

Research Bulletin 18/6 | The Determinants of Older Working Age Inactivity in Northern Ireland

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Summary

Northern Ireland has consistently had a higher rate of inactivity than the UK as a wholeⁱ and is currently the highest of any UK regionⁱⁱ. This research bulletin analyses the trends in inactivity rates for selected cohorts over the last twenty years, employing a multivariate regression model to investigate the different primary drivers of inactivity amongst these selected groups. The results from the model indicate that longer term ill health is a more important determinant of inactivity for older working age women than it is for other groups while older working age men are more proportionally impacted by skills and educational deficiencies than either women of an equivalent age or younger working age males.

Introduction

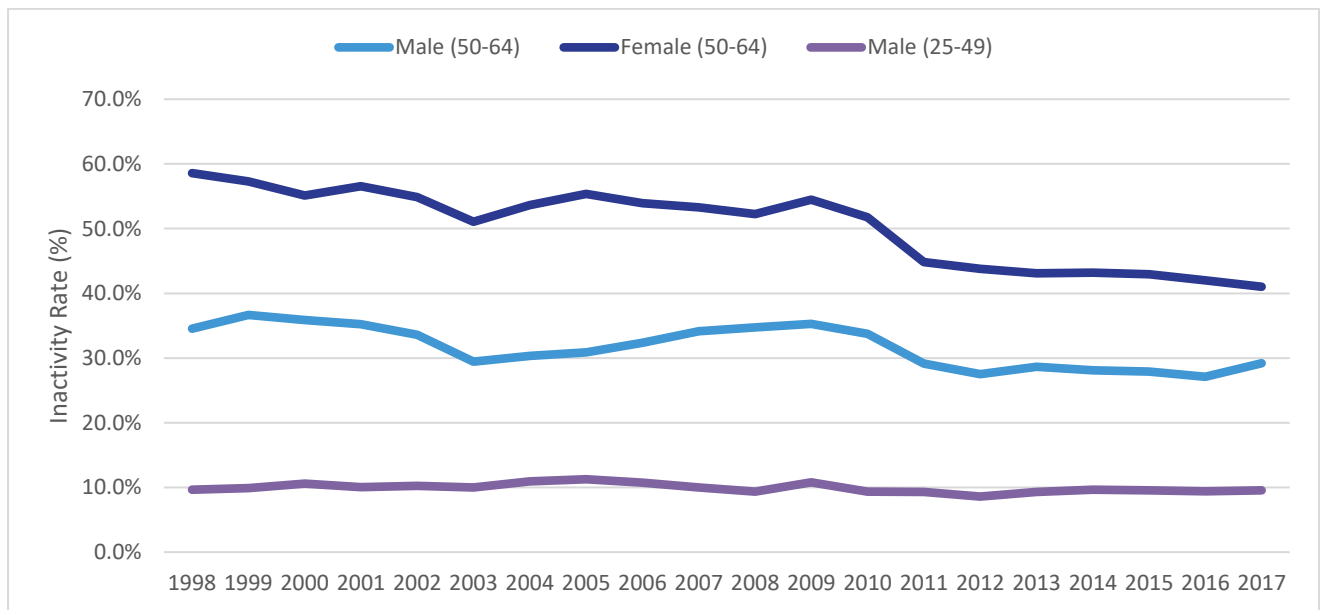
Towards the end of 2017 the rate of economic inactivity in Northern Ireland (NI) increased by 2.0% to 28.9%ⁱⁱⁱ. This upswing at the end of last year underscores the fact that NI has consistently had the highest inactivity rates of any UK region. However, headline figures often belie the participation outcomes of different groups within the region. To attain a stronger insight into the different drivers of inactivity in NI it is necessary to disaggregate the headline figures and analyse different groups separately. By considering the variance between how certain factors affect participation outcomes for different groups of people, this analysis should help inform decisions relating to the NI Draft Programme for Government objective of having more people working in better jobs (Outcome 6)^{iv}.

