retrospective data and the Panel data is collated in two separate files deposited in the UKDA which were merged (Halpin, 1997; Halpin, 2000). The merged dataset includes information on individual's self reported employment status each month, categorized as follows: full-time employed, part-time employed, self-employed, unemployed, long-term sick or disabled, family care, full-time student, retired or other (Sefton et al, 2011). The family history data is contained in a separate dataset, which includes the dates and current status of any marriages, including end dates for marriages that ended in divorce, separation or widowhood. The fertility history data includes the

number of natural children, and the date they were born. From the two data sets, work, marital and fertility histories were summarised in a similar manner to those undertaken by Sefton et al (2008, 2011), who used the same data set to explore the impact that women's work-family histories had upon income in old age.

In this study, to be included in the sample, individuals must have complete work and family histories between the ages of 20 and state pension age (60 for women and 65 for men). Respondents were also required to have non-missing information on whether they were in paid work after state pension age. In addition, they had to be aged over state pension age at some point during the panel (1991 – 2004). Respondents were also only included if they had non-missing personal income data from at least one of the panel years. The sample was trimmed to exclude observations with very low or very high income data. As individuals are observed at multiple points in time, up to 14 years apart, incomes are adjusted to May 2010 prices according to the retail price index.

Individuals can be observed up to 14 times during the panel period. Whilst work and family life history remain the same over the panel, other factors may change after state pension age, such as health status, which may impact upon a decision to work or not. Therefore, so this information is not lost, all observations of the same individual are included in the sample. The data was weighted to allow for multiple observation of the same individual. This yields a total sample of 21682 observations on 2677 individual, 7641 observations of 996 men and 14041 observations of 1681 women.

In order to examine the relationship between work-family life history and employment in later life, it is important to control for other factors that may be correlated with both. The variables controlled for were both background variables and post-state pension age controls:

- Birth cohort and years since reaching state pension age were also included. These account for the different pension systems and rules, which may influence working beyond state pension age.
- socio-demographic characteristics (sex, marital status, tenure);
- health status (limiting disability, any income from disability living allowance, any income from attendance allowance, health over the last year),
- access to job opportunities (access to a car, region, educational qualifications),
- financial resources (total personal monthly non-labour income, any personal income from private pension, any personal income from occupational pension, any personal income from investments or savings, any personal incomes from income support, future financial expectations).

Gross individual income was used for the analysis<sup>i</sup>. Whilst there is an argument that household income is a better reflection of material living standards - married women, who can share their partner's pension, appear better off using the household measure - household measures assume equal distribution of resources within the household (Ginn et al, 2001; Ginn, 2003). Individual income, however, is a direct measure of personal wealth, and using this measure demonstrates more openly the difference between men and women's incomes in old age<sup>ii</sup> (Sefton et al, 2008).

Binary logistic regression was used to examine how income and work-family life history influence the likelihood of working beyond state pension age, whilst holding other factors constant. To assess how important work and family history was in predicting the odds of working beyond state pension age, separate regressions were run for each way of categorising work and family histories in order to explore the extent that each one significantly impacted upon extending work, even after controlling for other factors. Separate models were fitted according to the gender.

### **Working after state Pension age**

Older people were defined as extenders if they undertook paid work for at least a month at any point after state pension age. It was considered that work and family life history would impact upon working after state pension age at whatever time this occurred. Thus, those who had undertaken at least one month's paid work after state pension age were labelled 'extenders'. 'Non-extenders' included those who have retired at or before state pension age, and undertook no paid work beyond state pension age up to the most recent observed wave (prior to 2004).

Over a quarter (28.5 percent) of the sample were 'extenders'. Women were more likely than men to have worked beyond state pension age - a third of women (32.6 percent) were 'extenders' compared to just over one in five (21.5 percent) of men. Women also, on average, worked for slightly longer, with a mean of 3.07 years for men and 3.30 for women, and median of 1.33 years for men and for 2.33 years for women. The modal for both men and women was only 0.92 years spent in paid work. So, whilst the majority worked for just under a year after state pension age, a few extended work for many years. Women were also more likely than men to work for a continuous full year, with 8.3 percent of men extending for a full year and 16.6 percent of women. Thus, there are differences between male and female extenders in our sample that warrant further investigation – why are women more likely to extend? We begin by examining differences in work histories, and how they impact upon working beyond state pension age.

