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#### Introduction<sup>1</sup>

Financial factors and pensions have been central for explaining the rise of retirement historically (see for example, Costa 1998; Hannah, 1986) and cross-national differences in the employment of older people. Gruber and Wise (1999), for example, demonstrate that the growth of early retirement occurred in a context of rising opportunities to leave work early via state pensions. Furthermore, they argue that differences in employment levels of older people between countries can be explained in relation to state pension incentives. They explore whether state pension wealth (the pension amount multiplied by life expectancy) is fully compensated when an individual works for another year and delays receipt. They find that exits from employment were higher in Germany and France than the USA, and argue that this is because there is less financial incentive to continue working.

This account is useful in helping understand aggregate differences in employment across countries. However, more broadly it also needs to be recognised that the impact of potential financial incentives on employment is not without some complexity. It is, for example, widely known from UK research that people often have a poor understanding of pensions and retirement incomes, which may make them less able to respond to financial incentives (Weyman et al, 2012). Likewise, Austrian research suggests that due to the complexity of people's lives, and a high degree of uncertainty about future reforms, "it is not entirely clear to what extent Austrian individuals are in fact capable of forming rational expectations about their future entitlements" (Hanappi 2012:37f.).

Furthermore, other institutional factors at a national level may be important in terms of shaping the influence of financial incentives on employment. For the example, Ebbinghaus (2006) persuasively argues that high early retirement in 'conservative' welfare states such as Germany occurred in part because the social partners were able to exploit early exit pathways. This was not the case to the same degree in 'social democratic' Scandinavian welfare states, which had lower exit rates despite having generous state pension schemes. In part it was suggested that this was because Scandinavian countries have active labour market policies that keep older people in work (Ebbinghaus 2006).

Clearly the generosity of state pensions will influence the extent to which they represent an attractive pathway out of work. However, institutional rules can influence whether incentives to take pensions necessarily result in labour exit. In the US, UK and Norway 'earnings limits' have been removed, which means an individual can take their full state pension while continuing to work. In Norway people have been able to draw a pension at 62 while working full-time since 2011. Around 45% of those able to draw a pension before 67 do so, and two thirds of these people work (Dahl and Lien, 2013). This reform may have contributed to the rise in people aged 62–66 in employment, from 39% in 2010 to 42 % 2012. Most people working past 65 in the UK, US, and New Zealand receive a

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state pension at the same time (Lain and Vickerstaff, 2014). Furthermore, in 2006 the UK changed occupational pension rules, making it easier for people to take a pension and continue working for an employer. Crawford and Tetlow's (2012: 29) analysis of the English Longitudinal Study of Ageing (ELSA) showed that 5/9 older people who started to receive private pension income in 2002 were still working in 2004. It is therefore less inevitable that receipt of a pension results in employment exit. Indeed, micro economic modelling of household labour supply in Austria suggests that moderately generous income support while working can encourage employment, if combined with lower pension entitlements for early retirement (Narazani and Shima, 2009:17).

Finally, the ability of an individual to respond to financial incentives depends upon a range of factors influencing their employment, including their health, education, and domestic/work context. Because of the complex pathways linking financial incentives with employment, this chapter attempts to critically review and contextualise findings.

### **Methodology**

The research reviewed in this domain chapter primarily focuses on EU countries. We also make reference to some research from the USA, where this highlights areas for future research to examine. National reports/documents that were available at the time of writing were used to identify material (with most useful research found in the reports for Austria, Netherlands, Norway and the UK). 101 studies were identified that dealt with the influence of finances on employment in some way. Of these studies the 29 most relevant are discussed below.

The areas of research examined are broken down as:

- The financial position of older workers
- The influence of pensions;
- The impact of debts on employment;
- The influence of financial responsibilities on employment, for example dependencies.

### The findings and analysis of research

### The financial position of older workers;

One of the concerns of research on work in older age is whether it is a 'burden' or a 'privilege' (Scherger 2012). Some research has consequently explored the extent to which people perceive themselves as working for financial reasons, rather than for intrinsic or social reasons. Surveys such as the English Longitudinal Study of Ageing (ELSA) ask workers beyond state pension age why they are still working. This data suggests that financial motivations appear to be secondary for most of these workers. Scherger's (2012: 56) survey analysis showed that only around a third of people working past state pension age in the UK and Germany gave financial reasons for doing so. These results illustrate the fact that older peoples' work motivations cannot be reduced to simple rational economic calculations. This is consistent with research showing that, relative to younger people, older workers in general have higher levels of intrinsic rather than extrinsic motivation (Inceoglu et al, 2011). We should, however, bear in mind that working beyond state pension age in Germany and the UK was a minority activity, so positive non-financial motivations may reflect this to a degree. Older employees below state pension age are probably more likely to say they work for financial