This short research bulletin will begin by analysing the trends in inactivity rates for selected cohorts over the last twenty years, selecting one group on which to perform further analysis. In addition to brief descriptive analyses of educational attainment and the characteristics of those who work versus those who do not, this article includes a comparative regression based exercise designed to show which factors are stronger determinants of inactivity for the analysed groups. Initial analysis of LFS microdata revealed that the cohorts most affected by inactivity in Northern Ireland were older working age men and women, so these groups were selected for trend analysis. Given that older working age men were later singled out for further examination in this bulletin, younger working age men were also retroactively included in the body of the analysis as a rudimentary control group.

Trend Analysis

Figure 1 illustrates the trends in inactivity rates among selected groups excluding full time students^v in Northern Ireland over the last twenty years. The rate of inactivity among older working age women, while high, has witnessed a considerable downward trend from the late 1990s. Male inactivity rates have remained relatively static with modest improvements seen for older working age men.

Figure 1: Northern Ireland inactivity rates by age/gender cohort (excluding students)



Note: (Annualized; four quarter smoothed)

Source: LFS Quarterly Microdata (Q1 1998-Q4 2017)

Older working age men have increasingly accounted for a larger proportion of the total inactive in NI over the last twenty years and accounted for almost 22% of the total inactive stock in late 2017, an increase of almost a third from the late 1990s. This should be seen in the context of older males accounting for just over 16% of the total working age population in NI, suggesting that this trend is not just a function of natural demographic changes. This particular trend has not been witnessed in other UK regions as increases in the total inactive stock attributable to this cohort have been broadly met by increases in their share of the working age population as illustrated by Table 1.

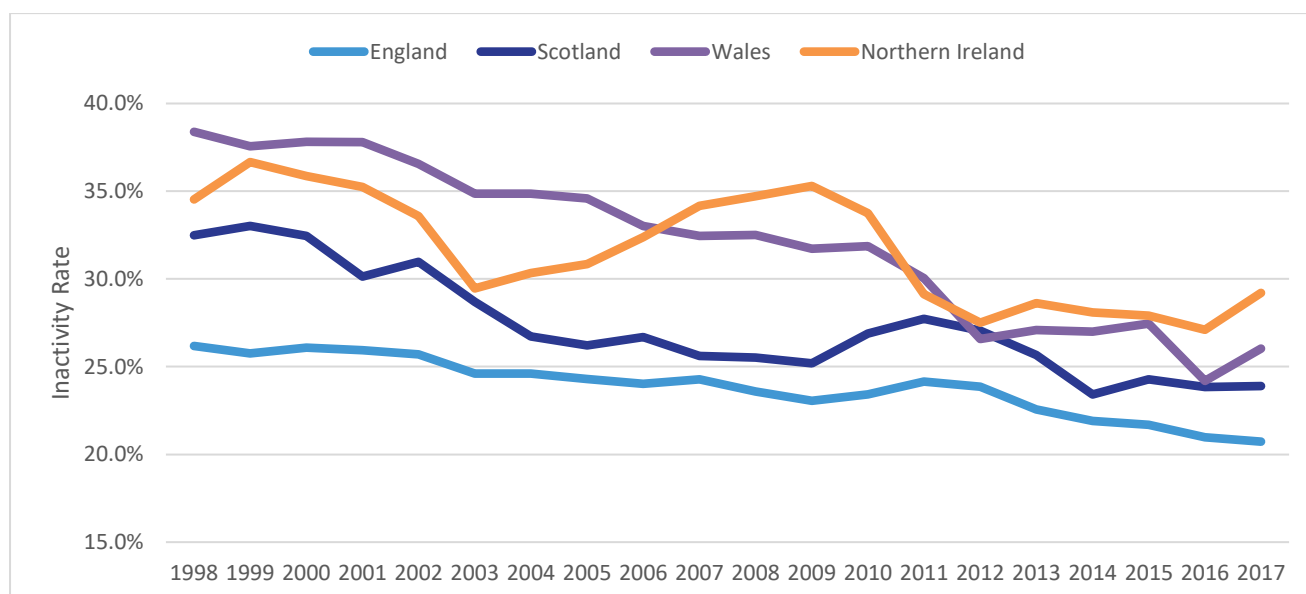
Table 1: Proportion of males (50-64) of total working age and inactive stock (excluding students)