### **The impact of work history**

Not unexpectedly, older men and women's work histories were very different. In the study, men could work for a possible 45 years before state pension age, whilst women could work for 40 years – reflecting the difference in state pension age. The mean number of years worked was 40.39 years for men, 89.8 per cent of a possible 45 but only 21.04 years for women – only 52.6 percent of the possible 40 years. This would not be enough to qualify for the full state pension, which required 39 years in the period of the study. For men, the lengthy employment pattern was also more likely to be in full time employment – working, on average, full time for 81.99 percent of their working lives, and part time for only 0.007 percent compared to a female average of 62.77 percent full time, and 31.3 percent part time. At the same time, women were more likely to have spent periods of their working life inactive - 37 percent of men in our sample had never been inactive compared to only 7.6 percent of women. Moreover, women were significantly more likely than men to be inactive for lengthy periods, with 40 percent of women having been inactive for 20 years or more (at least half their working life) compared to only 2 percent of men. The reasons for inactivity vary, with men more likely to have been unemployed or sick (32 percent compared to 15 percent of women), and with women more likely to care for the family, with 82.5 percent

having done so (and 29.1 percent for 20 years or more) compared to 0.5 percent of men. The stark differences in working life for men and women reflects the gender division of labour, and the prevalence of the male breadwinner, female carer model, especially for older cohorts. It is thus interesting to see whether these very different experiences impact upon extending work beyond state pension age. We examine duration and nature of economic activity and inactivity and the odds of working beyond state pension age.

### *Duration and timing*

The odds of extending paid work according to duration of employment is shown in table 1. For men, there is no statistically significant association between duration of employment and extending. For women, the more years spent in paid work during working life, relative to those employed for less than 25 years, significantly increases the odds of extending, even taking into account socio-economic factors. It thus appears that women with long years spent out of the labour market are less likely to make up for it in old age, whilst those with more experience are better able to negotiate extending paid work. Also, that duration of employment impacts men and women differently indicates women were extending to make up for years spent out of the labour market caring for children, even when time in the labour market was fairly lengthy. This is likely to be because many of the years spent in employment would likely be in part time contracts. Indeed, the assumption that longer periods of employment per se builds up greater income is not born out by the evidence, with Sefton et al (2008, 2011) finding that, for women, working long periods did not impact upon income after state pension age. It was *full time* employment that mattered. Thus, it is important to examine whether type of contract impacted upon extending beyond state pension age.

**Table 1: Logistic regression of the odds beyond state pension age (any) by number of years in employment for men and women, after controls**

	Men	Women
<i>Less than 25 years</i>	<i>ref</i>	<i>ref</i>
25-30 years	0.502	2.797***
30-35 years	0.133	3.109***
35-40 years	0.282	3.897***
40-45 years	3.673	-
<i>Log likelihood:</i>	<i>637.013</i>	<i>1470.369</i>
<i>Nagelkerke R Square:</i>	<i>0.299</i>	<i>0.147</i>

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

How the proportion of employed life spent in full time and part time employment impacts upon the odds of extending is shown in table 2. We examined the proportion of years in employment spent working full time or part time relative to never working full or part time. This does not account for number of years worked – so someone working 100 per cent of their working lives in full time employment, may still have only worked for a few years overall. Again, we found differences between men and women. Ever working full time *reduces* the odds of men working beyond state pension age but *increases* the odds for women. But there appears to be both a gender and work history effect. On the one hand,

even women working full time for most of their employed life are more likely to extend whilst men doing the same are less likely to. This is partly explained by the gender pay gap (DWP, 2005) but also by the fact that men spend more time in employment, and would be working full time for longer durations. Thus even women working full time for much of their employment duration would still have taken time out of the labour market to undertake care, extended working life in an attempt to make up for this. But, having said that, the odds of extending were reduced with longer proportions of employed life spent in full time work. So, for women, working full time does have some reducing effect upon extending paid work, as it does for men.

For both men and women, working part time increases the likelihood of extending paid work, holding other factors constant. This indicates that this group attempt to make up for the reduced pay and pension benefits associated with part time work even if their personal income is high. Comparing the odds of working in part time employment for 0-25 percent of ones working life<sup>iii</sup>, it appears that, working part time impacts more greatly for men than for women: men are 4.521 times more likely than those never working part time to extend working life compared to women who are 2.950 times likely to extend. That the odds ratios are higher for men may reflect that for women, but not men, the pension system partly makes up for years lost through part time work via derived pension rights<sup>iv</sup>.