reasons, because working at this age is less atypical. We might also expect the numbers of over 65s working for financial reasons to increase in future, as pressures to work beyond this age increase due to pension changes. These pressures exist across European countries. For example, changes in the way state pensions are calculated in Austria, which now include lifetime earnings, will result in substantially reduced pension levels that can only be realistically counteracted through continued employment (Mairhuber 2013).

Research has also examined the financial position of older workers, in an attempt to explore possible financial motivations for working. The findings of this analysis may depend to a degree on how the individuals' financial position is measured. For example, Parries and Sommers (1994) find that working in older age is associated with low non-wage income in the US. Haider and Loughran (2001), on the other hand, find that: 'labour supply [in the USA] is concentrated among the most educated, wealthiest and healthiest elderly' (ibid. from the abstract). The different measures of financial position used may *in part* explain the different conclusions reached in these studies. Parries and Sommers (1994) used non-earned income; this may represent some wealthier workers as being financially disadvantaged if they have deferred occupational pension income. Haider and Loughran (2001), on the other hand, used non-pensions wealth in the form of assets etc, which might be less influenced by this deferral effect. It should also be noted that although Haider and Loughran (2001) emphasise the fact that the wealthiest were most likely to work, the analysis itself suggests that employment was relatively high for all wealth quartiles except the poorest.

Research on EU countries that use wealth instead of non-earned income suggests that the most financially disadvantaged are least likely to work. Evidence from the English Longitudinal Study of Ageing (ELSA) reveals much lower levels of employment at ages 50 to 64 in the poorest wealth quintile. Before age 65 differences in employment between the upper four wealth quintiles were not big; after age 65 there was a linear relationship with increasing employment as we move up the wealth quintiles (Crawford and Tetlow, 2010: 21). Analysis by Lain (2011) using ELSA also found that the wealthiest quintile were most likely to work past 65, and the poorest least likely to work. The measure of wealth used by Lain (2011) was non-pension wealth; lower employment among the poorest remained after controlling for health, education and age in logistic regression analysis.

Komp et al (2010) examined factors associated with working at ages 60 and 70 in the SHARE survey countries (Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Spain, Sweden, Switzerland). It is not entirely clear how wealth is measured, but it appears to be individual wealth comprised of income and assets. The broad conclusion is that 'among men, wealthy persons with a high educational level and high occupational prestige are particularly likely to work' (ibid., 64). For women it is a partner's wealth that is important in influencing employment, not their own. The analysis on wealth is conducted at an aggregate level across all countries, so we do not know how the influence of finances on employment varies between countries. For example, the overall finding that female labour market participation is more strongly influenced by their partners wealth than their own appears to be consistent with UK evidence using pension wealth (Banks, 2007). However, as we see below, this pattern does not appear to be the same for the USA (see Coile, 2003). It would therefore be useful for more country-level analysis.

When examining the financial position of those exiting work early it is important to make a distinction between people defining themselves as retired versus those inactive for some other reason. Logistic regression analysis shows that 'retirees' were more likely to be in upper-level wealth corner quintiles, relative to other inactive people and workers combined (Crawford and Tetlow, 2010: 23). Research from Switzerland furthermore shows that early *retirement*, as distinct from ill-







health exit, is less common among those on low incomes. People on medium incomes are nevertheless in a stronger position to increase their assets through continued employment. Analysis of SHARE countries shows that blue-collar workers are likely to retire later, except with the important exception of involuntary retirement for health reasons (Radl 2013). The same analysis also shows that women retire earlier than men, despite being less financially prepared.

Research from Netherlands has arrived at similar findings, in relation to those taking early retirement. When we exclude those already out of work relatively early, for reasons such as ill-health, we see that those remaining often have a financial rationale for being there. Damman et al (2011) found that older men had an increased likelihood of working if they had a reduced pensions (for example, due to previous unemployment or self-employment). Henkens et al(2009) show that lower pension benefits increase the likelihood of working and high financial capital reduces it. Reeuwijk et al (2013) found similar findings in a qualitative study. Finally, de Wind et al (2014) found that older workers are more likely to take up early retirement if they say they can afford this. Proper et al (2009) found that financial incentives are also an important reason why older workers take gradual retirement over full early retirement.

