

ORIGINAL ARTICLE

Financialization and the rise of atypical work

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Abstract

The current literature on financialization and the labour process focuses disproportionately on how corporate financialization induces the use of atypical work and largely overlooks the role of household financialization. This paper presents several mechanisms through which household debt and pension fund financialization increase the financial insecurity of employees, which, in turn, can curb their resistance to accepting such work contracts. To assess our arguments, we estimate the effects of corporate and household financialization on involuntary part-time and temporary employment, using a panel dataset of OECD economies. Our findings provide robust support that financialization increases significantly non-standard employment rates for the total workforce and women, but less for older employees.

1 | INTRODUCTION

Over the last decades, employment insecurity has grown dramatically across the globe. Non-standard/atypical employment, that is involuntary part-time and temporary work, has been rising significantly, with approximately 60 per cent of employees working under such employment contracts (ILO, 2015). The growth of atypical/non-standard work has been exacerbated since the mid-1990s (ILO 2011; ILO 2015; Kalleberg 2000; Kalleberg 2009). Moreover, this process further accelerated after the 2008 Global Financial Crisis (GFC), since the short- and/or

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medium-term response of most governments to the post-GFC recession has been to promote a [supply-side agenda](#), whose main pillars are labour market flexibility and wage restraint (Cunningham & James, 2020). Consequently, in recent years, a growing number of studies examines the relationship between atypical work and precariousness, as well as the determinants of this process.

Despite the relevant literature emphasizing how labour market flexibility and atypical employment contracts help certain parts of the workforce (e.g. women after maternity and students) to transition to full-time, permanent jobs, it is now becoming widely accepted that contingent work is increasing across age, gender and skill cohorts. Furthermore, while it is worth underlining that non-standard employment is not necessarily synonymous with precarious work, there is substantial evidence that, currently, atypical employment contracts are mostly involuntary and come with worse workplace conditions and higher financial insecurity (Green and Livanos 2017; Han and Hart 2021; Henly and Lambert 2014; Julià et al. 2017; Kauhanen and Nätti 2015). Therefore, an increasing number of quantitative studies analyse how structural and institutional factors, such as wage rates, population demographics, labour market conditions and legislation, skills and public welfare provision, have contributed to the growth of atypical work (e.g. Buddelmeyer et al. 2004; Buddelmeyer et al. 2008; de Bustillo and de Pedraza 2010; Kretsos and Livanos 2016; Markefke and Rehm 2020; Valletta et al. 2020).

While the literature on the drivers of atypical work stresses the importance of the broader business and economic environment, the links between non-standard employment and financialization remain relatively understudied. Financialization can be broadly defined as the increasing influence of financial actors and institutions over the non-financial parts of the economy and society. One of the key dimensions of contemporary financialization that has been identified by political economists and industrial relations scholars is shareholder value orientation and the rise of corporate financialization. In highly financialized non-financial firms that are largely owned by shareholders, the main goal of management is to maximize dividend payments to them, hence, the process of achieving this entails rising financial costs, which, in turn, result in squeezing labour costs (Froud et al. 2010; Lazonick and O'Sullivan 2000; Medoff and Harless 1996). In this context, the financialization of non-financial firms has been affecting negatively labour management and increasing employment instability (Appelbaum et al. 2013; Appelbaum and Batt 2014; Cushen 2013; Cushen and Thompson 2016; Darcillon 2016; Gospel and Pendleton 2003; Palpacuer et al. 2011; Thompson 2003; Thompson 2013).

Nonetheless, financialization is a multidimensional process that affects not only non-financial corporations but also other vital parts of the economy. A striking shortcoming of the relevant literature is the lack of research on how the financialization of households/everyday life affects the labour process (Thompson and Cushen 2020), and, particularly, how it may increase compliance with non-standard employment arrangements. Recent literature shows that increasing financial commitments for households induce them to be more disciplined, thus, undermine labour's bargaining power and decrease labour's income share (Gouzoulis, 2021, 2022, Gouzoulis et al. 2021; Wood 2017). Thus, this paper theorizes and explores empirically how the financialization of everyday life contributes to the growth of non-standard/atypical work. More specifically, we focus on household debt and pension fund financialization, that is the increasing investment in risky, high-return financial instruments by pension funds.