**Table 2: Logistic regression of the odds beyond state pension age (any) by type of employment for men and women, after controls**

	Men	Women
<i>Never full time</i>	ref	<i>ref</i>
0-25%	0.578	4.076***
25-0.50%	0.591	3.048***
0.50-0.75%	0.737	3.721***



0.75 to 0.99%	0.402*	2.081**
All working life	0.259***	0.795
<i>Log likelihood:</i>	699.752	1456.900
<i>Nagelkerke R Square:</i>	0.193	0.168
<i>Never part time</i>	<i>Ref</i>	<i>ref</i>
0-25%	4.521***	2.950***
25-0.50%	10.979	3.870***
0.50-0.75%	8.921	4.019***
0.75 to 0.99%	-	4.594***
All working life	-	4.185***
<i>Log likelihood:</i>	1459.611	687.828
<i>Nagelkerke R Square:</i>	0.165	0.214

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

### *Inactivity*

Next, we examine the impact that periods of inactivity have upon extending, and how the different experiences of inactivity between men and women translate into different propensities to work longer. Table 3 shows that long durations of inactivity *decrease* the odds of working beyond state pension age compared to experiencing inactivity of less than 6 months, for both men and women. That this holds even after income, and other factors, are controlled for indicates that even those with very low incomes (and in most financial need to do so) are less likely to extend if they have experienced long periods of inactivity. For women, however, being inactive for more than 6 months but less than 2 years had no statistically significant affect upon working beyond state pension age. For men, even short periods of inactivity significantly reduce the odds of working beyond state pension age by 79.7 percent compared to men inactive for less than 6 months of their working lives. Both men and women inactive for more than 15 years are significantly less likely to extend working life relative to those inactive for less than 6 months, with a reduction of 83.3 for women percent and 87 percent for men. So, whilst, for men, even short periods of inactivity reduces the propensity to extend, for women very long periods of inactivity has most impact. This may be explained by the different types of inactivity undertaken between the genders – with short periods of unemployment impacting more heavily upon the ability to work longer than shorter periods of family care.

**Table 3 Logistic regression of working beyond state pension age by number of years inactived, after controls**

	Men	Women
<i>Inactive for less than 6 months</i>	<i>ref</i>	<i>ref</i>
Inactive for 6 months to 2 years	0.203***	0.531
Inactive 2 years to 15 years	0.058***	0.558*
Inactive 15 or more years	0.130**	0.167***

<i>Log likelihood:</i>	575.416	1461.073
<i>Nagelkerke R Square:</i>	0.395	0.164

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

We next look at the impact of different types of inactivity, shown in table 4. Being unemployed for shorter periods has no significant impact upon extending working life. But, being unemployed or sick for more than 2 years compared to never being unemployed or sick, reduces the chances of working after state pension age for both men and women, even after controls. Whilst this association is slightly stronger and more significant for men than women, it appears that for both sexes, long periods of unemployment or incapacity makes it difficult to extend working life.

Very few men had undertaken family care and thus it was not possible to explore the differences between men and women in terms of the impact this kind of inactivity has upon working beyond state pension age. For women, family care is important for extending working life, but the relationship is not straightforward. Those with a relatively short period of time undertaking family care (under five years), have higher odds of extending work compared to those never undertaking family care, being 2.132 times more likely (although this is only just significant). However, those undertaking family care for more than 20 years of their working life are 77 percent significantly *less* likely to be working longer than those never undertaking family care.

Thus, it appears that those with a relatively short break from the labour market to care attempt to make up for this by working longer, even after controlling for income and other factors<sup>v</sup>. It may be that this group have had enough attachment to the labour force to be able to negotiate working longer, but also that they will get greater returns by doing so, given that they have a relatively low number of years to make up. On the other hand, those with a very long period out of work to care for children have less attachment, and thus may find it difficult to negotiate the job market due to limited experience to enable them to work longer. It may also be that making up for such a lengthy period out of the labour market is more difficult and less attractive for this group. Thus, for those with lengthy periods out of the labour market due to caring, derived benefit rights are likely to be a more attractive, and financially rewarding option than negotiating paid work.