On a final note, absolute levels of wealth are inadequate in isolation for understanding financial motivations for employment. For example, wealth levels may be strongly influenced by the value of housing, which has increased considerably for many individuals in the UK. US research suggests that having higher housing wealth has no significant effect on employment (Bender, 2014), presumably because people do not draw on housing equity in retirement. Whether or not people draw on their housing wealth to fund retirement in future in EU countries is an open question, but this is currently rather marginal in the UK at least. It is therefore important to look to the influence of outstanding financial commitments (such as mortgages) and pensions to examine the actual influence of finances on employment.

### The influence of pensions on employment;

#### **State Pensions and benefits**

Based on an analysis of financial incentives in twelve OECD countries, Gruber and Wise (1999: 35) conclude that: 'there is a strong correspondence between the age at which [pension and other] benefits are available and departure from the labor force'. The authors further note in many countries Social Security or unemployment/disability benefits provide generous pathways out of work early, with strong financial penalties for working beyond pension age. It follows from this that differences in the availability/generosity of pension/benefits are important in terms of explaining lower employment in countries such as France and Germany, compared with the USA.

Subsequent micro-simulation analyses primarily based on 1990s data predicted significant increases in employment from reducing disincentives to continue working in older age (Gruber and Wise, 2004); this includes Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, the UK, and the USA. For each of the countries two scenarios is simulated: delaying benefit eligibility and assessing the effect of having common pensions across each country. Pension reforms in more recent years across a range of countries appear to confirm that restricting early eligibility impacts on retirement timing.

This includes one country with historically high early retirement: Germany. As Hanel (2010: 479) points out, although the German state pension age has historically been 65 'flexible retirement entry' with a full pension has been possible for certain groups of insured workers between 60 and 65; this includes the unemployed, women, and disabled people. In addition those with long contribution







records could retire at 63. Between 1997 and 2005 early access to pension benefits has been gradually removed. The author's analysis suggests that: 'after the reform, claiming of [pension] benefits occurs on average nearly 14 months later, and... Workers are expected to stay in gainful employment about 10 months longer' (page 485). However, employment levels have not risen sufficiently to *fully* compensate for the removal of early pension benefits, resulting in early leavers receiving unemployment benefits. A tightening of eligibility for early retirement in the Austrian pension system has also had a significant effect, according to econometric analysis by Hanappi (2012:1). A stronger emphasis on financial incentives in the pension system (the introduction of additional bonuses and penalties) reduces the out-of-labour force ratio of individuals aged 56-65 by 16.3% for females and 13.4% for males.

Of course, disability benefits provide an additional potential financial pathway out of employment. Coile et al (2014) report analysis on the impact of disability benefits on employment using the SHARE and surveys from other countries. They find substantial difference in disability benefit receipt between the EU countries examined and the US/Japan; these differences could not be accounted for by variations in health. Instead, it is suggested that the nature of the programmes themselves, and incentives to not work, are an important factor. Simulations increasing the stringency of admission to disability insurance programmes suggest increases in employment. In addition, it may be important to consider variations between countries in terms of labour market conditions. For example, in the UK disability benefit receipt increased in the 1980/1990s partly due to a decline in low skilled jobs; low skilled people with a limiting long-standing illness consequently found it harder to find/keep such a job and ended up on disability benefits (Faggio and Nickell, 2003).

A final area of interest is in relation to the abolition of earnings limits in the Norwegian state pension. Earlier reforms in 2002 doubled allowable earnings while in receipt of the pension; Hernæs and Jia (2009) found this had a positive effect on hours of work but not on Labour market participation itself. Brinch et al (2012) also compared the work incentive effects of earnings limits reforms and incentives to delay receipt of the pension. They found that men responded significantly to earnings limit changes in terms of increasing employment, but incentives to delay a pension had no effect. The authors conclude: 'The findings confirm that 67-69 year olds can adjust their work efforts to economic incentives, but do so only to those related to current income and not to future pensions'. This would appear to support the argument made by Lain and Vickerstaff (2014), that in considering financial incentives to work we need to consider the ability to combine work and pensions. Bråthen and Grambo (2009) find that changes to earnings limits increase the probability of somebody aged 66 to 67 working in Norway by 4%.