Concerning household debt as a disciplining device, we propose that this can happen via three interconnected mechanisms. First, financially insecure employees are more likely to give in to employers' pressures for more flexible contracts on the fear of losing their job and defaulting on their debt. Second, debt-related hardship can incentivize employees to obtain an additional

temporary/part-time job to secure more income, more particularly in countries with deregulated and liberalized labour markets. Third, securing their job under increased financial insecurity may incentivize employees to try to be more productive and disciplined in the workplace, and be more competitive against their peers. This can accelerate the intensification of work since it allows employers to either employ current employees for reduced hours or downsize their workforce without decreasing productivity.

Concerning pension fund financialization, the main feature of contemporary private and public pension funds is their large investments in high-return financial assets and instruments which involve increased risk of default. Since the money used in these investments are the pension contributions of employees, a default would result in losing their retirement income. Further, a higher perceived risk of default due to the risky investments commonly leads pension managers to shift the risk to scheme members via rising contributions or implementing reforms that decrease their pensions. Thus, an actual loss of income in the case of failed investments and/or a higher risk due to potential loss of income can put pressure on older employees to remain longer in the labour market, return to work after retirement and on younger employees to obtain an additional atypical job to secure additional income.

To provide a first assessment of the effects of household financialization on involuntary part-time and temporary employment, we use a panel dataset that consists of OECD economies for which there are available data for our key indicators and other well-established determinants of atypical work. Our estimations, which are based on the seemingly unrelated regression (SUR) approach and cover the period 1997–2018, provide robust evidence that proxies related to the financialization of everyday life and corporate financialization jointly increase involuntary part-time and temporary employment rates for the total workforce and women, and to a lesser extent for employees over 65 years old. Thus, we show that indeed household financialization is an important missing driver of the growth of atypical work, and that the literature on financialization and the labour process should expand its focus from corporate financialization to all aspects of this multilayered process, especially those related to employees' self-discipline.

The rest of this paper is structured as follows. Section 2 discusses trends in atypical employment and reviews the literature on its determinants. Section 3 highlights the disproportionate focus of the labour process literature on corporate financialization and how the financialization of everyday life can also contribute to the growth of non-standard employment. Section 4 reports the empirical strategy of the paper and Section 5 discusses critically the main findings. Finally, Section 6 concludes and discusses relevant implications.

2 | THE RISE AND DRIVERS OF ATYPICAL WORK ACROSS THE WORLD

The liberalization of employment relations during the transition from Fordism to Neoliberalism has been accompanied by a notable increase in atypical and precarious employment, and under-employment across all age cohorts and genders has become a permanent feature of contemporary economies at least since the mid-1990s (ILO 2011; ILO 2015; Kalleberg 2000; Kalleberg 2009; Kalleberg 2018). While precarious work and atypical employment are not synonymous, non-standard employment is usually associated with worse working conditions and more insecurity compared to permanent work (e.g. see Han and Hart 2021; Henly and Lambert 2014; Julià et al. 2017; Kauhanen and Nätti 2015). Consequently, given the increasingly involuntary character of non-standard forms of employment, measures of involuntary part-time employment and temporary work have