**Table 4 Logistic regression of working beyond state pension age by type of inactivity, after controls**

	Men	Women
<i>Did not retire early</i>	<i>ref</i>	<i>ref</i>
Retired Early <2 years	0.081***	0.038***
Retired Early >2 years	0.049***	0.023***
<i>Was not unemployed/ sick</i>	<i>ref</i>	<i>Ref</i>
Unemployed or disabled <2 years	1.159	1.720
2+ years	0.122***	0.247**

<i>No family care</i>	-	<i>Ref</i>
<5 years	-	2.132*
5-10 years	-	1.591
10-20 years	-	1.329
20+ years	-	0.230***
<i>Never other inactive</i>	<i>Ref</i>	<i>ref</i>
< 2 years	1.273	0.705
2+ years	0.496	2.798
<i>Log likelihood:</i>	<i>541.281</i>	<i>1092.228</i>
<i>Nagelkerke R Square:</i>	<i>0.445</i>	<i>0.472</i>

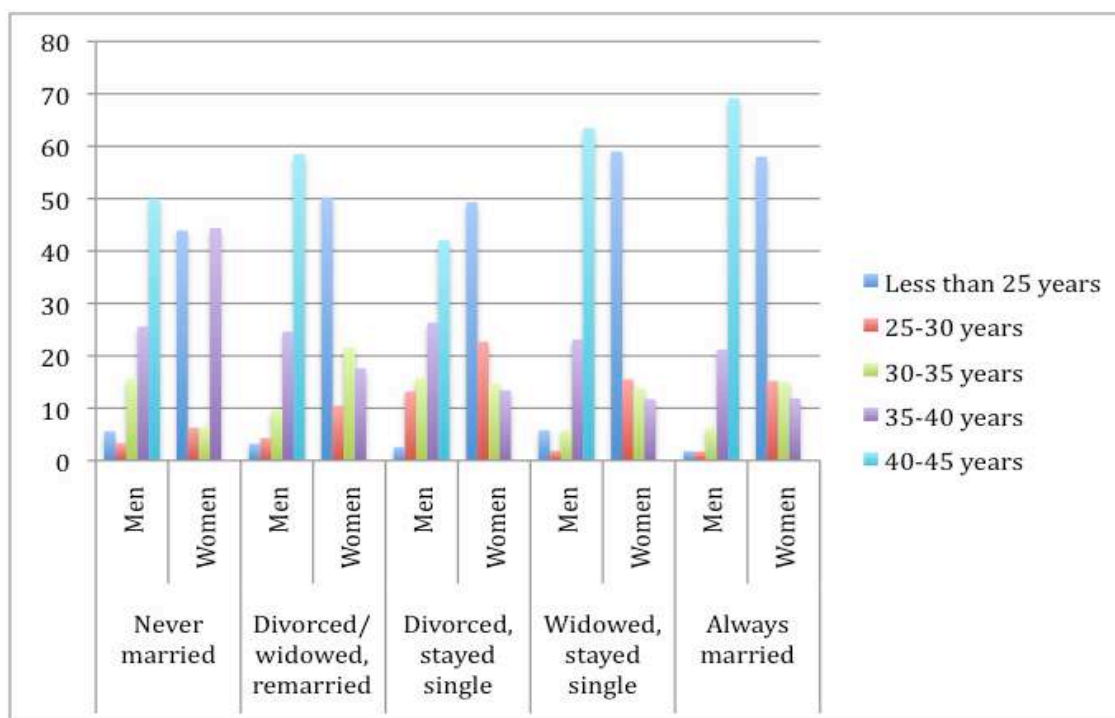
- = numbers too small for analysis

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

### The impact of marital history

Next, we examine the impact of marital history upon extending working life. Before doing so, we will examine the relationship between marital history and work history to understand whether marital history impacts differently for men and women. Chart 1 shows duration of employment according to marital history. In our sample, men were much more likely to work nearly all the potential years between 20 and state pension age (65), regardless of marital history. However, married men were more likely than other groups to work for 40-45 years. Women, however, were much more likely to have undertaken less than 25 years in employment, of a possible 40 years. However, a relatively high proportion of those who had never married (44.4 percent) had undertaken paid work for 35-40 years. Indeed, further analysis demonstrates that being married for longer is associated with longer periods out of the labour market to assume a wifely/caring role. Indeed, for this generation at least, it would have been expected that many women would give up their job upon marriage, as it was assumed they would be financially dependent upon their husband (Sefton et al, 2011). For men, there was no such obligation.