#### The pension design

It is not just the age at which a pension becomes available, but also the design of the pension that influences employment. This is most evident in relation to private and occupational pensions. In countries where occupational pensions have been important, such as the US and UK, people with salary-related 'defined benefit' (DB) pensions appear to retire earlier than those with 'defined contribution' (DC) pensions (see, for example, Munnell et al, 2004 for the USA). In defined-contribution schemes the pension is a lump sum based on contributions and investment returns; the person can then buy an annuity to turn it into a regular stream of income. Another year of work and contributions adds to the pension pot. Salary-related defined benefit pensions are organised around 'normal retirement ages', and there is less incentive to defer receipt and continue contributing to it; this may encourage people to take their occupational pension and leave employment. (Note, however, as stated above, in 2006 UK restrictions on taking an occupational pension while working for the same employer were relaxed).







With defined contribution pensions the individual bears the risk that their pension investments will rise sufficiently to pay for retirement. The importance of pension wealth influences on employment can therefore vary depending upon the financial climate. During 1992-2002 period sharp increases in wealth ('wealth shocks') increased retirement levels (Munnell et al, 2004). Since the financial crash, however, we might expect fewer positive 'wealth shocks' inducing retirement. Whether or not 'negative' wealth shocks reduced entry into retirement is less clear. Crawford (2013) found that wealth shocks between 2008 and 2009, in the form of falling asset prices, had no significant effect on the retirement plans of older workers in England.

Although retirement plans might not fluctuate *directly* in line with economic conditions, those with defined contribution pensions in England expect to work much longer than those with defined benefit pensions. According to analysis by Arkani and Gough (2007), three quarters (74%) of men aged 50-59 with DC pensions expected to work past 60, compared with just over half of those with DB pensions (56.2%). The average probability of working after age 65 was also lower for men aged 60–4 with DB schemes (37.8 per cent) than those with DC schemes (51.9%). In the case of women the influence of pension type on employment was less evident, once again suggesting that the partner's finances were a more important influence on employment. As DC pensions become more important in other countries it will be interesting to see if this results in people working longer.

Banks et al (2007) address the importance of pension type through an analysis of pension wealth accrual influences on employment. ELSA includes measures of private pension wealth (from defined benefit and defined contribution schemes) calculated as a total amount over the expected lifecourse. The analysis examines whether the propensity to retire is influenced by pension accruals that would occur from working between the first and second waves of the survey (2002 – 2004). Implicitly this is related to pension type. In a defined contribution pension wealth accrues in a smooth way because a further year of work contributes to the pension lump sum received. In defined benefit pensions there is an incentive to retire around 'normal' retirement age, with often little bonus for remaining in the scheme beyond the NRA. (Note that this may be less of a problem after 2006, when employers had the option of paying a pension to a current worker). The authors conclude that:

"pension accrual and pension wealth are important determinants of the retirement behaviour of men aged 50 to 59. Financial incentives – with the notable exception of the impact of partner's pension wealth – have a weaker role in determining the retirement decisions of women of the same age. Financial incentives appear to play a weaker role for men aged 60 to 64." (Banks et al, 2007: 38).

Financial incentives, in the form of DB pensions, were therefore most important in inducing very early retirement (at 50-59) among men. Consistent with other studies exploring different types of wealth, employment between age 50 and state pension age was least likely for those with the low pension wealth. This was confirmed in logistic regression analysis controlling for differences in education, age, and health problems. Those in the middle pension wealth quintiles appeared to be most likely to be in work between 50 and state pension age (Banks et al, 2007: 19; see also Weyman et al 2012).

We should be wary of assuming that female employment follows a partner's finances to the same degree across all countries, however. The UK context is one in which older women have been particularly concentrated in lower level part-time work (O'Connor et al, 1999). As secondary earners in the household their individual financial position may be less relevant to decision-making about retirement timing. In the US, where women have more substantial full-time careers in their own right, it appears that their employment is as influenced by their own financial incentives as men's are (Coile, 2003). It would interesting to know how female employment is influenced by the resources of





a partner in other EU countries, and whether this varies depending upon the types of careers women have typically had.

The findings of Banks et al (2007), discussed above, raise interesting questions about how receptive people are to financial incentives to work. The fact that those in the middle pension wealth strata were most likely to work up to state pension age and then leave work suggests that they are most responsive to financial incentives. This has some parallels with the argument made by Weyman et al (2012). Basically, those in the bottom wealth groups are less receptive to financial incentives because of factors like ill-health, while the wealthiest group may leave work early or late depending upon preference. The middle wealth groups, who are most likely to have defined contribution pensions (Banks et al 2007: 22), have most incentive to continue working.

