

Does retirement affect voluntary work provision? Evidence from the US, England and Ireland

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Abstract

Voluntary work is an important contribution for many non-profit organizations, such as charities, political and religious organizations. Older individuals make up a sizable share of the volunteer workforce, and volunteering is often regarded as an example of “active ageing”. In this study, we examine whether retirement has a causal effect on the frequency of voluntary work provision in three English-speaking countries – the US, England and Ireland. We draw on data from the HRS, ELSA and TILDA studies and analyse these datasets using a harmonized empirical approach. We use eligibility ages for old age pensions in an instrumental variables estimation to address potential confounding. We find that retirement increases the frequency of voluntary work provision in all three countries. This suggests that labour market policies aimed at increasing labour force participation at older ages might have unintended consequences for the size of the volunteer workforce.

Keywords: retirement, voluntary work, instrumental variables

1 Motivation

Population ageing is expected to lead to an ageing and shrinking workforce in many high income countries. Already, some countries, such as the United Kingdom (UK), experience labour force shortages in key occupations such as healthcare personnel (Scheffler et al., 2018). To mitigate some of these effects, policy makers in most high income countries aim to increase labour force participation at older ages and extend working lives (Dudel et al., 2018; Dudel and Myrskylä, 2017), e.g., by raising the state pension age. Yet, the transition into retirement often has a profound impact on older person's lives, and increasing evidence is suggesting that an increase in labour market activity at older ages can crowd out socially desirable non-market activities, e.g., informal care provision (Fischer and Müller, 2019) or childcare (Eibich and Siedler, 2016).

This comparative study considers the impact of retirement on voluntary work provision of older adults in the US, England and Ireland. Voluntary work is of major importance for the functioning of many non-profit organizations, such as charities as well as religious and political groups. Moreover, voluntary work, whether through an organization or informally between neighbours, can help maintain or even improve social cohesion. Volunteering is also associated with better health and cognitive functioning (Luo et al., 2019), and consequently voluntary work provision is a socially desirable activity. Older individuals are overrepresented in the volunteer workforce (Moen and Flood, 2014), which suggests a relationship between labour market activity and voluntary work provision.

From a theoretical perspective, voluntary work requires a time investment. Retirement reduces the opportunity costs of time, since income does no longer depend on working hours, thus decreasing the relative costs of non-market activities. We might therefore expect that retirement might lead to an increase in voluntary work provision.

In this study, we examine whether retirement has a causal effect on voluntary work provision. We use eligibility ages for old age pensions as instrumental variables to address endogeneity of retirement status. Drawing on data from the Health and Retirement Study (US), the English Longitudinal Study on Ageing (England) and The Irish Longitudinal Study on Ageing (Ireland), we conduct a harmonized analysis to facilitate comparisons across countries. Finally, we examine effect heterogeneity as well as characteristics of the complier population in each country.

2 Data

We use data from three longitudinal ageing studies - the US Health and Retirement Study (HRS), the English Longitudinal Study of Ageing (ELSA) and The Irish Longitudinal Study on Ageing (TILDA). We focus on individuals aged 50-79 in the period 2009-2016, i.e., we include data from HRS waves 10-12 (2010-2014), ELSA waves 5-7 (2010-2015) and TILDA waves 1-4 (2009-2016). We exclude individuals who reported to have never done any paid work from the analysis.

Our outcome variables are three binary indicators measuring the frequency of voluntary work provision – “any volunteering”, “regular volunteering”, and “frequent volunteering”. For the ELSA and TILDA data, these variables are defined based on the reported frequency of voluntary work provision (“any”, “at least once a month but less than once a week”, “at least once a week”), whereas in the HRS data, we define these indicators based on the self-reported number of hours spent on voluntary work in the past 12 months (“50 hours or more”, “100 hours or more”, “200 hours or more”). We define individuals as retired based on their self-reported labour force status. Individuals are defined as retired if they report their labour force status as retired, semi-retired or homemaker, whereas we define employed, self-employed, unemployed, permanently sick or disabled individuals as well as those reporting to be in education or training as not retired.

For the analysis of ELSA and TILDA data, we use state pension ages as instrumental variables for retirement. In England, the state pension age for men was 65 in the period studied in this manuscript. For women, the state pension age increased from 60 to 63 during the study period based on the date of birth. We use an indicator generated by the Institute for Fiscal Studies on whether individuals had reached the relevant state pension age at the time of the interview as an instrumental variable for retirement. In Ireland, the state pension age was 65 for men and women during the first two waves of the TILDA survey. The threshold was raised from 65 to 66 in January 2014, just before the collection of the third wave of the TILDA survey.