### Chart 1: Duration of employment according to marital history according to sex



We next examined whether these marital differentials in work history for men and women translate into different effects of marital history upon the odds of extending working life (table 5). Generally, marital history was more significant for women than it was for men, but it also impacted differently between the sexes. For men, ever being married significantly *decreases* the chances of working after state pension age by 84.9 percent compared to never being married. For women, however, ever being married *increases* the likelihood of working beyond state pension age by 5.246. Indeed, for women, even short periods of marriage significantly increased the propensity to work longer, with those married for only a quarter of their working life 4.141 times more likely to extend. The odds were also significantly increased, regardless of the age women married, although those marrying in their late 20s were more likely to extend than those married at an earlier or later age. Thus it appears that for women periods of inactivity associated with marriage are being translated into extending paid work to make up for this, even if the marital period was short<sup>vi</sup>. Men, however, had to be married for at least half their working life for it to make a significant reduction in the odds of working longer (by 86.6 percent compared to never married). This indicates that men's 'breadwinning' role is important for lowering their propensity to work longer.

For both men and women ever being divorced or widowed did not significantly impact upon working longer. What does seem to matter, however, is marital status post divorce (see table 5). For men who have been divorced or widowed early, remarrying reduces the chances of working beyond state pension age after certain variables are controlled for, but staying single does not. Thus, for men, remarrying post divorce/widowhood has a similar impact as being married, and never divorcing. It appears that having a partner is important for a decision (not) to extend paid work for men.

For women, staying single after divorce has the most impact for extending working life, increasing the likelihood by 6.419 after controls are accounted for. This may reflect a

double disadvantage: no partner's income to share in old age, and broken work history prior to divorce (Bardasi and Jenkins, 2002). Whilst we have adjusted for personal income, this does not account for the experience of losing their husband's income, and the derived pension rights associated with this. This loss in income may therefore translate into propensity to work longer, regardless of personal income. Divorcees may also extend working life as a means of developing their social life (Smeaton and Mckay, 2003), although there is no reason why female divorcees would be more likely than men to extend for social reasons. Thus, the reason is more likely to be financial, and related to losing the benefits of intra-household sharing of income.

**Table 5: Logistic regressions for the odds of working beyond state pension age by marital history for men and women (after controls)**

	<b>Men</b>	<b>Women</b>
<i>Never married</i>	<i>Ref</i>	<i>Ref</i>
Ever married	0.151*	5.246**
<i>Never divorced</i>	<i>ref</i>	<i>ref</i>
Ever divorced	1.285	1.047
<i>Never widowed</i>	<i>ref</i>	<i>ref</i>
Ever widowed	0.993	0.929
<i>Log likelihood:</i>	<i>709.837</i>	<i>1545.647</i>
<b>Proportion of years</b>		
<i>Never married</i>	<i>ref</i>	<i>ref</i>
Married for under 25%	0.139	4.141*
Married 25% - 50%	0.151	5.409**
50% - 75%	0.134*	5.286**
75% to 100%	0.134*	4.872**
<i>Log likelihood:</i>	<i>704.332</i>	<i>1539.015</i>
<b>Timing of marriage</b>		
<i>Never married</i>	<i>ref</i>	<i>ref</i>
Early 20s	0.137*	5.102**
Late 20s	0.196	5.770**
Over 30	0.177*	4.930**
<i>Log likelihood:</i>	<i>707.766</i>	<i>1545.269</i>
<b>Pattern of marriage</b>		
<i>Never married</i>	<i>ref</i>	<i>ref</i>
Divorce/ widowed, Remarried	0.158*	3.920*
Divorced, Stayed single	0.243	6.419**
Widowed early, Stayed	0.174	5.189**
Ever married, stayed	0.149*	5.919**
<i>Log likelihood:</i>	<i>709.634</i>	<i>1543.201</i>

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

Age of divorce may interact with divorce pattern to impact upon extending work. Research indicates that earlier divorce and staying single is more likely to result in higher individual pension incomes for women, even though they have fewer derived rights than those who experienced these events later in their lives and remain single (Sefton et al, 2008). This is likely to be because they would have longer periods to build up their own work histories.

Those divorcing later would have less time to adjust and make up the loss of income prior to retirement. Even for those with higher personal incomes, this may lead to an overall drop in standard of living, and greater propensity to extend work to minimise this impact.

Holding other factors constant, table 6 shows the pattern and age of divorce. Due to small numbers of men remaining single post divorce in the sample, this group were not able to be analysed according to age. Therefore, for comparability purpose, two columns are presented for women – one which presents a regression for those remaining single as one group (not segregated by age) to ensure the regression is comparable to men’s and the other dividing this group by age group to understand the impact for women divorcing at different ages.