Supplementary analysis in Banks et al (2007) suggested that "the impact of pension accrual on retirement is only important for those in good health". A similar finding has been discovered in relation to Spain. Erdogan-Ciftci et al (2008) and Erdogan-Ciftci, (2011) estimate public pension wealth and accrual values using labour market histories in the European Community Household Panel Survey. It is argued that work-histories are a reliable way of estimating pension wealth, because of the dominance and straightforward design of public pension provision. In both papers the authors find that pension accrual values, and the point at which this peaks, significantly influences retirement timing. However, as in the UK, the impact of financial incentives is dependent upon being in good health. Erdogan-Ciftci et al's (2008) analysis also suggests that it is *long-term* health that matters more than changes in health. The authors consequently argue that pension reforms that increase financial incentives to continue working are unlikely to have much impact on those in ill-health. Kostøl and Mogstad (2013) and Bråthen (2011) reached similar conclusions for Norway.

In addition to health, social class also appears to influence the extent to which people respond to financial incentives. Weyman et al's (2012: 124-125) analysis of ELSA showed that for managerial and middle strata groups pension and asset values significantly reduced actual retirement age. For those in the lowest income/skills strata wealth had no significant effect and instead health was significant.

### The impact of debts on employment;

As noted above, it is debatable whether high levels of housing wealth influence retirement timing (see, for example, Bender, 2014 for the USA). However, there is evidence that debts in the form of outstanding mortgages increase the likelihood of remaining in work in older age (see Mann, 2011 for the US and Smeaton and McKay, 2003 for the UK). Crawford and Tetlow's (2010) multivariate regression analysis of ELSA reveals that those still paying a mortgage had an increased likelihood of working past state pension age relative to out-right home-owners (see also Smeaton and Mckay, 2003).

# The influence of financial responsibilities on employment, for example dependencies.

The final area examined here relates to the impact of financial responsibilities in the form of dependencies, typically dependent children. Qualitative research by Vickerstaff et al (2008) found examples of older men with young children who were continuing to work because of the financial responsibilities entailed. Damman et al (2011) find that older workers with financially dependent children are less likely to retire early in the Netherlands. In the UK and EU context further research on this would be useful. In the US, the influence of dependent children on employment of older people is a known factor. Handwerker (2011), for example, finds that older parents are less likely to be retired if they are paying for their child's college education. The impact of this particular factor





may be much higher in the US than the EU, given the very high costs of US higher education. However, responsibilities to dependent children may take other forms in EU countries (for example, in the context of high youth unemployment).

#### Consideration of the cross national diversity

Across the countries studied, there was a much stronger emphasis on quantitative than qualitative research on finances. For EU countries there is notable quantitative research on the impact of public pensions and benefits on employment (for example, the work of Gruber and Wise, 1999; Gruber and Wise, 2004). This research uses surveys of older people containing financial information, such as SHARE, and estimates the effect pension accruals from working another year on employment. This enables us to conclude that financial disincentives to delay receipt of a pension do influence exit rates. Research of this type can be identified for all of the countries covered by this JPI.

Despite the above research, there is less country level research on how employment rates vary across different economic segments within countries. One partial exception to this is the UK, where the English Longitudinal Study of Ageing has been used to try to assess whether continued employment is related to financial advantage or disadvantage.

We located little research in any country on how *different* financial resources influence employment. In the case of UK/US research it is known that defined contribution pensions have a different effect to defined benefit schemes. It will be interesting to find out whether an increase in the importance of DC schemes in other EU countries also results in increased employment. However, there are other potential differential effects on employment from financial resources. Research from the US, for example, suggests that housing wealth has a different influence on employment to savings and pensions. In the US having higher levels of housing wealth does not increase your likelihood of retiring, perhaps because people do not envisage spending this wealth. It follows that some people who appear to be wealthy, due to housing equity, may end up working due to low pensions or retirement incomes. It also follows that some people with lots of wealth in the form of housing may end up working for financial reasons because they have debts. There are likely to be quite large variations between countries in terms of entering old age with outstanding mortgages, but there is little research on this.

The subjective influence of finances on employment is also an area where there is only patchy research coverage across countries. For example, we identify research on the extent to which work is explained through financial motivations. However, it is known that many people have only limited understanding of their future retirement incomes. Given this, we need more research on how subjective understandings of financial resources influence employment. It is also important to understand how uncertainty about financial resources influences employment. A lack of knowledge on this highlights the dominance of quantitative over qualitative research on this topic for all countries covered by this report.