Region	% of working age (Q4 2017)	PPS. Change since Q3 1997	% of Inactive stock (Q4 2017)	PPS. Change since Q3 1997
Northern Ireland	16.5%	+3.7	21.9%	+5.1
England	16.6%	+3.3	20.4%	+3.2
Scotland	18.0%	+4.8	23.4%	+4.1
Wales	17.6%	+3.8	23.5%	+2.9

Source: LFS Quarterly Microdata (Q1 1998-Q4 2017)

Figure 2 shows a comparison of inactivity rates for older working age males across the constituent regions of the UK. While inactivity rates for older men in NI have on the whole been trending downwards, the fall has been considerably slower than those seen in other UK regions with rates falling by almost a third for Wales, over a quarter for Scotland and a fifth for England compared to less than one sixth for NI.

Figure 2: Inactivity rates of males (50-64) by UK region (excluding students)



Note: (Annualized; four quarter smoothed)

Source: LFS Quarterly Microdata (Q1 1998-Q4 2017)

Consistent with the findings from previous studies^{vi}, NI has much higher proportions of older working age men citing long term disability or sickness as their primary reason for inactivity. Although the proportion of older men noting inactivity due to long term sickness has declined in recent years, this fall has again been much slower than those witnessed in other parts of the UK. Northern Ireland has consistently had the highest rates of older male inactivity due to this reason over the last twenty years.

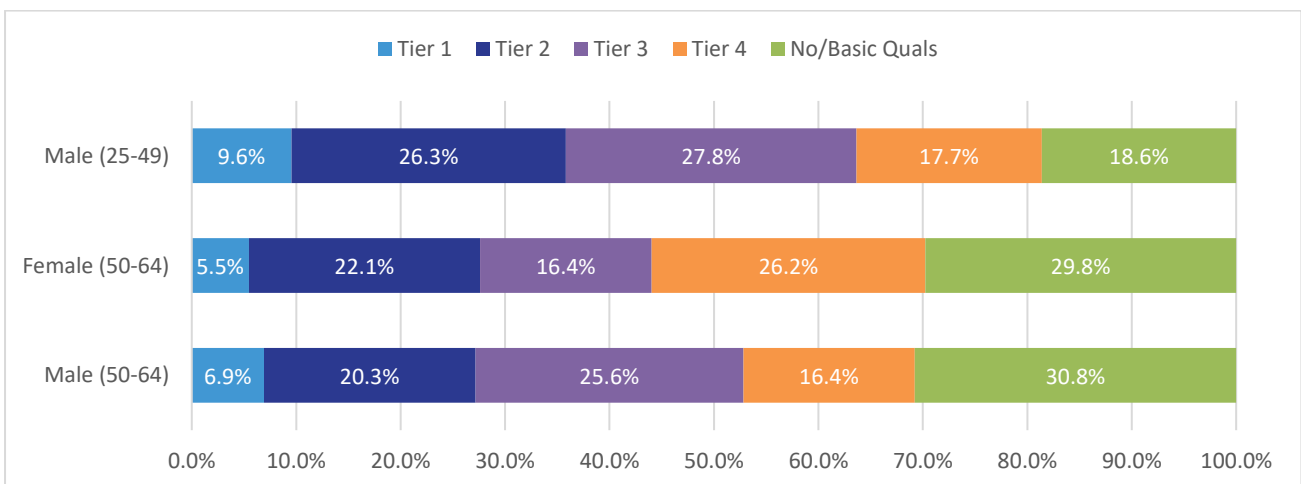
Skills and Educational Attainment

Analysis of the trends over the last twenty years indicates that activity rates for older working age males in NI have remained relatively low and unchanged in contrast to equivalent cohorts in the rest of the UK and other groups within NI. Previous research suggests that skill and qualification levels are a strong predictor of labour force participation^{vii}. It was essential therefore to determine whether disparities in skills between older working age NI males and other groups would be significant enough to explain the discrepancies in activity trends that have been observed thus far.

On the whole, older working age males in NI tend to have lower levels of educational attainment than other groups¹. While the proportion of those who have attained degree level qualifications (18.2%) is higher than older working age women, it is below equivalent attainment rates for younger working age males (25.4%). Attainment rates of secondary level qualifications remain well below the NI average with 20.3% of older males holding some A-Level qualifications compared with 28.9% of the NI working age population as a whole.

