

The Double Shift of Financialization: Personal Debt & Multiple Jobholding

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Abstract

The share of multiple jobholders has risen persistently in recent years, with conventional labour supply frameworks emphasising the roles of business cycle fluctuations, earnings, and human capital. This paper links the growing but largely disconnected literatures on multiple jobholding and financialization to argue that higher household debt ratios incentivize a larger share of working households to pursue a second job as a precautionary strategy rather than risk retaliation and job loss by bargaining for higher pay in their primary job. The paper provides the first aggregate-level assessment of the association between household debt ratios and multiple jobholding rates using a country-level panel dataset covering 33 advanced and emerging economies from 2013 to 2024. We report evidence in which suggests that higher household debt ratios are robustly associated with higher multiple jobholding rates. Unemployment and inflation are also significant correlates.

Keywords: Multiple Jobholding; Household Debt; Financialization

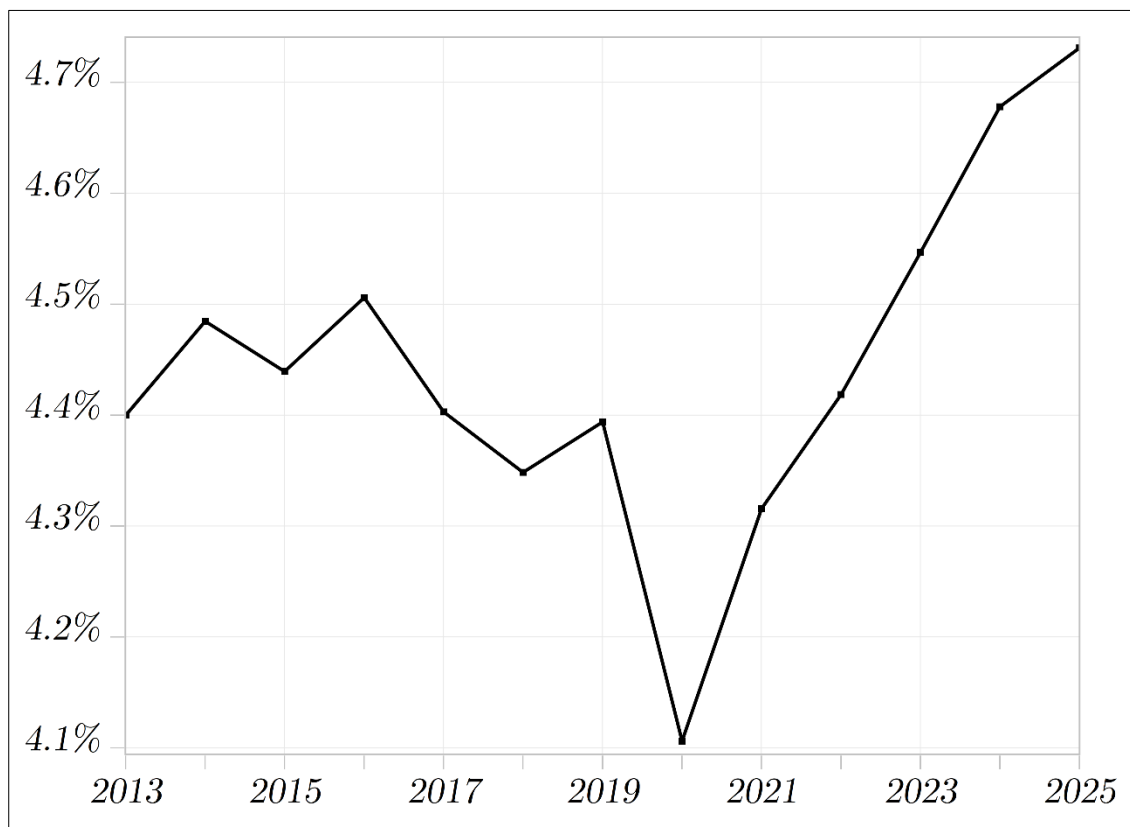
JEL Codes: J22; D14

1. Introduction

In the wake of the 2008 Global Financial Crisis and the COVID-19 recession, multiple jobholding has emerged as a persistent labour market trend across advanced and emerging economies, as economic hardship has been spreading to an increasing share of the working population. Despite being relatively understudied, this stylized fact is particularly worrying since the detrimental effects of holding multiple jobs on job quality, primary-job income, mental health, and workplace injuries, among other

aspects of well-being, are well established (Conen & Stein, 2021; Smith & McBride, 2021, 2023). Figure 1 reports the mean of multiple jobholders as a share of all employed persons for a panel of 33 economies covering the period 2013-2025.¹ The rate remained largely stationary at around 4.4 percent between 2013 and 2019, with a notable decline to 4.1 percent in 2020 when furlough schemes decreased labour market participation. Since then, and following the lift of economic relief measures implemented during COVID-19, multiple jobholding has increased consistently, climbing to over 4.7 percent in 2025.

Figure 1: Multiple Jobholding Rate (%), 2013-2025 - Mean



Notes: The multiple jobholding rate is defined as the percentage of persons with more than one job as a share of all employed persons. This includes people who had more than one job or business during the reference week, not due to a change of job or business. The longitudinal panel dataset includes Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Norway, Switzerland, the United Kingdom, Turkey, and the United States. *Sources:* Eurostat and Federal Reserve Economic Data (FRED).

¹ Our starting point is the harmonised multiple jobholding series provided by Eurostat (tqoe3a5), which provides the largest selection of countries for such an indicator. We then add the relevant, consistently defined multiple jobholding rate series (LNU02026620) for the United States from FRED. EU figures from Eurostat are mean values of four quarterly estimates from the EU-LFS (tqoe3a5; ages 15–64). US figure is constructed as the annual mean of twelve monthly NSA observations from BLS series LNU02026620 (CPS, ages 16+). Both identify reference-week simultaneous job or business holdings. The Eurostat definition excludes reference-week job changers, while the BLS categorization is structured around wage/salary combinations and under-represents dual self-employment. The implied downward bias for the US is well under one percentage point, which is small relative to the 2024 US-EU gap (5.2 Vs 4.0 percent).

It is worth noting that the mean value reported constitutes a very conservative estimate of the actual extent of multiple jobholding.² Scott et al. (2020) use data on reported earnings for the United States to include the shadow economy, and find that multiple jobholding stands at 18.2 percent –well above the Bureau of Labor Statistics’ official figure of 5 percent calculated using self-reported information from surveys. Reuschke (2026) uses administrative data for the United Kingdom and finds that the actual multiple jobholding rate is much higher than the official figures, reaching close to 20 percent for women and 16 percent for men.

The literature on multiple jobholding is organized primarily around the *push-versus-pull* framework, examining whether workers are pulled into additional employment by career development and personal fulfilment motives, or pushed into it by economic hardship (Bretz et al., 1994; Campion et al., 2020). Although early research, like Shishko and Rostker (1976) and Averett (2001), pointed to economic deprivation as a driver, subsequent empirical work has gradually focused more on how working households choose to have multiple jobs as a means of improving autonomy and pursuing career development (e.g., Renna & Oaxaca, 2006; Simard & Chênevert, 2010). As a result, financial hardship is not only left underspecified but also, implicitly or explicitly, treated as a transient individual condition without addressing its broader structural and systemic underpinnings. Interestingly, the issue of personal debt, and more broadly financialization, remains largely absent from the literature. A handful of notable exceptions mention the issue of debt as a potential underlying factor, but it is only Kauhanen (2021) who uses a binary variable for personal debt and finds that it increases the likelihood of multiple jobholding in Finland. Yet, in spite of the importance of this study, the absence of theorizing how debt is related to multiple jobholding, as well as the lack of accounting for the cumulative nature of indebtedness, leaves an important gap in our understanding.

This paper addresses that gap by linking the financialization of everyday life literature with the growing but relatively limited literature on multiple jobholding, arguing that household debt constitutes a systematic and overlooked push factor associated with higher multiple jobholding rates. Rising housing costs, student and healthcare debt, consumer credit expansion, and the retrenchment of welfare provision have made households increasingly reliant on debt to sustain consumption and access

² Country-specific figures reported in the Appendix are quite informative in this regard. Figure A1 shows that multiple jobholding rates have been increasing consistently throughout the 2013-2025 period in 17 out of 33 countries of our sample, while in 5 countries the rate follows a u-shaped pattern with an upward trend since 2020, as reported in Figure A2. In 11 countries the trend is largely downward despite upticks (see Figure A3). What is more important in terms of how conservative the reported mean estimate is, is that the rate appears to be very low, pulling the mean down, in countries where the shadow economy is larger and, thus, undeclared work is more prominent. Notably that is likely to be the case for Balkan countries. In countries with very limited shadow economies, like Denmark, Switzerland or the Netherlands, multiple jobholding rates reach 9.5, 10.5, and close to 9 percent, respectively – approximately two times the mean value of the sample.

essential goods and services over the past several decades (Gouzoulis, 2026). In this context, labour supply behaviour becomes conditioned by financial obligations. Requesting additional hours not only depends on the employer’s consent but is also costly for them, while negotiating a pay rise carries a risk of punitive retaliation in the form of wage cuts or even dismissal. For indebted working households, redundancy triggers personal debt default, making the latter risk especially severe. Under such circumstances, taking on an additional job supplements household income without exposing the worker to such a retaliation risk.