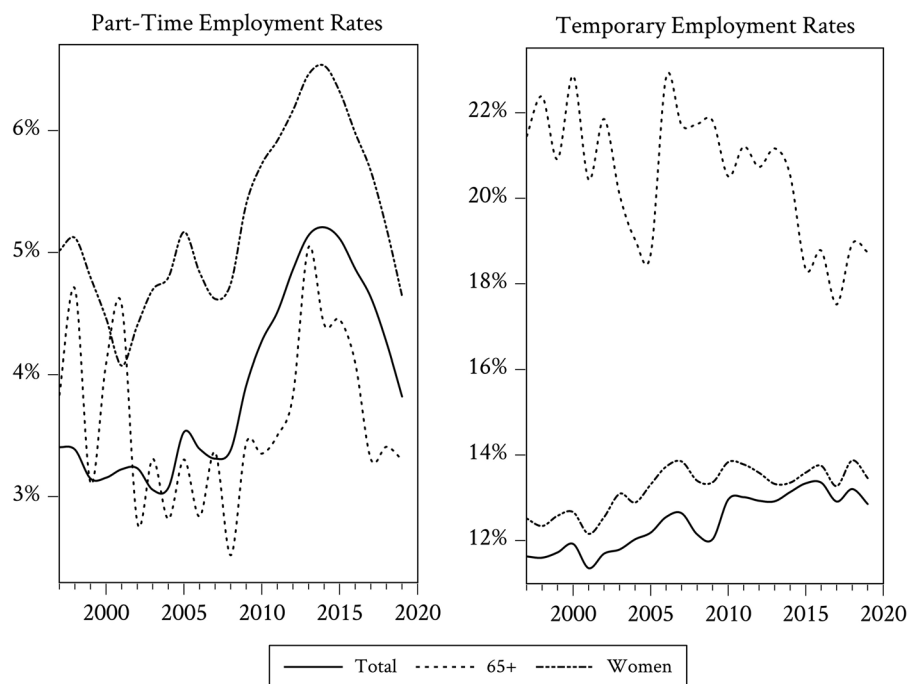


FIGURE 1 Atypical employment rates.

Notes: Temporary employment (% of dependent employment) includes wage and salary workers whose job has a pre-determined termination date. Part-time employment (% Employment; involuntary) refers to people in employment (employees and self-employed) who work less than 30 h per week. The denominator for each variable is the employment level for each sub-group. Both variables are means of the full sample of OECD economies. (Source: OECD)

become commonly used proxies for employment insecurity (Green and Livanos 2017; Han and Hart 2021; Kretsos and Livanos 2016; Nunez and Livanos 2015).

Figure 1 reports the evolution of the mean temporary employment rate and the mean involuntary part-time employment rate for the total workforce, women and employees over 65 years old since 1997, based on our sample of OECD economies.¹ Despite significant institutional heterogeneity across countries, OECD economies have largely converged towards increased marketization and labour market liberalization (see McBride and Watson 2019). Yet, looking at age and gender discrepancies is important. As regards gender, given broader economic, social and political inequalities between men and women, the dynamics of non-standard employment vary accordingly (European Parliament 2020; Menéndez-Espina et al. 2020; Young 2010).

Overall, the stylized facts presented above demonstrate a significant rise in non-standard employment across the world, especially after the GFC. Regarding the involuntary part-time employment rates, all three rates fluctuate significantly but remain overall stationary between 1997 and 2007, and increase rapidly between 2007 and approximately 2015. This rise is likely related to the post-2008 GFC recession which affected mostly low-income, indebted households across the world and the subsequent austerity-oriented response by most countries. Then, after 2015, total involuntary part-time employment rates decline, but remain higher than the pre-2007 levels, indicating some form of hysteresis. Regarding temporary employment, in the cases of the total population and women, there is a clear upward trend in the series throughout the whole

period. The rate for women is higher during the whole period, but it is worth highlighting that the increasing trend for women slowdowns relative to the total population rate in the mid-2010s. The trend of temporary employment for older employees is substantially different, since, while over time the rate for this age group is dramatically larger than the total population and women rates, its overall trend is declining. A potential explanation for this declining trend is the increase in temporary work for younger employees, especially after the GFC.

A growing body of literature explores these atypical employment trends focusing on cyclical, structural and institutional factors. Regarding the business cycle-atypical work nexus, there are several competing arguments. These are related to whether sectors with a higher rate of full-time, open-ended employment contracts experience stronger counter-cyclical effects ('composition effect') (Lester 1999), whether contingent contracts increase during downturns as employers try to adjust supply over the business cycle (the 'flexibility effect') (Delsen 1998) or whether during business cycle downturns segments of the labour force that are typically employed under contingent employment contracts (e.g. low-skilled employees or women who transition after maternity) become discouraged and eventually exit the labour force (Buddelmeyer et al. 2004). Yet, overall, the findings of the relevant empirical literature are largely inconclusive as to whether atypical work is pro-cyclical or counter-cyclical (Borowczyk-Martins and Lalé 2019; Buddelmeyer et al. 2004; Buddelmeyer et al. 2008; Markefke and Rehm 2020; Valletta et al. 2020).