Older working age males do however have higher rates of attainment of qualifications gained through work or professional bodies (13.3%) than either older working age women (7.9%) or younger males (8.5%). This suggests a greater proclivity for occupational roles that provide opportunities for on the job training and development. The greatest disparity however can be seen in the proportions of older working age males who report having no qualifications at all (24.4%), which is well above the NI average of 16.2% and substantially above the rate for younger working age males (12.7%).

Figure 3: Highest qualifications by age/gender cohort



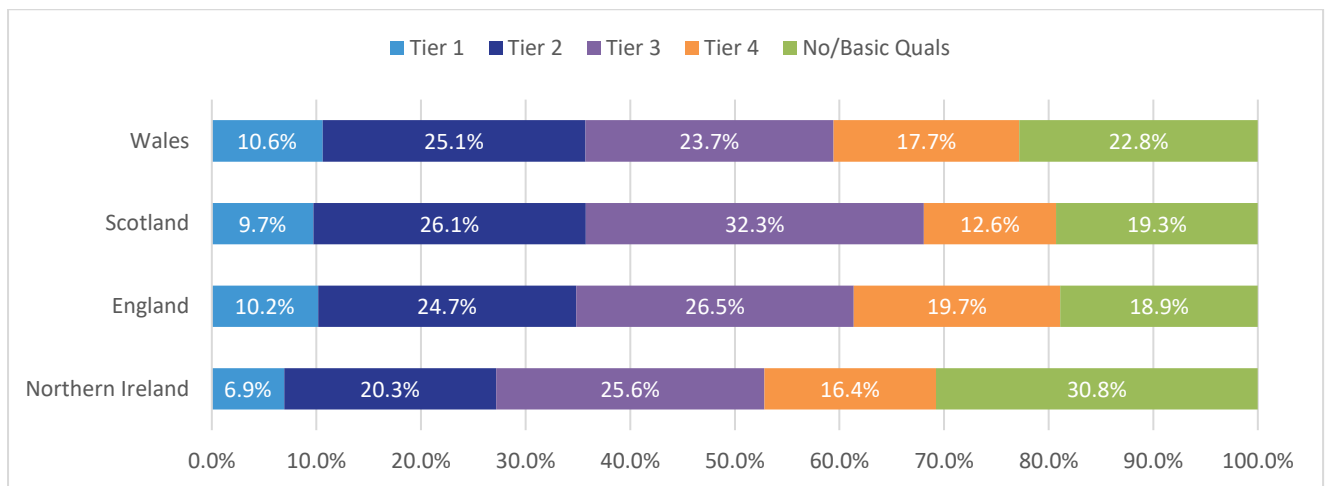
Source: LFS Quarterly Microdata (October-December 2017)

¹ Data on qualification attainment is extrapolated from responses in LFS Microdata (Q4 2017) using QUAL series of variables. Qualification attainment is not the same as highest qualification where each respondent can only have one answer as there can be substantial overlap between different qualifications obtained.

Figure 3 shows the highest qualifications held (grouped by corresponding UK Qualification framework^{viii} levels²) by broad tier for cohorts of interest. Overall, older working age men tend to be more skilled than women of an equivalent age and the proportion of older working age men with no or basic qualifications is broadly comparable to older women. There is a significant disparity in skills between older working age men and men aged 25-49. Larger proportions of younger working age males hold advanced vocational awards or higher degrees (Tier 1) as their highest qualification and a significantly lower proportion have no or very basic qualifications compared to their older counterparts.

Figure 4 shows the highest level of qualification by broad category for older working age males in all UK regions. Older working age males in NI tend to have lower levels of higher educational/vocational attainment than their counterparts in other regions of the UK. The proportion of older working age men in NI holding higher degrees or the highest vocational awards (Tier 1) as their highest qualification is the lowest of any UK region at 6.9% compared to 10.6% for Wales, 10.2% for England and 9.7% for Scotland. The proportion of those holding lower university level qualifications (Tier 2) also compares unfavourably with the rest of the UK.

