The Changing Nature of Work and Public Pension Coverage: Evidence from the US and Europe

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The concept of work conjures up the image of an employee heading to an office, factory floor, or store in exchange for a regular paycheck from an employer and a reasonable expectation of job continuity. In reality, work arrangements are more varied and volatile. Workers may be in alternative work arrangements, working as an independent contractor, on-call worker, or employee of a temporary help agency or contract firm. Work may be contingent, where workers have only a temporary contract or lack any formal or informal contract for ongoing employment. Workers may be offered low or irregular hours of work, making it difficult to plan their lives. Workers may be self-employed, reliant on their own ability to identify clients to sustain a flow of income.

Non-standard work – a term we define broadly to include alternative work, contingent work, and self-employment – offers different advantages and disadvantages relative to standard employment. For the employee, non-standard work offers greater flexibility and (in some cases) tax and legal advantages, but may also bring greater income instability and reduced access to employer-provided benefits. Importantly, eligibility for public pension benefits may be affected. Non-standard work may simply not accrue public pension entitlements, may shift the obligation of making pension contributions from employers to workers, or may offer greater scope for low earnings or unreported income, reducing future benefits.

We analyze how the rise of non-standard work may affect public pension coverage, framing our analysis as a case study of three developed economies – the US, the UK, and Germany – to explore the relevance of differences in pension rules. We also document trends in non-standard work and conduct a descriptive analysis of the well-being of self-employed vs. traditionally employed retirees.

How Non-Standard Work Affects Pension Coverage

In Germany, all traditionally employed workers participate in the main pillar of the pension system, in which benefits are directly proportional to earnings (up to a max) and financed by a 19% tax on wages, shared between employers and employees. The self-employed are generally not covered by the main pillar. Many professions have their own pension systems; however, the benefits in these systems can be quite small. The self-employed may voluntarily participate in the main pillar; this was fairly common until the 1990s but is now rare due to the low expected return on contributions. Interestingly, Germany is the only EU country in which the self-employed are not covered by the main pillar. Another category of German workers not traditionally covered by the main pillar is those in “mini jobs” – labor contracts with monthly earnings below 450 Euros – who represented 7% of the labor force in 2017. Since 2013, however, pension contributions have been mandatory for their employers (while remaining optional for them).

In the US, Social Security benefits are available to those with forty quarters of covered employment, are based on the worker’s highest thirty-five years of indexed earnings, and are funded by a tax of 6.2 percent of earnings each on employers and employees (up to a cap). Unlike in Germany, self-employed workers in the US are covered by Social Security and pay a 12.4 percent tax on net earnings (unless below $400). A worker may combine periods of work in employment and self-employment to attain eligibility. As provisions are essentially the same for those engaged in standard and non-standard work, the primary way in which non-standard work can affect benefits is if non-standard earnings are lower, more volatile, or more subject to underreporting. In the full version of this paper, we discuss the literature on self-employment earnings.