It can be seen that for both men, and especially, for women, age of divorce does influence how marriage history post divorce impacts upon extending work. For men, remarrying after a post-40 divorce significantly reduces the likelihood of extending working life, but not pre-40. For women, remarrying post divorce increases the likelihood of working longer, regardless of the age at divorce – but the odds are higher for those remarrying after a later divorce post-40. Accounting for age of divorce for women remaining single has important implications. Whilst both age groups are more likely to extend, the odds ratios are larger and more significant for women divorcing post-40.

**Table 6: Logistic Regression of the odds of working beyond state pension age by pattern and timing of divorce for men and women**

	<b>Men</b>	<b>Women</b>	
<i>Never divorced, separated</i>	<i>ref</i>	<i>ref</i>	<i>ref</i>
Under 40s and remarried	0.203	3.716*	3.841*
Over 40s, remarried	0.134*	4.273*	9.505**
Divorced, stayed single	0.203	6.035**	Under 40: 3.928* Over 40: 5.473**
Ever married, stayed	0.153*	5.195**	5.143**
<i>Log likelihood:</i>	<i>709.469</i>	<i>1543.158</i>	<i>1541.117</i>

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

### **The impact of fertility history**

Fertility history may be important for extending work for women more than men, given the gender division of labour. Indeed, chart 2 shows that children impact upon work history for women, but not for men. We can see that the proportion of women working under 25 years increases with each additional child. For men, however, no pattern in work history is evident according to number of children. If these differences translate, family history will impact differently along sex lines upon the propensity to extend paid work.

**Chart 2: Duration of employment according to number of children and sex**

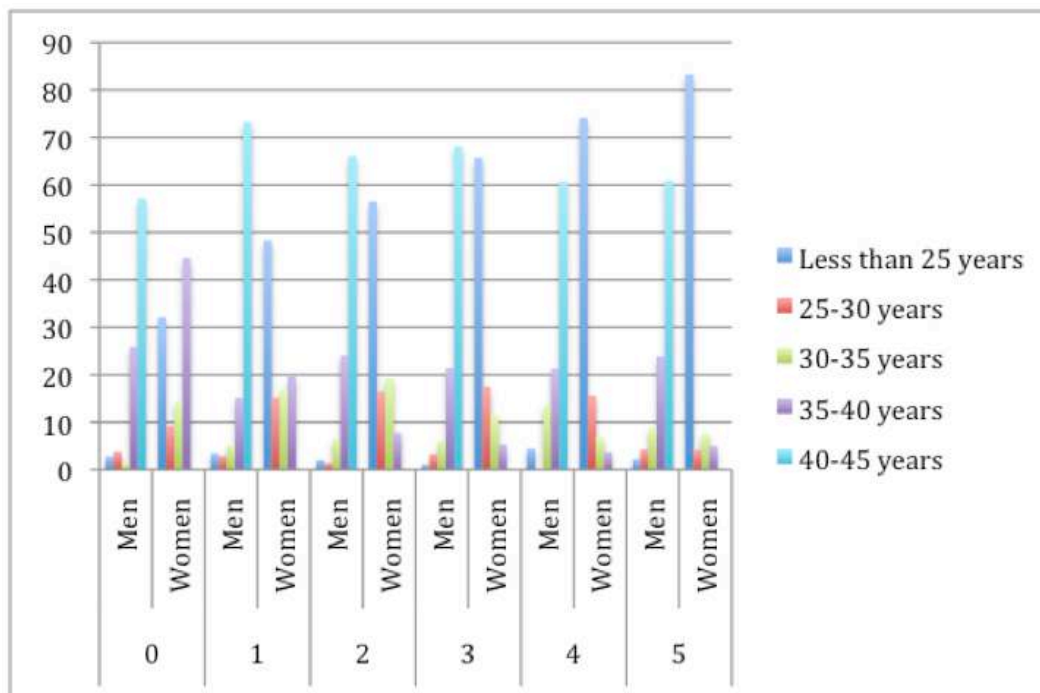


Table 7 shows the odds ratios for number and timing of children after controls. Neither number nor timing of children impact significantly for men, reflective of the minimal impact children have upon men’s work histories. But, number of children also has little significant impact upon working longer for women. The odds are increased significantly only for those with two children. The extra years of employment worked by women who had fewer children appear to increase propensity to work longer, perhaps on the one hand, because much of it is part-time, but also because some labour market attachment increases negotiation power. But lower attachment to the labour market for women with large families is not translated into significant higher or lower propensity to extend. It may be that those with large numbers of children could afford to have larger numbers, with large spousal incomes negating the need for these women to work longer, despite broken work histories.