Figure 4: Highest qualifications held by males (50-64)



Source: LFS Quarterly Microdata (October-December 2017)

Northern Ireland has reasonably comparable proportions of older working age men who could be considered 'middle skilled', a category that includes upper secondary, intermediate vocational and trade related qualifications. This is driven by the 16% of older NI males with trade apprenticeships as their highest qualification, roughly double the equivalent figures for England and Wales.

² Tier 1 analogous to Levels 7 & 8 including higher degrees and advanced vocational qualifications. Tier 2 analogous to Levels 5 & 6 including university level qualifications below postgraduate level and higher/professional vocational awards. Tier 3 analogous to Levels 3 & 4 with some Level 2 including upper secondary qualifications, intermediate vocational or trade related apprenticeships. Tier 4 analogous to Levels 1 & 2 including basic secondary qualifications and primer vocational awards.

However, NI has by far the largest proportions of older working age males with no or very basic qualifications, with 24.4% noting they had no qualifications whatsoever compared to 9.5% for England, 11.9% for Scotland and 13.1% for Wales.

The comparison of skill levels and educational attainment has revealed that older NI males are generally less skilled than their counterparts in other UK regions and other groups within Northern Ireland. The fact that older NI males appear to have a greater proclivity towards middle skilled vocational qualifications than other groups could suggest a greater susceptibility to structural change, which may explain why larger numbers of older men are outside the labour force in NI. The disparity in skills between these groups however does not appear to be significant enough to explain the aberrant trends in activity between these groups that has been identified previously, indicating that there are other important determinants of labour force participation for this group.

Differences between Active and Inactive NI Males (50-64)

Having examined the differences in activity trends and skill levels between older working age males and other groups, the next stage of the analysis attempts to discern whether there is any notable variance in social characteristics between active and inactive older males, which may explain why some individuals in this group are more likely to be outside the labour force than others.

Economically active older males are more likely than their inactive counterparts to be cohabiting with a partner or spouse. Over 81% of active older men fall into this category compared to 57.6% of those outside of the labour force. Reflecting this trend, inactive older men are also less likely to be responsible for the care of dependent children.

There is a clear dichotomy between active and inactive older men in terms of housing and accommodation. Just under 36% of the economically active in this group purchased their homes through a mortgage or loan compared to around 13% of inactive individuals. Rented accommodation is more prevalent among inactive older men, with 40% renting their accommodation compared to just 13.2% of those classed as economically active. Of those living in rented accommodation, the inactive are more likely to rent from their local councils, charitable trusts or local housing organisations than the economically active, who tend to rent more from private landlords.

In terms of skills and qualifications, inactive older men tend to have lower levels of educational attainment with over a third (34.4%) having no qualifications at all compared to 19.6% of those considered economically active. Disaggregating the figures further shows that economically active males have higher rates of attainment across a variety of educational levels as can be seen in Table 2.

Table 2: Qualification attainment by activity status (NI males 50-64)

Qualification Attainment	Activity Status	
	Active	Inactive
Degree Level	21.5%	11.2%
A-Level	23.8%	12.8%
O-Level	41.5%	26.4%

Source: LFS Quarterly Microdata (October-December 2017)

The general health of the inactive stock within this cohort is relatively poor in comparison to economically active older males. Over three quarters of inactive older men noted that they had a health condition (of any severity) lasting longer than 12 months compared to only 37.7% of economically active men reporting the same. The severity of illness/disability also appears to be more acute among inactive older males in NI with 92.7% of inactive men with a health condition noting that their illness limited the kind of work they could do compared to 33.0% of active men with an illness who said the same. Almost 80% of inactive older men with a longer term health condition noted that their illness/disability impaired their ability to perform everyday tasks to a significant degree.

Regression Analysis

From the descriptive analysis of the socio-economic differences between active and inactive older working age males it is possible to make some broad comments on the type of factors that may make an individual more likely to be outside of the labour force. However to properly assess the precise relationship and magnitude of effect of these factors on an individual's likelihood to be economically inactive it is necessary to embark on a more robust empirical analysis. The final section of this research bulletin will attempt, via a series of regression models, to demonstrate which factors contribute most towards inactivity for different groups in Northern Ireland and highlight how the effect of these factors vary between different cohorts.