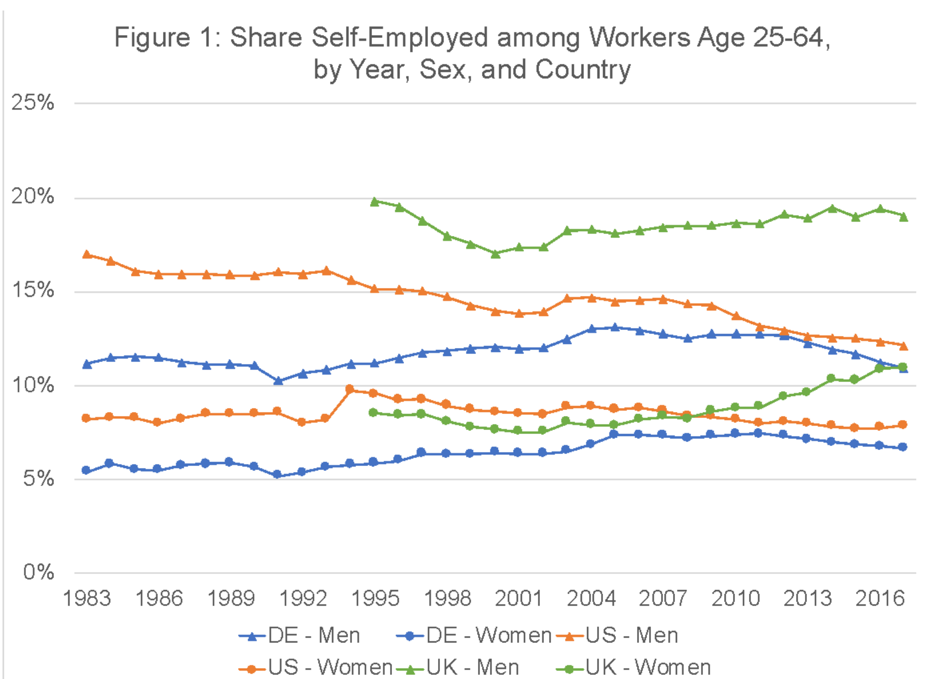
The UK currently has a flat rate state pension that is directly proportional to the years of contributions made – those with 35 years receive the full pension, those with fewer years receive a fraction of this (e.g., 20/35th for 20 years), and those with under 10 years are not eligible. Employees and the self-employed make contributions if they earn more than about $8,000 per year in wages or net profits; those below the threshold may be credited with contributions if in receipt of certain government benefits. As in the US, pension rules are now essentially the same for those in standard and non-standard work in the UK, but benefits can diverge due to differences in actual or reported earnings (or credits). It is important to note, however, that the UK's current pension system replaced a previous two-tier system in which the self-employed did not make contributions to the earnings-related tier. A self-employed worker who reached state pension age before April 2016 would thus have a much lower state pension than an employee with the same earnings history.

To explore the potential implications of earnings differences for pension entitlements in the UK under the current system, we estimate the share of workers of different types who made pension contributions (or received a credit) in 2016, using the UK Family Resources Study. We find that 25% of the self-employed did not earn enough to make pension contributions; adding in other credits, 19% of the self-employed did not accrue pension entitlements. Among employees, only 5% did not accrue pension entitlements. Making similar calculations for 2007, we show that the share of all workers not accruing pension entitlements has risen by about 15% (from 6% to 7% of all workers) over the past decade and estimate that one-third of the increase is due to the rising number of self-employed in the UK.

Trends in Non-Standard Work

Measuring trends in non-standard work has been hampered by a lack of data – in the US, the Contingent Worker Supplement to the Current Population Survey (used to measure alternative and contingent work) was not fielded between 2005 and 2017. We focus on measures that can be estimated consistently over time and across countries: the share of workers in self-employment, temporary or multiple jobs, and part-time work.

Despite the perception that non-standard work is rising over time, this trend is not evident in our measures. Since 2000, the share of workers in self-employment (as measured in household survey data) has declined by about 1.5 percentage points in the US, increased by about 2.5 percentage points in the UK, and remained roughly flat in Germany. The share of workers in temporary jobs and with multiple jobs is rising in Germany but flat or declining in the US and UK; part-time work is also flat or declining.



Former Self-Employment and Retiree Well-Being

We examine financial well-being in retirement by self-employment status as a preliminary effort to explore how pension rules may have affected the welfare of non-standard workers. We restrict our analysis to retirees with at least 10 years of work and define the self-employed as those who spent at least half of their career so engaged.

We begin by comparing the share of retirees who report being in financial distress and the share at risk of poverty (with equivalized household income less than 60% of the country median). In the US and UK, the mean values are fairly similar for the self-employed and the employed, but in Germany, these outcomes are much more common for the self-employed. We also find that median income and the ratio of median financial assets to income are lower for the self-employed than the employed in Germany, but not the US or UK. These findings are consistent with the lack of main pillar pension coverage for the self-employed in Germany, although they could also reflect other differences, such as in lifetime earnings. While our analyses are best viewed as descriptive due to the potential endogeneity of non-standard work, they suggest that engaging in such work may affect retirement security.

Table 1: Financial Outcomes of Self-Employed vs. Employed Retirees

	SE as % of Sample	% in Financial Distress			% At Risk of Poverty		
		Self-Emp	Emp	SE / Emp	Self-Emp	Emp	SE / Emp
DE	6%	0.26	0.15	1.73	0.37	0.16	2.31
US	10%	0.27	0.24	1.12	0.31	0.28	1.09

UK	6%	0.34	0.30	1.14	0.25	0.27	0.90