Age of first child does not have an impact upon extending work beyond state pension age. For women, timing of family completion does. After controlling for other factors, women with no children, and those completing their family in their early 20s are significantly less likely to extend working life than those completing in their late 20s. Further analysis shows that women completing a family early are more likely to have longer years outside the labour market. Any paid work undertaken may be also be low skill due to lack of experience. Thus, despite the lack of pension income accumulated, weaker labour market attachment for women with early childbearing likely translates into lower negotiating power to undertake work beyond state pension age.

**Table 7: Logistic regression of working beyond state pension age by fertility history for men and women, after controls**

	Men	Women
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<b>Number of children</b>		
0	<i>ref</i>	<i>ref</i>
1	1.665	1.568
2	1.228	1.784**
3	1.544	1.543
4	1.061	1.506
5+	0.931	1.022
<i>Log likelihood:</i>	<i>710.965</i>	<i>1549.143</i>
<b>First born</b>		
<i>Late 20s</i>	<i>ref</i>	<i>ref</i>
No children	0.745	0.652
Early 20s	0.707	0.974
Early 30s	1.243	1.267
Late 30s or older	1.294	1.288
<i>Log likelihood:</i>	<i>710.816</i>	<i>1551.061</i>
<b>Last born</b>		
<i>Late 20s</i>	<i>ref</i>	<i>ref</i>
No children	0.596	0.624*
Early 20s	0.891	0.571*
Early 30s	0.648	1.073
Late 30s or older	1.048	0.876
<i>Log likelihood:</i>	<i>709.686</i>	<i>1546.163</i>

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

### **Marital and fertility history**

It is important to examine the combination of marital and fertility history to understand their affects on working beyond state pension age. This is because, for women, the impact of marital history might be exacerbated by having children. We examine both the impact of various marital patterns for those with and without children upon extending work (table 8). For men, marital history does not significantly impact upon extending paid work, even when they have had children. For women, children have little impact for those who have married and remained married, with increased odds regardless of the presence of children. The impact of the wifely role assumed by married women is enough to increase the need to extend paid work, regardless of the additional care associated with having children. Nevertheless, the odds ratio for those without children is weaker than those with, indicating that having children does exacerbate the situation.

The impact that marital history post divorce is, however, heavily dependent upon whether the female divorcee has children or not. Post divorce, for those who remarry, and especially those who remain single, the likelihood of working longer is significantly increased, but not for those without children. This is likely to reflect the difficulties in juggling paid work and care as a single parent, increasing the need to work longer to make up for this. Indeed, further analysis shows that for women divorcing under 40 exacerbates the effect of children – with the likelihood of extending work being 10.594 times greater than those never married without children, this association being highly significant. This is because younger



divorcees with children are more likely to have young children, exacerbating the difficulties in building up an independent work history.

**Table 8: Logistic regression of working beyond state pension age by marital pattern and the presence of children for men and women (after controls)**

<b>Marital and fertile history</b>	<b>Men</b>	<b>Women</b>
<i>Never married, no children</i>	ref	ref
Div, remarried, no children	0.047	4.972
Div, stayed single, no children	0.071	3.380
Ever married, stayed married, no children	0.076	4.062*
Never married, children	0.483	1.102
Div, Remarried, children	0.125	3.968*
Div, stayed single, children	0.144	6.760**
Ever married, stayed married, children	0.103	5.578*
<i>Log likelihood:</i>	<i>706.975</i>	<i>1539.215</i>
<i>Nagelkerke R Square:</i>	<i>0.181</i>	<i>0.086</i>

\* < 0.05 \*\* < 0.01 \*\*\* < 0.001

## **Conclusions**

Gender is an important factor in determining whether people work beyond State Pension Age. For women, work history is important for explaining the propensity to extend paid work. Even women with relatively long years in the labour market were extending to make up for years spent out of the labour market caring for children. This is because many of these years are spent in part time contracts, and part time work increases the propensity to extend paid work. But even being in full time work does not protect women from the need to work longer. This is likely to be a reflection of the gender gap in earnings, even for those in full time work (DWP, 2005). For women, family history is also important for explaining a greater propensity to work beyond state pension age, with short breaks due to caring and lengthy marriages being important. Divorce in itself is not a predictor of extending work – it is marital history post divorce, notably remaining single, especially with children, that matters. It is likely that the double disadvantage of broken work history and no partner’s income to sustain them in old age increases the likelihood of this group working longer. Thus, this indicates that women’s caring role within the family translates into labour market

inequalities and increased financial need or desire to extend paid work after state pension age.