To examine this argument empirically, we use the unbalanced panel of 33 advanced and emerging economies (see Figure 1). Using a static GMM estimator, we investigate the relationship between household debt-to-GDP ratios and multiple jobholding rates, while controlling for unemployment, inflation, the labour share, and human capital between 2013 and 2024. Our findings provide evidence that household indebtedness is positively and significantly associated with multiple jobholding rates across all specifications. We also find that unemployment is a negative correlate, suggesting that economic downturns constrain opportunities for additional jobs. Finally, we find that inflation emerges as an additional positive correlate in several specifications, an aspect of economic hardship that is becoming increasingly prominent in the present global climate of persistently high inflation. The labour share and human capital effects remain largely inconclusive.

The rest of this paper is structured as follows. *Section 2* reviews the literature on multiple jobholding, highlighting the prominence of explanations that focus on its developmental side for skill acquisition, career progression, and work satisfaction. *Section 3* theorizes how the financialization of everyday life is a missing piece of the multiple jobholding puzzle. It argues that, in the current environment of labour market deregulation and, thus, heightened employer retaliation, the rise of personal debt ratios is likely to be closely associated with higher multiple jobholding rates. *Section 4* presents the data, variables, and empirical strategy, while *Section 5* reports and discusses the results that confirm our main hypothesis. Finally, *Section 6* concludes and outlines directions for future research.

2. Pushed or Pulled into Multiple Jobholding?

Multiple jobholding is becoming increasingly prominent across national labour markets, but it remains a largely understudied topic. The relatively limited literature primarily analyses the phenomenon through the lens of subjective motivations, and particularly the “*Push- Vs Pull-Based*” career motivations framework (Bretz, Boudreau, & Judge, 1994). The push-pull theory is typically formulated and used as a

psychological or motivational model, concerned with individual decisions, i.e., whether workers are indeed *pulled* into a second job by career opportunities and intrinsic motivations or actually *pushed* into multiple jobs by financial hardship (Campion et al., 2020). Building on this framework, the literature focuses on the rise of multiple jobholding as a phenomenon mainly linked to human capital development and career advancement, taking on projects that offer personal fulfilment, and, to a lesser extent, economic hardship.

While this perspective has generated valuable empirical insights, its individualist, motivation-based framing and its primary focus on pull factors related to career development and personal fulfilment tend to overlook the structural economic dynamics that shape labour supply behaviour (Bhayana et al. 2024). In particular, this approach abstracts from the structural economic conditions under which such “subjective motivations” are produced and generalized across social classes and income groups. Thus, reframing the push-pull theory of multiple jobholding as a structural labour market framework requires shifting the level of analysis from individual decision-making to macro-level structural transformation shaping industrial relations and class behaviour. In this context, the rest of this section argues that “push” and “pull” factors can represent systemic pressures and capacities embedded in economic structures rather than subjective motivations, focusing on how financialization shapes economy-wide economic hardship and, consequently, the aggregate labour supply for those already employed.

2.1 Career Development & Personal Fulfilment

While research examining the range of factors that shape the decision to engage in multiple jobholding has grown significantly in the past 20 years, the first attempts to engage with such questions date over 60 years ago. As elaborated in the systematic reviews of Campion et al. (2020) and Bhayana et al. (2024), since around 1960, over 100 studies have theorized or empirically examined the potential drivers of multiple jobholding, with the vast majority of studies coming from the disciplines of economics, management, and industrial and labour relations.³ In one of the earliest studies on this topic, Wilensky (1963) examines qualitatively how career development opportunities, work history, and economic hardship push workers into multiple jobs. Based on an interview sample of 119 white, male multiple jobholders, the study shows that economic deprivation is the main driving force. Since then, a relatively limited number of studies

³ Health scholars and sociologists have also engaged with the topic, but with a primary focus on how multiple jobholding affects health and other aspects of job quality and career outcomes (*ibid.*).

have explored how economic needs induce multiple jobholding (Shishko and Rostker, 1976; Averett, 2001; Kawakami, 2019; Campion and Csillag, 2022).

Most of the literature highlights “pull” factors, portraying multiple jobholding as a voluntary developmental and career-enhancing strategy through which individuals pursue human capital development, career mobility, and psychological fulfilment. Within this perspective, the “heterogeneous job hypothesis” or “job portfolio motive” suggests that workers combine jobs to access diverse experiences, facilitate transitions into preferred occupations, and enhance long-term employability (Renna and Oaxaca, 2006; Simard and Chênevert, 2010). Empirical studies on this topic show that career development considerations are often strong predictors of holding more than one job simultaneously for specific sub-groups of the workforce (Wu et al., 2009). In this sense, multiple jobholding is framed as an individualized optimisation strategy that generates human capital spillovers and functions as a stepping stone to improved primary employment outcomes (Panos et al., 2009, 2014).

By contrast, explanations centred on economic necessity tend to be more narrowly specified and theoretically constrained. Early work conceptualized multiple jobholding primarily as a labour supply response to insufficient earnings or working hours in a primary job. The so-called “hours-constraint hypothesis”, a framework that has received substantial empirical support (Shishko and Rostker, 1976; Dickey et al., 2009; Hirsch et al., 2016; Smith & McBride, 2021, 2023), suggests that workers take on additional employment when they are unable to reach their desired income level. Extensions of this model, like Paxson and Sicherman (1996), link multiple jobholding to occupational mobility and adjustments in working time under labour market constraints, while other studies confirm the continued importance of financial motives, particularly in advanced capitalist economies (Kimmel and Powell, 1999). However, these approaches often treat economic hardship as a transient, individual-level constraint rather than situating it within broader structural conditions.

Attempts to move beyond individual-level analyses are relatively limited and tend to focus on regional discrepancies or the association between business cycle fluctuations and increases in multiple jobholding. For example, Partridge (2002) finds that job growth reduces multiple jobholding rates only when it is accompanied by real wage growth, suggesting that multiple jobholding functions as an adjustment mechanism to regional labour market conditions rather than merely a short-term response to cyclical shocks. Evidence on the relationship between multiple jobholding and the business cycle remains mixed. Amuedo-Dorantes and Kimmel (2005) report little cyclical variation in male moonlighting, while female participation appears more responsive. More recent work finds that transitory business cycle fluctuations have limited effects,

whereas increases in local unemployment reduce multiple jobholding, particularly among workers who are not hours-constrained in their primary job (Renna et al., 2023). In contrast, evidence for European economies points to a procyclical pattern linked to labour market flexibility and the prevalence of non-standard employment (Livanos and Zangelidis, 2012; Zangelidis, 2014).

Even though the push–pull framework acknowledges the coexistence of pecuniary and non-pecuniary motives, the literature remains heavily skewed towards individual-level explanations (Kimmel and Smith Conway, 2001; Campion et al., 2020; Bhayana et al., 2024). Demographic factors such as gender and age are also shown to correlate with multiple jobholding, as recent work shows (Preston and Wright, 2020). Yet, these are typically incorporated as modifiers of individual choice rather than as indicators of structural labour market inequalities. Consequently, structural drivers such as wage stagnation, employment insecurity, and rising living costs are insufficiently theorized, and the role of personal indebtedness in shaping labour supply decisions is largely marginalized.

2.2 Multiple Jobholding as a Response to Economic Hardship

Overall, while the literature has made important contributions in highlighting the heterogeneity of motives underlying multiple jobholding, it remains analytically imbalanced. The dominant focus on career development and individual optimization contrasts with a comparatively thin treatment of economic hardship and its structural determinants at the systemic level, limiting our understanding of why multiple jobholding emerges and persists across different segments of the workforce.

Piasna et al. (2021) shift attention to job quality deficits and labour market inequality as key drivers of multiple jobholding. Through several dimensions of primary employment, including income, job security, working time control and working conditions, the authors find that poorer job quality, particularly low income and job insecurity, increases the likelihood of multiple jobholding, especially in countries characterized by labour market segmentation and weaker employment protection. Earlier evidence suggests that first and second jobs are not substitutes but differ in quality, and that second jobs are not temporary adjustments to changes in labour supply preferences but tend to persist over time (Böheim and Taylor, 2004). The quality and duration of multiple jobholding may reflect both individual motives and the wider structural conditions that shape these behavioural patterns.

However, few studies have linked economic hardship to multiple jobholding specifically through personal debt. Early research by Gringeri (2001), drawing on interviews with 60 rural families in the US, finds that multiple jobholding operates as

a strategy to sustain everyday living costs in low-wage rural communities with limited employment opportunities. Financial hardship, particularly medical debt, arising from lack of access to health insurance, is mentioned as a potential factor reinforcing reliance on additional jobs. Wu et al. (2009), in their study of the drivers of multiple jobholding in the UK from 1991 to 2001 using the British Household Panel Survey (BHPS), argue that the key driver of moonlighting is financial pressures rather than insecurity in the primary job. They also discuss that younger workers may be more likely to take on secondary employment, driven by obligations that include student loan and mortgage debt repayments for first homes. Atherton et al. (2016) examine dual employment among self-employed and employed individuals in the UK between 1991 and 2009, highlighting housing costs as key drivers of moonlighting decisions, particularly among the self-employed. Additional jobs are used to manage financial commitments, such as mortgage obligations, and to stabilize volatile earnings, enabling individuals to maintain rather than exit self-employment.