It would also be useful if research gave more systematic and detailed analysis of how gender interacts with financial incentives to work. Typically, across the studies examined gender is either included as a control variable, or, more commonly, separate analysis is presented for men and women. In the latter case, the discussion often concentrates on male employment to a greater degree, with a conclusion that individual-level financial incentives are relevant for women but have less influence on employment. This, however, raises the question of whether individual-level financial resources have a greater impact on female employment in some countries over others. A potential hypothesis for future comparative research is that financial incentives of women are more







important in countries where female employment over the life-course more closely approximates that of men. This, however, requires analysis incorporating life-history data. In addition, more research is required on how financial incentives influence employment for single women and men. There are, for example, good reasons to assume that divorced women end up working in older age for financial reasons (Smeaton and McKay, 2003), but more research on this is needed.

In addition to the above areas, there is limited research found in any of the countries on how changes in wealth over time influence retirement timing/expectations. In the US, there are a number of studies that examine how so-called 'wealth shocks' (such as changes in pension wealth) influence retirement timing. With the development of surveys such as ELSA and SHARE there will be opportunities for EU countries to conduct this kind of analysis.

Finally, we identified a lack of research on the way in which financial retirement resources are influenced by ethnicity and how this influences employment.







### **Research conclusions**

We can draw the following conclusions:

Most research focuses on the macro and individual levels. Incentives to retire through state pensions are important for explaining differences in employment levels of older people across countries. Microsimulation analysis predicts that restricting admission to state pensions and benefits reduces early exit. Germany and Austria are examples of the countries that have limited early access to pensions, with both experiencing increased employment of older people thereafter. However, access to a pension does not necessarily mean exit from the Labour market if individuals are allowed to take a pension while working. This is the case in a number of countries including Norway and the UK. More research is therefore needed on the extent to which employment is influenced by opportunities/constraints to combine pensions and earnings.

More research is required on how employment is influenced by the combination of different types of pensions available within countries. Where private pensions are common individuals in defined benefit schemes appear to retire earlier than those with defined contribution pensions. In other countries where salary related state pensions have dominated there has been growth of supplemental saving into new types of pension schemes. Research is therefore needed to examine the impact on employment of the (changing) pension landscapes in countries.

As most research focuses on the individual/macro levels, there is a need for research that takes a broader view and places financial influences on work and retirement in a family/household context. This would examine the influence of household finances and how these are distributed and managed in the household. Likewise, it would examine the influence of intergenerational transfers and financial responsibilities (including dependent children) on employment. This requires qualitative research alongside quantitative, so we can understand how subjective understandings of finances influence employment.

We need more systematic analysis across countries on how gender, marital status and employment histories interact with financial incentives to work. In some countries employment of married women appears to be more influenced by the resources of their partner than their own. However, we need research that examines whether or not this is true in all countries, including countries in which women have had similar career employment patterns to men. We also need to understand how employment is influenced by gender and marital dissolution across different countries. This includes whether divorce for women results in financial needs and employment in older age.

More research is needed on the relationship between ethnicity, finances and work.

In many countries there is a need for more research on how employment rates vary across different economic segments. For this purpose it would be beneficial if all countries had access to large-scale surveys that measured the financial position of older people. Analysis of the English Longitudinal Study of Ageing highlights how large-scale surveys can generate knowledge about employment differences across economic groups. It reveals that people working in older age come from financially diverse backgrounds, as do those leaving work early. In the years leading up to state pension age the richest and poorest appear to be most likely to leave work early, albeit for very different reasons (pension incentives versus ill-health). After state pension age the numbers working declines considerably, with the richest segment most likely to remain in work. People with middle-level wealth appear to be most likely to leave work at state pension age; however, in future these individuals may be most receptive to financial incentives to continue working. It would be beneficial







if other countries were to invest in large-scale surveys that facilitated disaggregated analysis such as this.

There is a need for research to take a broader perspective on how *different* financial resources/needs interact to influence employment. Focusing on single measures of financial position alone can only give a partial picture. An individual's financial position may look different depending upon whether we look at income (with or without earnings), wealth or debts. People with high housing equity and a generous pension may be nevertheless working for financial reasons if they have a large outstanding mortgage. Likewise, their financial needs might be related to their circumstances - for example, the presence of dependent children in the household.

There is a need for more research on how changes in wealth (wealth shocks) influence employment both within and between countries.