For the HRS data, we use eligibility ages for early and normal retirement as instrumental variables, following the approach adopted by Bonsang et al. (2012). Specifically, we generate binary indicators for whether individuals exceed the age thresholds of 62 (early retirement) or 65 (normal retirement). We also adjust the threshold at 65 to account for pension reforms, which increased this threshold from 65 to 66 for certain birth cohorts.

3 Methodology

We estimate instrumental variables regression models using two-stage least squares methods. We instrument retirement status using the eligibility ages for state pensions and social security benefits as described above. We control for a quadratic age trend as well as education, ethnicity and marital status to account for differences in observable demographic characteristics. Standard errors are clustered at the individual-level to account for the longitudinal structure of the data. As a robustness check, we also estimate fixed effects instrumental variables model, which confirm the robustness of our findings.

4 Preliminary results

Table 1 below shows the preliminary findings for all three datasets, both for the full sample as well as for men and women separately. First, we note that retirement leads to an increase in the provision of voluntary work in all three countries studied here. Moreover, the effects are quantitatively similar across countries, with point estimates ranging between 10 and 20 percentage points depending on the outcome. For the US, we find significant increases for all three frequencies of voluntary work provision. The increase is stronger for any or regular volunteering than for frequent volunteering. For regular volunteering, we find a stronger increase for men than for women, while for frequent volunteering the increase is larger for women. For the UK and Ireland, the effects seem primarily driven by men volunteering frequently. The estimated effects of retirement on any volunteering and frequent volunteering are smaller, and the change in the probability of providing any voluntary work is not statistically significant. The estimated effects for women are large, but not always precisely estimated.

We conduct a number of robustness checks, which confirm that our results are robust to changes in the definition of retirement, the age range of the sample, the choice of the age trend as well as the inclusion of individual fixed effects. We also examine effect heterogeneity and find that retirement only affects voluntary work provision of individuals with at least secondary education.

In summary, we find that retirement increases the likelihood to provide voluntary work in the US, the UK and Ireland. This suggests that policies to increase labour force participation at older ages can have repercussions for the size of the volunteer workforce, which need to be carefully considered.

Table 1: The effect of retirement on voluntary work

	HRS			ELSA			TILDA		
	Any volunteering	Regular volunteering	Frequent volunteering	Any volunteering	Regular volunteering	Frequent volunteering	Any volunteering	Regular volunteering	Frequent volunteering
<i>A. Full sample</i>									
Retired	0.210*** -0.038	0.170*** -0.032	0.088*** -0.023	0.179*** -0.04	0.204*** -0.038	0.161*** -0.032	0.048 -0.049	0.140** -0.048	0.129** -0.041
Wald F	335.77	335.77	335.77	661.4	661.4	661.4	482.6	482.6	482.6
N	43361	43361	43361	20,209	20,209	20,209	20,051	20,051	20,051
<i>B. Men</i>									
Retired	0.210*** -0.064	0.200*** -0.054	0.070* -0.038	0.093 -0.061	0.099. -0.058	0.144** -0.05	0.0418 -0.057	0.108* -0.055	0.155*** -0.046
Wald F	118.52	118.52	118.52	306.4	306.4	306.4	377.1	377.1	377.1
N	18601	18601	18601	9,293	9,293	9,293	9,287	9,287	9,287
<i>C. Women</i>									
Retired	0.200*** -0.049	0.140*** -0.041	0.100*** -0.029	0.134. -0.072	0.208** -0.068	0.149** -0.057	0.0666 -0.09	0.199* -0.089	0.0995 -0.076
Wald F	205.34	222.34	222.34	201.8	201.8	201.8	153.6	153.6	153.6
N	24760	24760	24760	10,916	10,916	10,916	10,764	10,764	10,764

Source: HRS Waves 10-12, ELSA Waves 5-7, TILDA Waves 1-4. Estimates come from a 2SLS regression model controlling for quadratic age, education, ethnicity and marital status. HRS results use age thresholds at 62, 65 and 70 as instruments, ELSA and TILDA results use state pension ages as instruments. Clustered standard errors in parentheses. Significance: . p<0.1, * p<0.05, ** p<0.01, *** p<0.001.

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