While the aforementioned papers mention personal debt as an aspect of financial pressures leading to multiple jobs, only a handful of empirical studies incorporate specific debt-related indicators in regression analysis. In the earliest empirical study in the area, building on the target income model of Simpson & Kapitany (1989), Weersink et al. (1998) use the May 1991 survey of dairy farm families in four nearby areas in New York and Ontario, and show that the farm’s financial position, measured by its debt-to-asset ratio, is a key determinant of off-farm labour supply decisions for farm operators. Similar patterns of off-farm multiple jobholding driven by farm debt in rural areas of New Zealand have been documented by Taylor & McCrostie Little (1995) and Robertson et al. (2008).

More recently, in the first study that explores the personal debt-multiple jobholding nexus beyond farm workers, Kauhanen (2021) examines the determinants and heterogeneity of multiple jobholding in Finland using individual worker-level data from Statistics Finland’s FOLK module for the period 2010-2016. The analysis uses a binary variable for personal debt (i.e., whether a person has debt or not) alongside other socio-economic covariates, and shows that being in debt increases the likelihood of multiple jobholding. In addition, it finds a strong positive association with precarious work contracts, like temporary contracts and part-time work, further highlighting economic necessity as an important driver of labour supply decisions.

In sum, evidence from regression analysis on the positive association between financial hardship in the form of personal indebtedness and multiple jobholding exists, but is relatively limited, focusing on specific sectors (farming), and national-level studies are almost absent, except for the study of Kauhanen (*ibid.*). Another blind spot

of the personal debt-multiple jobholding literature also remains the *under-theorization* of how personal debt is linked to multiple jobholding in the first place, beyond the obvious argument that economic strain pushes working households to increase their supply of working hours to deal with it. To a great extent, this gap reflects the lack of dialogue between the studies that focus on the personal debt-multiple jobholding nexus and the growing literature on the relationship between the financialization of (workers’) everyday lives and labour market outcomes.

3. Multiple Jobholding & The Financialization of Everyday Life

The term “financialization” started gaining prominence in the early 2000s, focusing primarily on the rapid growth of stock market financing, and how these undermine real investment and growth (Boyer, 2000; Lazonick and O’Sullivan, 2000; Stockhammer, 2004). The key mechanism is that as non-financial firms increasingly rely on stock market financing, they become increasingly focused on maximising shareholders’ returns, i.e., dividends, even if that comes at the expense of real investments. Thompson (2003, 2013) shifts the focus to the organizational level, arguing that shareholder primacy and the balance sheet imbalances created by it are more often than not shifted to the weakest stakeholder within the corporate ladder: workers. Accordingly, more recent empirical studies show that the decline of the labour share and the growth of personal income inequality are closely linked to the intensification of corporate financialization (Darcillon, 2016; Kohler et al., 2019; Guschanski and Onaran, 2025).

Nevertheless, the financialization of non-financial corporations is just one side of the financialization puzzle. Since the early 2000s, the financial sector has gradually and swiftly shifted its focus onto financing households through mass-marketed financial products, such as home mortgages and consumer credit (Van der Zwan, 2014). With the decline of the welfare state, the privatization of key services that drive prices for essentials up, and wages remaining stagnant for decades, working households are increasingly pushed into getting into debt to fund house purchases, education, healthcare expenses, auto loans, or even everyday expenses via payday loans and credit cards (Gouzoulis, 2026). The growing over-indebtedness of working households has profound implications for their economic behaviour at the workplace level.

The expanding literature on the financialization of households’ everyday lives–labour market choices nexus argues that the fear of defaulting on personal/household debt has been influencing worker militancy and workplace consent (Grady and Simms, 2019; Kim et al., 2019). Securing a steady flow of income, while indebted, is essential

for workers to repay their debt, even if that comes at the expense of working conditions or a lower salary, as more aggressive negotiations on these matters can lead to job loss and personal default. In other words, workers face a trade-off between employment stability and wage/working conditions. Evidence in favour of this argument has been provided in the context of the debates on falling labour shares, wage inequalities, declining unionization and strike activity, and the growth of insecure work contracts (e.g., see Guschanski and Onaran, 2016; Wood, 2018; Kohler et al., 2019; Gouzoulis, 2021, 2023, 2024; Gouzoulis et al. 2023, 2024; Barradas 2025a,b, 2026; Gouzoulis and Nikolopoulou, 2026; Wong et al., 2026). Returning to the closing point of the previous sub-section, the question that emerges is: how can the financialization of everyday life-labour market literature inform the multiple jobholding debate?

As discussed above, it is logical and well-established that workers facing economic hardship are likely to increase their labour supply to earn more income and deal with their financial obligations (e.g., see Bunn et al. 2021). One option in such a case is for workers to ask their current employer for additional work hours. Where there is genuine need for additional labour hours for the employer, the “less bad” outcome for workers is that the employer declines the request, since overtime pay from an incumbent worker comes at a higher rate than hiring a new part-time employee. Especially in less regulated, liberal market economies where welfare is conditional on having a job contract, employers have additional incentives to not increase work hours for existing workers, particularly part-timers. For example, in the United States, workers become eligible for benefits only when they are averaging 30 hours or more per week, which are paid by their employer.

The worst outcome for workers asking for additional work hours is the case of *employer retaliation*, which links to the job loss–personal debt default–worker consent mechanism described above. While illegal, employer retaliation against workers is becoming a worryingly widespread trend, since labour enforcement and inspections have been dropping notably or, at best, remain inadequately stable (Standaert, 2025; Kirby et al., 2025; ETUC, 2026). As a result, retaliatory actions by employers can often go unnoticed and unpunished. In light of this, reports have documented that workers tend to avoid conflicts with their managers to steer clear of possible retaliation. For instance, Bernhardt et al. (2009) focus on a sample of workers in low-wage industries in Chicago, Los Angeles, and New York City and find that 43 percent of the workers who attempted to form a union faced retaliation from their employers. At the same time, 20 percent of the workers surveyed reported that they avoided making a complaint about working conditions and minimum wage violations, half of whom stated that their reluctance was due to the fear of having their wage or work hours punitively reduced. Milkman et al. (2010) surveyed 1,815 low-wage workers in Los Angeles and

found that approximately half of those who made a complaint or attempted to unionize faced retaliation, while 20 percent of them did not complain to avoid retaliation. Among those who did face retaliation, 60 percent were threatened with being fired and reported to immigration authorities, and 35 percent were fired or suspended. In a smaller-scale survey of 900 workers in San Diego, Esbenshade et al. (2024) report that just 11 percent of workers who experienced wage theft filed a complaint, since those who did had their hours reduced, were given worse shifts, or lost their jobs.

Retaliation is clearly more prominent in liberal market economies, like the United States, where dismissals are almost entirely unregulated, but employment protection has declined significantly across OECD countries, particularly in countries that enforced austerity programmes after the 2008 GFC. Thus, employer retaliation has become more possible across the board, despite studies outside the United States remaining scarce. One notable exception is the study of Foster et al. (2018) for Alberta, Canada, which documents comparatively lower overall workplace retaliation fear levels, but with a rising trend when the demands are expensive or disruptive for the employer. They also note, citing Lola (2017), that *fear of employer retaliation is linked to economic hardship*.

Building on this assumption and the related evidence, the link between economic hardship and workers' reluctance to risk employer retaliation in today's economy is closely linked to the financialization of everyday life, and the growth of over-indebtedness across working households. Overall, therefore, higher levels of personal indebtedness relative to income imply that a larger share of the workforce is likely to *require additional income* while simultaneously being *more reluctant to risk their primary job* by demanding higher wages or improved working conditions. Hence, where this trade-off is widespread across a country's workforce, a larger share of it is likely to rely on obtaining a second job as a precautionary strategy, rather than demanding improvements in their working conditions and higher wages from their primary employer. All things considered, our key hypothesis is that *higher household debt-to-income ratios will be positively associated with higher multiple jobholding rates*.

4. Empirical Strategy

Our key hypothesis developed in the previous section, i.e., that higher household debt-to-income ratios are positively associated with multiple jobholding rates, is examined here as a first, broad assessment in an aggregate setting, using a cross-national panel of 33 countries observed over time (see Figure 1). If the mechanism we propose operates as hypothesised, it should be discernible in the relationship between household

indebtedness and multiple jobholding rates across a wide range of institutionally diverse economies. Should the hypothesised association hold at the aggregate, macro level, this would provide a first, partial validation of our hypothesis and lay the foundations for more granular individual- or sectoral-level tests in future research.

4.1 *Specification, Data, & Hypotheses*

The baseline specification used to assess the association between multiple jobholding, household debt, and the rest of the regressors is the following:

$$\text{Multiple Jobholding Rate} = f(\text{Household Debt, Labour Share, Human Capital, Unemployment, Inflation})$$

where the *Multiple Jobholding Rate* is the percentage of persons with more than one job as a share of all persons in employment (see Figure 1).