We need more qualitative research on how subjective understandings of financial resources (including lack of knowledge) influence employment. This would include the influence of attitudes about what constitutes a sufficient retirement income, and how this varies between countries.

More cross-national research is needed at the workplace level examining how employers and social partners use financial resources, such as pensions and early retirement incentives, to influence the employment of older people. The ease with which social partners could use social benefits to promote early exit has been a factor in the past in some countries. It would be useful to understand how this is changing and the consequences for employers in managing retirement transitions.







### References

- 1. Arkani, S. and Gough, O. (2007), 'The impact of occupational pensions on retirement age', Journal of Social Policy, 36, 297-318.
- 2. Banks, J., Emmerson, C. and Tetlow, G. (2007), Healthy retirement or unhealthy inactivity: How important are financial incentives in explaining retirement: Institute for Fiscal Studies.
- 3. Bender, K.A., Mavromaras, K.G., Theodossiou, I. and Wei, Z. (2014), The Effect of Wealth and Earned Income on the Decision to Retire: A Dynamic Probit Examination of Retirement: IZA Discussion Paper.
- 4. Bråthen, M. and Grambo, A.-C. (2009), 'Sysselsettingseffekten av endrede regler for alderspensjon for 67-åringer', Arbeid & Velferd, 2, 41-47.
- 5. Brinch, C.N., Hernæs, E. and Jia, Z. (2012), Labor supply on the eve of retirement. Disparate effects of immediate and postponed rewards to working.
- 6. Coile, C. (2003), Retirement incentives and couples' retirement decisions, Topics in Economic Analysis & Policy: National Bureau of Economic Research.
- 7. Coile, C., Milligan, K.S. and Wise, D.A. (2014), Social Security Programs and Retirement Around the World: Disability Insurance Programs and Retirement Introduction and Summary, Cambridge, MA: National Bureau of Economic Research.
- 8. Costa, D.L. (1998), 'The evolution of retirement, The Evolution of Retirement: An American Economic History, 1880-1990: University of Chicago Press.
- 9. Crawford, R. and Tetlow, G. (2010), 'Employment, retirement and pensions', in J. Banks, C. Lessof, J. Nazroo, N. Rogers, M. Stafford and A. Steptoe (eds.), Financial circumstances, health and well-being of the older population in England, London: Institute for Fiscal Studies.
- 10. Crawford, R. and Tetlow, G. (2012), Expectations and experience of retirement in Defined Contribution pensions: a study of older people in England, Institute for Fiscal Studies, November.
- 11. Crawford, R. (2013), 'The effect of the financial crisis on the retirement plans of older workers in England', Economics Letters, 121: 2, 156-159.
- 12. Damman, M., Henkens, K. and Kalmijn, M. (2011), 'The Impact of Midlife Educational, Work, Health, and Family Experiences on Men's Early Retirement', Journals of Gerontology Series B-Psychological Sciences and Social Sciences, 66: 5, 617-627.
- 13. de Wind, A.W., Geuskens, G.A., Ybema, J.F., Blatter, B.M., Burdorf, A., Bongers, P.M. and van der Beek, A.J. (2014), 'Health, job characteristics, skills, and social and financial factors in relation to early retirement-results from a longitudinal study in the Netherlands', Scandinavian journal of work, environment & health, 40: 2, 186-194.
- 14. Ebbinghaus, B. (2006), Reforming early retirement in Europe, Japan and the USA, Oxford: Oxford University Press.
- 15. Erdogan-Ciftci, E., Van Doorslaer, E. and Lopez Nicolas, A. (2008), Health, Financial Incentives and Retirement in Spain: Network for Studies on Pensions, Aging and Retirement.