For men, compared to women, work-family history has much less of an impact upon extending paid work once various socio-economic factors are accounted for. Of note is that full time employment reduces the chances of men of working longer. Thus, it appears that men are protected by their 'breadwinner' role. This appears to be particularly the case for married men, whom are significantly less likely to extend, even post divorce. Once married, men participate in paid work and additional pension schemes as part of their 'breadwinning' role (Price and Ginn, 2003). This appears to reduce their propensity to work longer. There is some indication, however, that men falling outside their 'breadwinning' role are penalized for it: men working part-time have higher odds of extending than women working part time. On the one hand, men working part time are, on average, paid less than women working part time. But also, that men have been unable to claim derived benefits may mean that men without full work histories are penalized more heavily for this than are women.

This paper has shown that work-family history remains significant for women even after controlling for income (and other factors). This suggests that women were extending not simply for reasons of poverty avoidance. It may be that income maintenance, or a desire to improve quality of life and afford luxuries or 'extras' (Barnes et al, 2003: 34) prompts extending, even for those with higher incomes. Or they may feel the need to extend work because of certain financial commitments, such as dependents (Higgs et al. 2003). Women may also be extending until their partner retires, especially as derived pension rights for married women do not come into effect until the male has retired (DWP, 2005). Other reasons for extending may not be financially related, such as social reasons, especially for divorced women, (Smeaton and Mckay, 2003), but this would not account for the gender differences observed. It is also likely that partner's work histories, which have not been examined in this paper, would impact. But, given the gender difference, the most plausible explanation, would be that women are extending for financial reasons, and to make up for lost earnings, and pension accumulation during due to caring history.

This paper also provides evidence that those potentially in most financial need to working longer, find it difficult to do so. For women, lengthy dis-attachment (due to caring) from the labour market, reduces propensity to work longer. It may be that derived benefit rights are a more attractive, and financially more rewarding option for this group than trying to negotiate paid work after so many years out of the labour market. Men who break from their breadwinning role for even short periods of time are less likely to make up for it by extending working life. This may be due to reduced negotiating power; extending being less attractive given that those with broken work histories are less likely to have such rewarding careers and reduced access to flexible work choices (see Finch, forthcoming). Thus greater support needs to be given to this group to increase their negotiating power in the labour market (see Finch, 2011).

This paper has provided evidence that work-family history explains why women are more likely to extend beyond state pension age, and why men are less likely. Gender inequalities within working life translate into longer working in old age. As a result, policy needs to focus upon reducing the financial need to work longer by tackling gender inequalities in the labour

market. Arguably, for more recent pensioners not examined in this study, these are compensated more comprehensively by the pension system via home protection allowance, than for the cohorts in our study. And, for future cohorts further provision has been made to account for these inequalities, mainly by reducing the number of years required to qualify for a full pension to 30 years (DWP, 2011b). Moreover, increasing numbers of women are entering the labour market, which will arguably lead to the ability to build up independent work histories. All these changes may mean work-family history places a reduced role in determining working beyond state pension age for women. But, despite increased propensity to enter paid work, women are more likely than men to work part time, to be paid less than men, and to take breaks from the labour market to care for children. Until gender inequalities in the labour market are addressed directly, women are likely to need to work beyond state pension age to make up for them.

## Notes

<sup>1</sup> Although sensitivity analysis was undertaken using household income data. Generally, the results did not change when household income was used but the sample size was reduced.

<sup>2</sup> This is not to understate that partner's income is likely to be an important factor in a decision to extend working life.

<sup>3</sup> For men, the numbers working part time for more than 25 percent of their lives are small and thus insignificant.

<sup>4</sup> For most of the women in our sample, the home responsibilities protection allowance introduced in 1978 would have been introduced too late to make a significant difference.

<sup>5</sup> Of note, however, is that if household income variables, rather than personal income was included in the model, the increasing effects of being in family care for less than five years are no longer significant. This indicates that whilst those with less than five years caring would extend working life, regardless of high or low *personal* income, they would only do so if household income was low. This suggests that *household* income is more important than personal income for a decision to work beyond state pension age for women who had taken under 5 years of family care. Presumably, if household income were high there would be less financial need for this group to extend.

<sup>6</sup> An alternative explanation could be that married women work longer to retire with their partners (especially since entitlement to derived pension rights only begins once husbands are retired). But, controlling for whether a partner is employed or not makes little difference to the odds.

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