Household Debt is the household debt, loans, and debt securities (%GDP) from the IMF's Global Debt Database. As explained throughout the previous section, we expect this variable to be positively associated with the multiple jobholding rate.

To control for labour's income relative to total output, we include the *Labour Share* (adjusted wage share; %GDP) from AMECO. We expect this variable to be, *ceteris paribus*, negatively associated with multiple jobholding, since a higher labour share indicates that workers are capturing a greater proportion of output as wage income. This implies that earnings from primary employment are more likely to be sufficient to meet living costs, reducing the need for supplementary work to boost total income. We use the labour share to capture workers' relative claim on output and is directly comparable across countries with differing income levels and currencies. As a further test, we also re-run all baseline specifications that include the labour share and replace it with the *Real Compensation per Employee, Total Economy* from AMECO. Due to lack of data for this indicator for Turkey, we drop the country from the sample.

We also include *Unemployment*, i.e., the percentage of the total labour force that is unemployed, and *Inflation*, which is the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services (constant 2015 prices). Both variables come from the World Bank database. We expect the unemployment rate to be negatively associated with multiple jobholding rates, since higher unemployment reflects labour market slack. As more jobseekers compete for a limited pool of vacancies, it becomes harder for individuals who already hold one job to secure or retain a second. Inflation is expected to be positively associated with multiple

jobholding rates, since rising prices erode the real value of wages. Where nominal wage growth fails to keep pace with inflation, workers face declining purchasing power and are more likely to seek additional employment to maintain their standard of living.

Finally, *Human Capital* is proxied by the Human Capital Index from Barro and Lee (2013). Since this index is built from average schooling years and returns to education, both of which evolve gradually, on a generational rather than annual timescale, it exhibits minimal variation over the relatively short time dimension of our panel. Given this limited within-panel variation, the variable is unlikely to be a strong predictor. Nonetheless, we include it to control for cross-country differences in human capital and to align with standard practice in the literature.

Subject to data availability for all variables, our final dataset is an unbalanced panel that covers 33 advanced and emerging economies over the period 2013-2024, with the main constraint being the household debt ratio series of the IMF that ends in 2024.⁴ The countries included in our sample are Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Norway, Switzerland, the United Kingdom, Turkey, and the United States. Table 1 below reports the descriptive statistics of our dataset.

Table 1: Descriptive Statistics

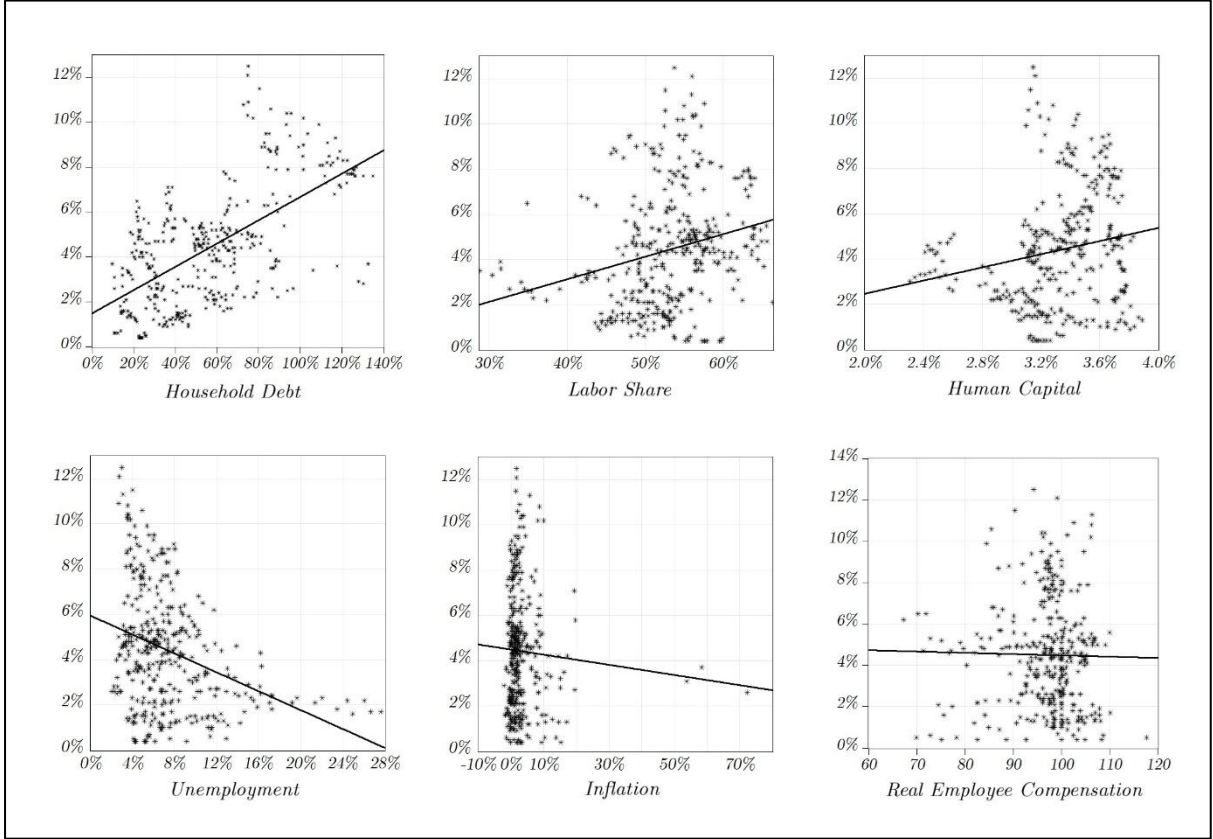
	<i>Multiple Jobholding</i>	<i>Househol d Debt</i>	<i>Labour Share</i>	<i>Human Capital Index</i>	<i>Unemployment</i>	<i>Inflation</i>	<i>Real Employee Compensation</i>
Mean	4.42	56.54	53.02	3.34	7.26	3.21	97.04
Median	4.30	53.43	53.30	3.37	6.18	1.73	98.33
Maximum	12.50	134.96	66.33	3.89	27.69	72.31	117.78
Minimum	0.40	9.64	28.73	2.31	2.02	-2.10	67.23
Std. Deviation	2.57	30.26	6.20	0.33	4.09	6.30	7.45
Skewness	0.62	0.61	-0.78	-0.84	2.08	6.72	-1.37
Kurtosis	2.89	2.64	4.76	3.73	8.74	63.20	5.58
Observations	391	395	396	363	396	396	377

As a first step of our preliminary analysis, Figure 2 reports bivariate scatter plots between the dependent variable and each independent variable, including a fitted linear

⁴ OECD employment protection variable (dismissal protection) problematic in terms of country coverage and time (2013-2019). But, overall the range of existing series shows a range of 0-3.5, with the variable's scale ranging between 0-6 (no regulation to fully strict).

trend. These plots provide an initial visual assessment of linearity, outliers, and overall association before estimating the multivariate regression models.

Figure 2: Scatter Plots (Stacked) – Multiple Jobholding Vs Regressors



Notes: The Y axis shows the multiple jobholding rate, and the X axis shows the respective regressor (see labels).

Household debt exhibits a strong positive correlation with multiple jobholding, stronger than that observed for any other independent variable in our dataset. The labour share and human capital are also positively correlated with multiple jobholding, but these associations are notably weaker and display substantial dispersion, which calls into question the robustness of a simple fitted linear trend. The bivariate correlation between inflation and multiple jobholding appears to be negative.⁵ Last, unemployment is fairly strongly and negatively correlated with multiple jobholding. The correlation coefficient matrix is reported in Table A1 of the appendix.

4.2 Regression Approach

Our empirical analysis draws on an unbalanced macroeconomic panel of 33 countries observed over 12 time periods. A key challenge is endogeneity, as several explanatory variables are plausibly determined simultaneously with multiple jobholding. Debt pressure is theoretically a key driver of multiple jobholding, but the additional income

⁵ This bivariate relationship seems largely driven by extreme outliers, like Turkey's exceptionally high inflation rates between 2022 and 2025, which exceeded 50% and peaked at around 72%.

from a second job may also help workers reduce their debt burden. Similar feedback can be assumed for the wage share, human capital, and unemployment. Since standard panel estimators, including fixed effects, may then suffer from reverse feedback bias, we employ the Generalized Method of Moments (GMM) estimator (Hansen, 1982), using earlier values of the endogenous variables as instruments. We use a static specification given the short time dimension of the panel. All explanatory variables are treated as potentially endogenous and instrumented with their one- and two-period lags. Restricting the lag structure to two periods prevents instrument proliferation, which would weaken the Hansen J-test. The estimator uses a White period weighting matrix and period-SUR GLS weights, which correct for serial correlation in the residuals within countries.⁶ We prefer one-step to two-step GMM because the latter’s weighting matrix is imprecisely estimated in panels of moderate cross-sectional size, offering little practical efficiency gain. The estimates are interpreted as conditional associations rather than causal effects.