The dependant variable in the model is whether an individual is considered economically inactive or not. The independent variable is whether an individual has qualifications of any kind. The model controlled for factors including longer term health, age and whether an individual was responsible for the care of dependent children below the age of 19. The analysis also included whether an individual's primary accommodation is rented social housing and whether an individual is not cohabiting with a life partner as proxy measures for social disadvantage and lack of social support networks respectively.

The results for older NI males indicates that not having qualifications increases the likelihood of being inactive by almost 13% for individuals in this group. This effect is noticeably higher than that observed for older working age women (+10.4%) and younger men (+9.2%), suggesting that a lack of skills and qualifications is a more significant barrier to labour force participation for older NI males than other groups. Social disadvantage and longer term ill health are unsurprisingly strong predictors of activity status across all examined cohorts. Notably the results indicate that an older working age women is almost 37% more likely to be inactive if they have a health condition of any kind or severity lasting longer than 12 months. The magnitude of this effect is significantly stronger than those observed for both male cohorts indicating that ill health is a stronger determinant of economic activity for older women than it is for other comparable groups. Interestingly there doesn't appear to be a significant difference between older (+25.8%) and younger working age men (+22.7%) in terms of ill health as a barrier to labour force participation.

The most significant determinant of inactivity for younger working age men appears to be social disadvantage. A younger working age man in NI is over 31% more likely to be inactive if they are socially disadvantaged, higher than older working age men (+26.2%) and significantly higher than the effect observed for older women (+18.4%). In contrast to other analysed groups the analysis indicates that the results for marital/cohabitation status and age are not statistically significant for younger men, suggesting that these factors have little influence on labour force participation for this cohort. For older working age men and women the effect of not living with a life partner is different. An older man is more likely to be inactive if they live alone without a life partner (+13.3%) whereas an older woman is 9.1% less likely. This suggests that a lack of familial networks of support negatively effects the participation outcomes of older NI men while for women it potentially creates a financial imperative towards economic activity irrespective of other factors.

Most of the results of the analysis are statistically significant at the one percent level implying some measure of reliability. The coefficients of determination of our models, indicate that the variables included explain around 27%-31% of the variation around the trend line depending on the group being analysed. This implies that there is around 70% of the effect that remains unexplained.

Conclusions

The results of the regression modelling indicate some interesting trends. Longer term ill-health is a consistent determinant of inactivity across all examined groups with the observed effect being substantially stronger for older women than for men of a comparable age, implying that ill health is less of a barrier to labour force participation for older men than it is for older women. Results from our modelling also indicate that older working age males are more likely than other cohorts to be inactive if they have no qualifications or limited skills.

The fact that not having qualifications corresponds to a higher likelihood of older age male inactivity could be a function of a number of different things, including a lack of jobs suitable for older men with limited skills or reluctance amongst low skilled employers to take on men nearing retirement age. In any event the analysis has demonstrated

that older working age males in Northern Ireland are more likely than others to be inactive if they have limited skills. It follows that policies designed to improve skill levels could have a greater impact on participation outcomes for this group and could help greater numbers of older working age men transition to retirement through continuous paid work.

Martin McErlean

For further information or queries please contact analyticalservicesunit@economy-ni.gov.uk

ⁱ [Regional Labour Market Statistics in the UK: April](#): Office for National Statistics (2018)

ⁱⁱ [Northern Ireland July Labour Market Report](#): Northern Ireland Statistics and Research Agency: Department for the Economy (2018)

ⁱⁱⁱ [Northern Ireland November Labour Market Report](#): Northern Ireland Statistics and Research Agency: Department for the Economy (2018)

^{iv} [Draft Programme for Government Framework 2016-2021](#): Northern Ireland Executive (2016)

^v [An anatomy of economic inactivity in Northern Ireland](#): Magill M. McPeake M.; Ulster University Economic Policy Centre (2016)

^{vi} [Economic Inactivity in Northern Ireland](#): Murphy E.; Northern Ireland Assembly Research and Information Service (2014)

^{vii} Patterns of Economic Activity Among Older men: Barham C.; ONS Labour Market Division (2002)

^{viii} [What qualification levels mean](#): UK Government