- 16. Erdogan-Ciftci, E., Van Doorslaer, E. and López-Nicolás, Á. (2011), Does declining health affect the responsiveness of retirement decisions to financial incentives: Netspar Discussion Paper 01/2011-005.
- 17. Faggio, G. and Nickell, S. (2003), 'The rise in inactivity among adult men', in R. Dickens, P. Gregg and J. Wadsworth (eds.), The Labour Market Under New Labour: The State of Working Britain, New York: Palgrave Macmillan.
- 18. Gruber, J. and Wise, D. (1999), Social Security and Retirement around the World, London: University of Chicago Press.
- 19. Gruber, J. and Wise, D.A. (2004), Social security and retirement around the world, Chicago: University of Chicago Press.
- 20. Haider, S. and Loughran, D. (2001), Elderly Labor Supply: Work or Play?, Boston: Center for Retirement Research at Boston College,.
- 21. Hanappi, T. (2012), 'Retirement Behaviour in Austria: Incentive Effects on Old-Age Labor Supply', Institute for Advanced Studies and Johannes-Kepler-University Linz.
- 22. Handwerker, E.W. (2011), 'DELAYING RETIREMENT TO PAY FOR COLLEGE', Industrial & Labor Relations Review, 64: 5, 921-948.
- 23. Hanel, B. (2010), 'Financial incentives to postpone retirement and further effects on employment Evidence from a natural experiment', Labour Economics, 17: 3, 474-486.
- 24. Hannah, L. (1986), Inventing retirement: the development of occupational pensions in Britain, Cambridge: Cambridge Univ Press.
- 25. Henkens, C.J.I.M., Henkens, K., van Dalen, H. and van Solinge, H. (2009), De vervagende grens tussen werk en pensioen: over doorwerkers, doorstarters en herintreders, Amsterdam: KNAW Press.
- 26. Hernæs, E. and Jia, Z. (2009), Labour supply response of a retirement earnings test reform: Memorandum//Department of Economics, University of Oslo.
- 27. Inceoglu, I., Segers, J. and Bartram, D. (2011), 'Age-related differences in work motivation', Journal of Occupational and Organizational Psychology, no-no.
- 28. Komp, K., van Tilburg, T. and van Groenou, M.B. (2010), 'Paid work between age 60 and 70 years in Europe: a matter of socio-economic status', International Journal of Ageing and Later Life, 5: 1, 45-75.
- 29. Kostøl, A.R. and Mogstad, M. (2013), How financial incentives induce disability insurance recipients to return to work: National Bureau of Economic Research.
- 30. Lain, D. (2011), 'Helping the Poorest Help Themselves? Encouraging Employment Past 65 in England and the USA', Journal of Social Policy, 40, 493-512.
- 31. Lain, D. and Vickerstaff, S. (2014), 'Working Beyond Retirement Age: Lessons for Policy', in S. Harper and K. Hamblin (eds.), International Handbook on Ageing and Public Policy, Cheltenham: Edward Elgar.





- 32. Mairhuber, I. (2013), 'Geschlechtergerechtigkeit in der österreichischen Pensionsversicherung', Kurswechsel 4/2012: 39–49, 4, 39-49.
- 33. Mann, A. (2011), 'The effect of late-life debt use on retirement decisions', Social Science Research, 40: 6, 1623-1637.
- 34. Munnell, A.H., Triest, R.K. and Jivan, N.A. (2004), How do pensions affect expected and actual retirement ages, Chestnut Hill, MA: Center for Retirement Research at Boston College.
- 35. Narazani, E. and Shima, I. (2009), Labour incentive reforms in preretirement age in Austria: EUROMOD Working Paper.
- 36. O'Connor, J.S., Orloff, A.S. and Shaver, S. (1999), States, markets, families: Gender, liberalism and social policy in Australia, Canada, Great Britain and the United States, Cambridge: Cambridge University Press.
- 37. Parries, H.S. and Sommers, D.G. (1994), 'Shunning retirement: Work experience of men in their seventies and early eighties', Journals of Gerontology, 49: 3, S117-S124.
- 38. Proper, K.I., Deeg, D.J. and van der Beek, A.J. (2009), 'Challenges at work and financial rewards to stimulate longer workforce participation', Human Resources for Health, 7, 70.
- 39. Reeuwijk, K.G., de Wind, A., Westerman, M.J., Ybema, J.F., van der Beek, A.J. and Geuskens, G.A. (2013), "All those things together made me retire": qualitative study on early retirement among Dutch employees, BMC public health, 13: 1, 516.
- 40. Scherger, S., Hagemann, S., Hokema, A. and Lux, T. (2012), Between privilege and burden: Work past retirement age in Germany and the UK, Bremen: Centre for Social Policy Research,.
- 41. Smeaton, D. and McKay, S. (2003), Working after state pension age: quantitative analysis, Leeds: Department for Work and Pensions.
- 42. Vickerstaff, S., Loretto, W., Billings, J., Brown, P., Mitton, L., Parkin, T., White, P. and Britain, G. (2008), Encouraging labour market activity among 60-64 year olds, Norwich: Department for Work and Pensions.
- 43. Weyman, A., Wainwright, D., O'Hara, R., Jones, P. and Buckingham, A. (2012), Extending working life: Behaviour change interventions: Department for Work and Pensions.