5. Results & Discussion

Table 2 reports our baseline estimates. We estimate all possible pairwise and higher-order combinations of the explanatory variables, in addition to the parsimonious baseline, to assess whether potential multicollinearity between regressors generates biased estimates. The stability of the coefficients across specifications indicates that the findings are not driven by such biases or any particular combination of controls. In terms of our main finding, the household debt coefficient is consistently positive across all 12 model specifications, with point estimates ranging narrowly from 0.036 to 0.056. All estimates are statistically significant at the 0.1% level. In substantive terms, a ten percentage point increase in the household debt-to-GDP ratio is associated with an increase in the multiple jobholding rate of between 0.36 and 0.56 percentage points. This association reflects cross-country variation in household debt ratios and multiple jobholding rates, consistent with the persistent nature of household debt-to-GDP ratios over the relatively short time dimension of our macro-level panel. Regarding the unemployment rate coefficient, it is negative and statistically significant across all specifications in which it appears, namely specifications (4), (7), (9), (11), and (12). The respective point estimates range from -0.142 to -0.217 , and their statistical significance is at or below the 0.1% level across all five cases. Concerning the labour share, its coefficient is predominantly negative in specifications in which it is included, but is statistically significant in almost all specifications included. The coefficients for

⁶ An auxiliary regression with period fixed effects yields very low Durbin–Watson statistics across specifications, indicating substantial serial correlation in the residuals (see Table A3).

inflation are positive across all five specifications in which it appears, but is statistically significant only in specification (5). The results for the human capital index are largely inconclusive, with a consistently positive but statistically non-significant coefficient across all specifications in which it appears. In terms of post-estimation diagnostics, the Hansen-Sargan J-tests support instrument validity across all specifications, with borderline p-values only in model (8) – consistent with the known sensitivity of the test to instrument count.

Table 2: Baseline Models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Household Debt</i>	0.045*** (<0.001)	0.036*** (0.001)	0.048*** (<0.001)	0.052*** (<0.001)	0.047*** (<0.001)	0.043*** (<0.001)	0.049*** (<0.001)	0.049*** (<0.001)	0.050*** (<0.001)	0.056*** (<0.001)	0.053*** (<0.001)	0.056*** (<0.001)
<i>Labour Share</i>		-0.061 (0.304)				-0.046 (0.378)	0.059 (0.431)	0.083 (0.201)	0.001 (0.993)	0.079 (0.248)	0.077 (0.122)	0.049 (0.273)
<i>Human Capital Index</i>			0.963 (0.099)			1.49 (0.054)			0.057 (0.941)	0.912 (0.348)		-0.783 (0.549)
<i>Unemployment</i>				-0.164*** (<0.001)			-0.142*** (<0.001)		-0.153*** (<0.001)		-0.215*** (<0.001)	-0.217* (0.018)
<i>Inflation</i>					0.135* (0.036)			0.127 (0.117)		0.055 (0.549)	0.159** (0.006)	0.123 (0.102)
<i>Constant Term</i>	1.607** (0.002)	5.466 (0.136)	-1.927 (0.314)	2.219*** (<0.001)	1.538** (0.004)	-0.922 (0.726)	-0.965 (0.812)	-3.109 (0.411)	1.871 (0.528)	-6.641 (0.066)	-1.457 (0.566)	2.066 (0.587)
<i>Adjusted R²</i>	0.106	0.04	0.102	0.189	-0.29	0.095	0.096	-0.356	0.187	-0.052	-0.631	-0.225
<i>Unadj. R²</i>	0.109	0.05	0.108	0.194	-0.28	0.103	0.105	-0.368	0.199	-0.066	-0.651	-0.247
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	10	10	9	10	10	9	10	10	9	9	10	9
<i>Observations</i>	324	324	293	324	324	293	324	324	293	293	324	293
<i>Durbin-Watson Stat.</i>	2.021	1.889	2.052	1.997	1.918	1.987	2.038	1.993	1.959	1.997	1.990	1.959
<i>Hansen-Sargan J-Stat.</i>	0.188 (0.664)	0.552 (0.759)	0.468 (0.791)	2.704 (0.259)	1.960 (0.375)	0.486 (0.922)	5.953 (0.114)	7.543 (0.056)	6.356 (0.174)	7.101 (0.131)	5.559 (0.235)	5.808 (0.325)
<i>Instrument Rank</i>	3	5	5	5	5	7	7	7	9	9	9	11

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the one-step Generalized Method of Moments (GMM) estimator with a White period weighting matrix, period-SUR GLS weights, and White period (cross-section cluster) standard errors. Instruments include all respective regressors with two additional lags and a constant term. Weighted test statistics reported.

In Table 3, we re-estimate all twelve specifications using one-period lags of all explanatory variables as a robustness check for potential endogeneity biases. The results remain broadly unchanged compared to the baseline results reported in Table 2. The coefficient of the lagged household debt is positive and statistically significant across all twelve specifications. Its point estimates range from 0.029 to 0.052, and statistical significance is at the 0.1% level in ten specifications and the 1% level in the remaining two. The coefficient of the lagged unemployment rate is negative all five specifications in which it appears, with point estimates ranging from -0.096 to -0.177 . However, it is found to be statistically significant in three out of five equations. The lagged coefficient for inflation shows more consistent statistical significance than its contemporaneous counterpart, with positive coefficients in all specifications, but statistically significant in only one. The lagged labour share and human capital index remain statistically non-significant throughout. The Hansen-Sargan J-test is passed across all twelve lagged specifications, resolving the borderline rejections observed in Table 2. In sum, these additional estimations confirm the credibility of the baseline results, especially regarding our main variable of interest, the household debt-to-GDP ratio, and largely overperform the baseline models.

Table 3: Models with Lagged Regressors

	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
<i>Household Debt</i> $t-1$	0.029** (0.002)	0.031*** (0.001)	0.029** (0.003)	0.042*** (<0.001)	0.043*** (<0.001)	0.031*** (<0.001)	0.046*** (<0.001)	0.051*** (<0.001)	0.047*** (<0.001)	0.052*** (<0.001)	0.049*** (<0.001)	0.048*** (<0.001)
<i>Labour Share</i> $t-1$		-0.019 (0.882)				-0.032 (0.754)	-0.058 (0.162)	0.158 (0.202)	-0.071 (0.092)	0.166 (0.227)	0.114 (0.396)	0.092 (0.381)
<i>Human Capital Index</i> $t-1$			1.144 (0.121)			1.539 (0.064)			-0.157 (0.875)	0.554 (0.580)		0.033 (0.969)
<i>Unemployment</i> $t-1$				-0.143*** (<0.001)			-0.159*** (<0.001)		-0.177* (0.015)		-0.096 (0.145)	-0.125 (0.063)
<i>Inflation</i> $t-1$					0.069* (0.014)			0.045 (0.254)		0.037 (0.446)	0.058 (0.230)	0.063 (0.089)
<i>Constant Term</i>	2.369*** (<0.001)	3.337 (0.659)	-1.460 (0.564)	2.588*** (<0.001)	1.456** (0.003)	-1.127 (0.836)	5.672* (0.012)	-7.886 (0.292)	7.066 (0.101)	-10.175 (0.297)	-4.516 (0.564)	-3.122 (0.692)
<i>Adjusted R²</i>	0.159	0.144	0.157	0.276	0.210	0.138	0.228	-0.145	0.187	-0.234	0.004	0.069
<i>Unadj. R²</i>	0.162	0.150	0.163	0.281	0.215	0.147	0.236	-0.157	0.199	-0.217	0.017	0.085
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	9	9	9	9	9	9	9	9	9	9	9	9
<i>Observations</i>	292	292	292	292	292	292	292	292	292	292	292	292
<i>Durbin-Watson Stat.</i>	1.975	1.951	1.980	2.013	1.979	1.961	1.985	1.878	1.969	1.880	2.021	2.018
<i>Hansen-Sargan J-Stat.</i>	1.398 (0.237)	3.633 (0.163)	1.284 (0.526)	1.969 (0.373)	3.911 (0.142)	3.287 (0.349)	2.077 (0.557)	1.961 (0.580)	2.369 (0.668)	2.631 (0.621)	3.558 (0.469)	5.338 (0.376)
<i>Instrument Rank</i>	3	5	5	5	5	7	7	7	9	9	9	11

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the one-step Generalized Method of Moments (GMM) estimator with a White period weighting matrix, period-SUR GLS weights, and White period (cross-section cluster) standard errors. Instruments include all respective regressors with two additional lags and a constant term. Weighted test statistics reported.

As an additional round of robustness checks, we replace the labour share with real compensation per employee in the baseline models. Overall, all main findings remain almost unchanged in terms of both coefficient size, signs, and statistical significance. Real employee compensation is found to be more consistently negative than the labour share, as its coefficient is negative in all specifications and statistically significant in three out of eight equations. It is worth noting that despite the inclusion of this variable slightly limits the sample due to missing data for Turkey, it overall improves the goodness-of-fit of all models.

Table 4: Robustness Checks

	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
<i>Household Debt</i>	0.044*** (<0.001)	0.046*** (<0.001)	0.055*** (<0.001)	0.056*** (<0.001)	0.056*** (<0.001)	0.056*** (<0.001)	0.059*** (<0.001)	0.062*** (<0.001)
<i>Real Employee Compensation</i>	-0.037 (0.116)	-0.385 (0.127)	-0.029 (0.197)	-0.056** (0.002)	-0.029 (0.162)	-0.051* (0.046)	-0.043* (0.031)	-0.039 (0.089)
<i>Human Capital Index</i>		1.523 (0.075)			-0.617 (0.528)	0.869 (0.396)		-0.538 (0.593)
<i>Unemployment</i>			-0.206*** (<0.001)		-0.223*** (<0.001)		-0.217*** (<0.001)	-0.199*** (<0.001)
<i>Inflation</i>				-0.148*** (<0.001)		0.121 (0.057)	0.102*** (<0.001)	0.149** (0.006)
<i>Constant Term</i>	5.34 (0.055)	0.088 (0.971)	5.083* (0.043)	6.250*** (<0.001)	7.186 (0.088)	2.696 (0.586)	6.475** (0.003)	7.376 (0.138)
<i>Adjusted R²</i>	0.111	0.086	0.169	0.104	0.132	0.139	0.163	0.175
<i>Unadj. R²</i>	0.117	0.096	0.178	0.113	0.145	0.151	0.174	0.189
<i>Cross-Sections</i>	32	32	32	32	32	32	32	32
<i>Time Periods</i>	10	10	9	10	10	9	10	9
<i>Observations</i>	307	284	307	307	284	284	307	284
<i>Durbin-Watson Stat.</i>	2.054	2.044	2.003	1.989	1.985	1.919	2.002	1.944
<i>Hansen-Sargan J-Stat.</i>	2.318 (0.314)	3.751 (0.289)	3.103 (0.376)	3.366 (0.338)	3.475 (0.482)	2.344 (0.673)	0.919 (0.922)	4.125 (0.531)
<i>Instrument Rank</i>	5	7	7	7	9	9	9	11

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the one-step Generalized Method of Moments (GMM) estimator with a White period weighting matrix, period-SUR GLS weights, and White period (cross-section cluster) standard errors. Instruments include all respective regressors with two additional lags and a constant term. Weighted test statistics reported.

In total, our findings confirm that household indebtedness is robustly and positively associated with multiple jobholding across countries, and that this association is not sensitive to multicollinearity, control set, or internal-instrument lag structure. These results are consistent with the main mechanism presented in the earlier sections of this paper: as personal debt obligations relative to primary employment income *accumulate over time and across countries*, secondary employment becomes an instrumental strategy for meeting debt service

requirements without the risk of demanding a higher wage at the primary job, which could lead to permanent replacement and personal default.

The second key finding that emerges from our estimations is that higher unemployment rates are negatively associated with multiple jobholding, a result consistent with high unemployment constraining access to secondary employment, even among workers facing pressure to seek it. This finding has important implications for the welfare of indebted households, who face the sharpest financial pressure during downturns, precisely when secondary employment opportunities are most scarce.

Concerning the rest of the variables included, the results regarding inflation provide partial support for the cost-of-living channel, which becomes more consistently significant when the coefficient is lagged, a pattern that may reflect delayed responses. The results for the labour share are largely inconclusive, indicating that the functional distribution of income has no robust independent association once financial and labour market conditions are controlled for. The results for the human capital index are similarly inconclusive, which is not surprising given that the average years of schooling per person have barely changed since 2013 in the countries included in the sample.

Overall, our estimations provide macro-level evidence that aggregate multiple jobholding rates are positively associated with household indebtedness and, partially, with inflationary pressures, conditional on labour market access constraints over the business cycle. At the same time, our results show that higher aggregate levels of human capital in an economy are not associated with higher multiple jobholding rates, suggesting that, at least at the macro level, already-employed persons are *rather pushed than pulled* into taking on additional jobs.

6. Conclusions

This paper examines the macroeconomic determinants of multiple jobholding rates, focusing on the overlooked impact of personal indebtedness as a factor that pushes employed persons into taking on additional jobs. To do so, we integrate insights from the financialization of everyday life literature into the *push-versus-pull* motivations framework that has become the standard framework for analysing the drivers of multiple jobholding rates. The recently growing literature on the intersections between financialization and labour relations shows that the increasing penetration of financial markets and instruments into household balance sheets has made workers structurally dependent on financial markets to meet basic consumption and housing needs. As a result, they prioritize employment stability to repay their debts over negotiating wage increases and better working conditions. In this paper, we extend this thesis and argue that obtaining a second job can be a sensible precautionary strategy for indebted working households, as more aggressive wage negotiations with the

primary employer often come with a risk of becoming redundant, which, in turn, increases the chances of a personal debt default. As such, we argue that personal debt operates as a systematic push factor for multiple jobholding that existing research has largely overlooked, by treating financial hardship either as a binary condition or as a residual category rather than as a cumulative constraint.

Empirically, rather than treating financial hardship as a binary condition, we disaggregate it into its constituent components, cumulative household debt obligations relative to income and inflationary pressures, and estimate their association with multiple jobholding rates using a longitudinal panel of 33 advanced and emerging economies over the period 2013–2024. To the best of our knowledge, this is the first study to examine the association between household debt ratios and multiple jobholding rates in a cross-national, longitudinal setting. Our most consistent finding is that household debt is positively associated with multiple jobholding rates, with all model specifications yielding statistically significant coefficients. Our second most robust finding is that unemployment rates are negatively associated with multiple jobholding rates across all specifications. This result highlights the impact of business cycle fluctuations, since high unemployment during downturns constrains access to additional jobs, even among workers facing pressure to seek them. We also find some evidence that inflation partly induces higher multiple jobholding, while the estimates for the labour share and the human capital index are largely inconclusive. All things considered, our macro-level results are more consistent with the hypothesis that workers already in employment are *pushed* into taking on additional jobs by financial necessity, rather than *pulled* toward them by aspirations for development or career advancement.

Needless to say, our analysis is a first step toward establishing theoretically and empirically that personal indebtedness is an important overlooked factor in the multiple jobholding debate, and further analysis is necessary. As such, our work opens up several avenues for future research. First, our findings document a cross-national association, since the within-country dimension is relatively limited over this short period, as expected for macroeconomic series at $T=12$, and disentangling underlying mechanisms is left to future micro-level work. The use of micro-level data would allow examining the relationship between multiple jobholding and personal indebtedness using quasi-experimental methods, while also addressing within-country heterogeneity. In this way, differences across the income distribution and among different demographic groups could be investigated, shedding light on the potential links between debt-driven employment decisions and broader patterns of economic inequality. Second, a micro-level analysis would also allow us to decompose personal debt and examine how specific types of debt affect workers' labour supply decisions. This, in turn, could reveal the forms of indebtedness that most likely push workers into additional employment, offering a more granular understanding of the channels through which financial

obligations shape labour market behaviour. Finally, examining the potential overlap between multiple jobholding and informal work is particularly important, especially in emerging economies where informal labour markets remain substantial, and boundaries between formal and informal income-supplementing activities are often blurred.

References

- Aalbers, M.B. (2017). The variegated financialization of housing. *International Journal of Urban and Regional Research*, 41(4), 542–554.
- Amuedo-Dorantes, C., & Kimmel, J. (2005). *Moonlighting behavior over the business cycle*. IZA Discussion Papers No. 1671.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2), 277–297.
- Atherton, A., Faria, J.R., Wheatley, D., Wu, D., & Wu, Z. (2016). The decision to moonlight: Does second job holding by the self-employed and employed differ? *Industrial Relations Journal*, 47(3), 279–299.
- Baah-Boateng, W., Oduro, A.D., & Adjei, P. (2013). Determinants of moonlighting in Ghana: An empirical investigation. *African Review of Economics and Finance*, 4(2), 176–202.
- Barro, R.J., & Lee, J.W. (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics*, 104, 184–198.
- Bernhardt, A., Milkman, R., Theodore, N., Heckathorn, D.D., Auer, M., DeFilippis, J., González, A.L., Narro, V., Perelshteyn, J., Polson, D., & Spiller, M. (2009). *Broken laws, unprotected workers: Violations of employment and labor laws in America's cities*. UCLA: Institute for Research on Labor and Employment. Available at: <https://escholarship.org/uc/item/1vn389nh>
- Bhayana, C., Gopakumar, K.V., & Vohra, N. (2024). Embedding the individual within the career ecosystem: A systematic review of multi-level antecedents of multiple job holding. *Human Resource Management Review*, 34(3), 101028.
- Bobek, A., Mikuš, M., & Sokol, M. (2023). Making sense of the financialization of households: State of the art and beyond. *Socio-Economic Review*, 21(4), 2233–2258.
- Böheim, R., & Taylor, M.P. (2004). *And in the evening she's a singer with the band: Second jobs, plight or pleasure (tech. rep. No. 2004-03)*. ISER Working Paper Series.
- Boyer, R. (2000). Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis. *Economy and Society*, 29(1), 111–145.
- Bunn, P., Chadha, J., Lazarowicz, T., Millard, S., & Rockall, E. (2021). *Household Debt and Labour Supply*. Bank of England, Staff Working Paper No. 941.
- Campion, E.D., Caza, B.B., & Moss, S.E. (2020). Multiple jobholding: An integrative systematic review and future research agenda. *Journal of Management*, 46(1), 165–191.
- Conen, W., & Stein, J. (2021). A panel study of the consequences of multiple jobholding: enrichment and depletion effects. *Transfer: European Review of Labour and Research*, 27(2), 219–236.
- Dickey, H., Watson, V., & Zangelidis, A. (2009). *What triggers multiple job holding? An experimental investigation*. MPRA Paper 17575, University Library of Munich

- Esbenshade, J., Cardosi, A., Magallon Estrada, U., & Gannon, D. (2024). *Unpaid and Unaware: Wage Theft and Labor Rights Enforcement in San Diego City and County*. San Diego, CA: Center on Policy Initiatives and Center for Community Research and Engagement, San Diego State University. Available at: <https://cpisandiego.org/research/unpaid-and-unaware-wage-theft-and-labor-rights-enforcement-in-san-diego-city-and-county-2024/>
- ETUC (2026). *ETUC reply to the First Stage Consultation of Social Partners on the Quality Jobs Act*. Brussels, Belgium: European Trade Union Confederation. Available at: <https://www.etuc.org/en/document/etuc-reply-first-stage-consultation-social-partners-quality-jobs-act>.
- Foster, J., Barnetson, B., & Matsunaga-Turnbull, J. (2018). Fear factory: retaliation and rights claiming in Alberta, Canada. *Sage Open*, 8(2), 2158244018780752.
- Gouzoulis, G. & Nikolopoulou, I. (2026). Losing Unequally: Financialization, Productivity, & the Finance Wage Premium. *Industrial Relations Journal*, 57(1), 32-46.
- Gouzoulis, G. (2021). Finance, discipline and the labour share in the long-run: France (1911–2010) and Sweden (1891–2000). *British Journal of Industrial Relations*, 59(2), 568–594.
- Gouzoulis, G. (2023). What do Indebted Employees do? Financialisation and the Decline of Industrial Action. *Industrial Relations Journal*, 54(1), 71-94.
- Gouzoulis, G. (2024). Does Household Indebtedness Contribute to the Decline of Union Density? *New Political Economy*, 29(3), 414-431.
- Gouzoulis, G. (2026). *Debt and the Future of Workers: Financialization as Exploitation in the 21st Century*. Bristol University Press.
- Gouzoulis, G., Constantine, C., & Ajefu, J. (2023). Economic and Political Determinants of the South African Labour Share, 1971-2019. *Economic and Industrial Democracy*, 44(1), 184-207.
- Gouzoulis, G., Iliopoulos, P., & Galanis, G. (2023). Financialization and the rise of atypical work. *British Journal of Industrial Relations*, 61(1), 24–45.
- Guschanski, A., & Onaran, Ö. (2016). Why did the wage share fall? Industry level evidence from Austria. *Wirtschaft und Gesellschaft*, 42(4), 557-589.
- Gringeri, C.E. (2001). The poverty of hard work: Multiple jobs and low wages in family economies of rural Utah households. *Journal of Sociology & Social Welfare*, 28, 3.
- Hansen, L.P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica*, 50(4), 1029-1054.
- Hirsch, B.T., Husain, M.M., & Winters, J.V. (2016). *The puzzling fixity of multiple job holding across regions and labor markets (Discussion Paper No. 9631)*. IZA Discussion Papers.
- Kauhanen, M. (2021). *Multiple job holding in the changing labour market - evidence from Finland (tech. rep. No. 331)*. Labour Institute for Economic Research, Working Papers.

- Kim, Y.K., Lima, G.T., & Setterfield, M. (2019). Political aspects of household finance: debt, wage bargaining, and macroeconomic (in) stability. *Journal of Post Keynesian Economics*, 42(1), 16-38.
- Kimmel, J., & Powell, L.M. (1999). Moonlighting trends and related policy issues in Canada and the United States. *Canadian Public Policy/Analyse de Politiques*, 207–231.
- Kimmel, J., & Smith Conway, K. (2001). Who moonlights and why? Evidence from the SIPP. *Industrial Relations: A Journal of Economy and Society*, 40(1), 89–120.
- Kirby, M., Shepherd, H., & Godwin, E. (2025). “The State of UK Regulatory Enforcement in 2025.” *Good Jobs First*. Available at: <https://goodjobsfirst.org/the-state-of-uk-regulatory-enforcement-in-2025/>.
- Langley, P. (2020). “The financialization of life.” In P. Mader, D. Mertens, & N. van der Zwan (Eds.), *The Routledge international handbook of financialization* (pp. 11–25). Routledge.
- Lazonick, W., & O'Sullivan, M. (2000). Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society*, 29(1), 13-35.
- Lazzarato, M. (2012). *The making of the indebted man: An essay on the neoliberal condition*. Semiotext(e).
- Livanos, I., & Zangelidis, A. (2012). Multiple job-holding among male workers in Greece. *Regional Studies*, 46(1), 119–135.
- Lola, C. (2017). Low-wage workers and bullying in the workplace: How current workplace harassment law makes the most vulnerable invisible. *Hastings International and Comparative Law Review*, 40, 231-253.
- Martinez, A., Western, M., Haynes, M., Tomaszewski, W., & Macarayan, E. (2014). Multiple job holding and income mobility in Indonesia. *Research in Social Stratification and Mobility*, 37, 91–104.
- Milkman, R., González, A., & Narro, V. (2010). *Wage Theft and Workplace Violations in Los Angeles: The Failure of Employment and Labor Law for Low-wage Workers*. UCLA: Institute for Research on Labor and Employment. Available at: <https://escholarship.org/uc/item/5jt7n9gx>
- Panos, G.A., Pouliakas, K., & Zangelidis, A. (2009). *The inter-related dynamics of dual job holding, human capital and occupational choice (tech. rep. No. 4437)*. IZA Discussion Papers.
- Panos, G.A., Pouliakas, K., & Zangelidis, A. (2014). Multiple job holding, skill diversification, and mobility. *Industrial Relations: A Journal of Economy and Society*, 53(2), 223–272.
- Partridge, M. (2002). Moonlighting in a high growth economy: Evidence from US state-level data. *Growth and Change*, 33(4), 424–452.
- Paxson, C.H., & Sicherman, N. (1996). The dynamics of dual job holding and job mobility. *Journal of Labor Economics*, 14(3), 357–393.

- Pellandini-Simányi, L. (2020). The financialization of everyday life. In Borch, C., & Wosnitzer, R. (Eds.), *The Routledge handbook of critical finance studies*. Routledge.
- Piasna, A., Pedaci, M., & Czarzasty, J. (2021). Multiple jobholding in Europe: Features and effects of primary job quality. *Transfer: European Review of Labour and Research*, 27(2), 181–199.
- Preston, A., & Wright, R.E. (2020). Exploring the gender difference in multiple job holding. *Industrial Relations Journal*, 51(4), 301–328.
- Renna, F., & Oaxaca, R.L. (2006). *The economics of dual job holding: A job portfolio model of labor supply (tech. rep. No. 1915)*. IZA Discussion Papers.
- Renna, F., Oaxaca, R.L., & Choe, C. (2023). Is there a business cycle effect on the incidence of dual job holding? *The BE Journal of Economic Analysis & Policy*, 23(2), 443–465.
- Reuschke, D. (2026). *Linked administrative data reveals much higher level of multiple jobholding in Britain than previously thought*, Data Insight Report. Administrative Data Research (ADR) UK. Available at: https://www.adruk.org/fileadmin/uploads/adruk/Documents/Data_Insights/Data_Insight_Darja_Reuschke.pdf
- Robertson, N., Perkins, H.C., & Taylor, N. (2008). Multiple job holding: Interpreting economic, labour market and social change in rural communities. *Sociologia Ruralis*, 48(4), 331–350.
- Scott, J., Edwards, K., & Stanczyk, A. (2020). Moonlighting to the side hustle: the effect of working an extra job on household poverty for households with less formal education. *Families in Society*, 101(3), 324–339.
- Shishko, R., & Rostker, B. (1976). The economics of multiple job holding. *The American Economic Review*, 66(3), 298–308.
- Simard, G., & Chênevert, D. (2010). Organizational and individual determinants of atypical employment: The case of multiple jobholding and self-employment in Canada. *Canadian Journal of Career Development*, 9(1), 25–33.
- Simpson, W., & Kapitany, M. (1983). The off-farm work behavior of farm operators. *American Journal of Agricultural Economics*, 65(4), 801–805.
- Smith, A., & McBride, J. (2021). 'Working to live, not living to work': Low-paid multiple employment and work–life articulation. *Work, Employment and Society*, 35(2), 256–276.
- Smith, A., & McBride, J. (2023). 'It was doing my head in': Low-paid multiple employment and zero hours work. *British Journal of Industrial Relations*, 61(1), 3–23.
- Standaert, S. (2025). “Worker Protections in Freefall: The Collapse of Federal Labor Enforcement under the Second Trump Administration.” *Good Jobs First*. Available at: <https://goodjobsfirst.org/worker-protections-in-freefall-the-collapse-of-federal-labor-enforcement-under-the-second-trump-administration/>.
- Stockhammer, E. (2004). Financialisation and the slowdown of accumulation. *Cambridge Journal of Economics*, 28(5), 719–741.

- Taylor, N. & McCrostie Little, H. (1995). *Means of survival? A study of off-farm employment in New Zealand*. Christchurch: Taylor Baines and Associates.
- Van der Zwan, N. (2014). Making sense of financialization. *Socio-Economic Review*, 12(1), 99–129.
- Weersink, A., Nicholson, C., & Weerhewa, J. (1998). Multiple job holdings among dairy farm families in New York and Ontario. *Agricultural Economics*, 18(2), 127–143.
- Wong, P.Y., Gouzoulis, G., & Galanis, G. (2026). Household Debt and Union Jobs: Evidence from Bankruptcy Reform. *Post-Keynesian Economics Society, Working Paper No. 2618*.
- Wu, Z., Baimbridge, M., & Zhu, Y. (2009). Multiple job holding in the United Kingdom: Evidence from the British household panel survey. *Applied Economics*, 41(21), 2751–2766.
- Zangelidis, A. (2014). *Labour market insecurity and second job-holding in Europe*. Available at SSRN 2615268.

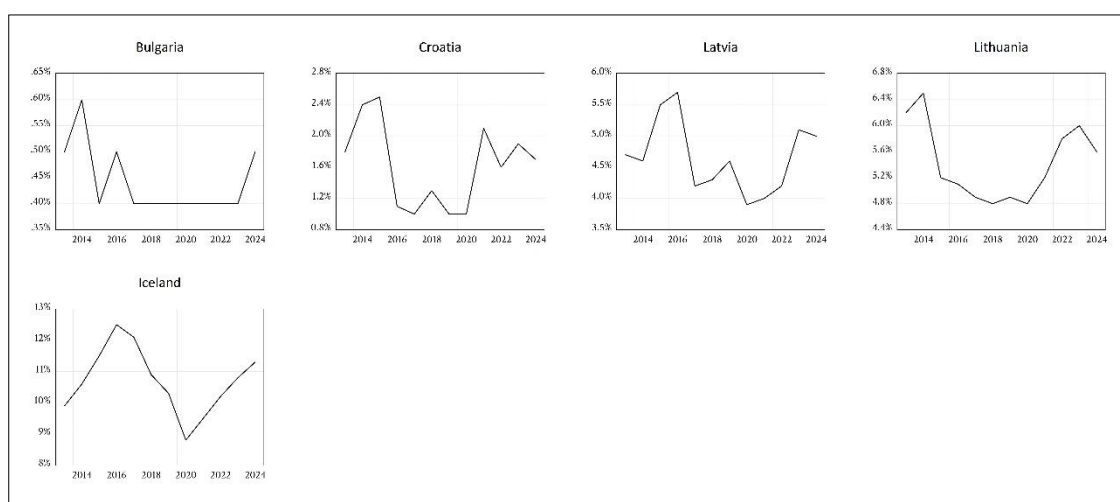
Appendix

Figure A1: Multiple Jobholding Rates (%), 2013-2025 – Increasing Trend



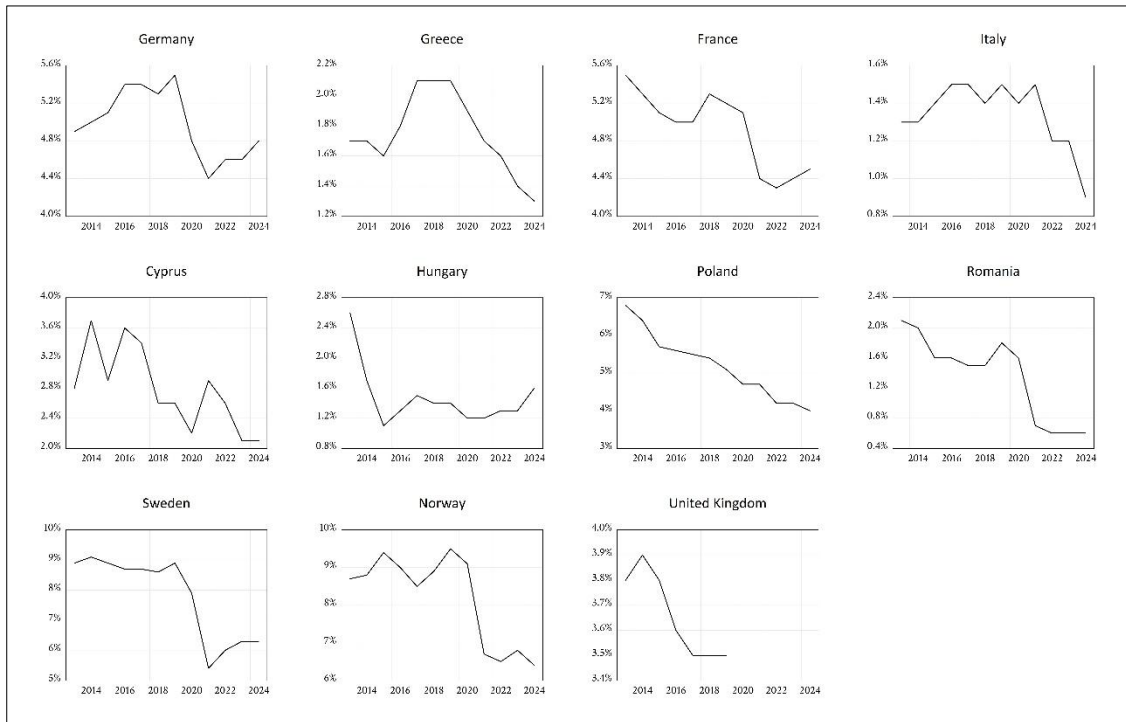
Notes: The multiple jobholding rate is defined as the percentage of persons with more than one job as a share of all employed persons. This includes people who had more than one job or business during the reference week, not due to a change of job or business. *Sources:* Eurostat and Federal Reserve Economic Data (FRED).

Figure A2: Multiple Jobholding Rates (%), 2013-2025 – U-Shaped Trend



Notes: The multiple jobholding rate is defined as the percentage of persons with more than one job as a share of all employed persons. This includes people who had more than one job or business during the reference week, not due to a change of job or business. *Source:* Eurostat.

Figure A3: Multiple Jobholding Rates (%), 2013-2025 – Declining Trend



Notes: The multiple jobholding rate is defined as the percentage of persons with more than one job as a share of all employed persons. This includes people who had more than one job or business during the reference week, not due to a change of job or business. *Source:* Eurostat.

Table A1: Correlation Matrix

	<i>Multiple Jobholding</i>	<i>Household Debt</i>	<i>Labour Share</i>	<i>Human Capital Index</i>	<i>Unemployment</i>	<i>Inflation</i>	<i>Real Employee Compensation</i>
<i>Multiple Jobholding</i>	1						
<i>Household Debt</i>	0.614	1					
<i>Labour Share</i>	0.226	0.215	1				
<i>Human Capital Index</i>	0.164	0.043	0.105	1			
<i>Unemployment</i>	-0.337	0.006	-0.038	-0.495	1		
<i>Inflation</i>	-0.005	-0.246	-0.065	0.190	-0.324	1	
<i>Real Employee Compensation</i>	-0.027	0.158	0.266	-0.040	0.024	0.241	1

Table A3: Period Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Household Debt</i>	0.053*** (<0.001)	0.051*** (<0.001)	0.051*** (<0.001)	0.051*** (<0.001)	0.055*** (<0.001)	0.050*** (<0.001)	0.049*** (<0.001)	0.053*** (<0.001)	0.049*** (<0.001)	0.052*** (<0.001)	0.052*** (<0.001)	0.051*** (<0.001)
<i>Labour Share</i>		0.037 (0.306)				0.029 (0.446)	0.028 (0.421)	0.047 (0.195)	0.034 (0.363)	0.040 (0.285)	0.039 (0.239)	0.042 (0.242)
<i>Human Capital Index</i>			0.677 (0.522)			0.568 (0.601)			-0.949 (0.390)	0.782 (0.464)		-0.742 (0.498)
<i>Unemployment</i>				-0.214*** (<0.001)			-0.211*** (<0.001)		-0.253*** (<0.001)		-0.213*** (<0.001)	-0.245*** (<0.001)
<i>Inflation</i>					0.045 (0.107)			0.056* (0.050)		0.077 (0.053)	0.060** (0.002)	0.058* (0.030)
<i>Constant Term</i>	1.425* (0.035)	-0.407 (0.804)	-0.764 (0.818)	3.098*** (<0.001)	1.161 (0.114)	-1.864 (0.583)	1.675 (0.325)	-1.241 (0.469)	4.827 (0.199)	-3.519 (0.299)	0.803 (0.613)	3.376 (0.369)
<i>Adjusted R²</i>	0.371	0.377	0.371	0.472	0.378	0.374	0.474	0.387	0.489	0.390	0.488	0.498
<i>Unadj. R²</i>	0.390	0.397	0.392	0.489	0.398	0.397	0.494	0.409	0.509	0.414	0.508	0.519
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	12	12	11	12	12	11	11	12	11	11	12	11
<i>Observations</i>	390	390	359	390	390	359	390	390	359	359	390	359
<i>Durbin-Watson Stat.</i>	0.063	0.066	0.065	0.080	0.069	0.066	0.082	0.075	0.088	0.084	0.096	0.101
<i>Notes:</i> *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using period (year) fixed effects and White period (cross-section cluster) standard errors.												