Regarding the role of trade unions, the employment law and welfare provision for employees and the unemployed, these are also important determinants of non-standard employment dynamics. In general, trade unions lobby in favour of the elimination of intra-working class income, age and gender inequalities and fight for equal employment rights and working conditions for employees under atypical and precarious contracts (Bengtsson 2014; Pontusson 2013). In addition, in countries with more extensive welfare state systems, in-work benefits are more universal and depend less on restrictive income thresholds and vice versa. Therefore, wider coverage for in-work benefits disincentivizes employees to work under a lower-paid, non-standard employment contract to keep receiving such social security payments linked to low pay. Indeed, there is significant evidence that the decline of trade unions, reductions in the replacement ratios and the duration of unemployment benefits, and the liberalization of employment law have allowed employers to substitute full-time and/or permanent contracts with contingent ones (Buddelmeyer et al. 2004; Buddelmeyer et al. 2008; Hevenstone 2010; Hipp et al. 2015; Houseman 2001; Kahn 2010).² Yet, in times of crisis, unions tend to prioritize the protection of the total working population at the expense of focusing on gender inequalities, hence, the decline of unions has a greater negative impact on women's employment conditions (Briskin 2014). Also, in the absence of universal maternity benefits, paid leave and childcare facilities, women may also have stronger incentives to work under any conditions to enjoy related work-dependent or employer-provided benefits.

Finally, training, skills and education are well-established negative determinants of atypical work. While students might be keen to work under more flexible contracts during their studies which increase non-standard employment, high-skilled workers have more options for full-time, permanent employment (Barron and Anastasiadou 2009; Becker 1994; Green and Livanos 2017; Kretsos and Livanos 2016; Robotham 2012; Sršen and Dizdarevič 2014; Vono de Vilhena et al. 2016; Young 2010). Thus, *ceteris paribus*, the overall conclusion is that the larger the share of the skilled workforce is, the lower the share of non-standard employment in the economy is. Nevertheless, in the context of the labour market liberalization of the last decades, several studies demonstrate that the link between skills and better employment conditions is becoming weaker and that the

relevant gender inequalities deepen at the expense of women (Salladarré and Hlaimi 2014; Branch and Hanely 2018; Mitri 2021).

3 | FINANCIALIZATION AS A DRIVER OF ATYPICAL EMPLOYMENT

Beyond the conventional drivers of atypical work described in the previous section, relatively less attention has been paid to external market discipline mechanisms that can also be related to the growth of contingent employment contracts. Most notably, over the last two decades, industrial relations scholars, political economists and sociologists of work have been researching how corporate financialization impacts the employer-management-labour nexus. On the one hand, in liberal market economies where the number of listed non-financial corporations is large, the main priority of their managers has become the maximization of shareholder value. This often involves even shares buybacks when the demand for the company's share is not high enough to keep dividend payments at the level shareholders expect (Froud et al. 2000; Lazonick and O'Sullivan 2000; Medoff and Harless 1996). On the other hand, in more corporatist regimes, non-financial firms obtain credit to invest more in periods of growth, which eventually increases their overhead financial costs (Gebauer et al. 2018). In both cases, worsening balance sheets due to rising financial payments leads managers to prioritize short-term financial performance and, thus, downsize, cut wages, and increase atypical work to improve the financial position of their firm.

Related macro and micro level evidence regarding the negative impact of corporate financialization on skilled and unskilled labour across varieties of capitalism and different types of non-financial firms is offered by various empirical studies (Clark and Macey 2015; Darcillon 2016; Gospel and Pendleton 2003; Palpacuer et al. 2011). Also, corporate financialization in the form of private equity and new investment funds often leads to broader 'breaches of trust' between different types of stakeholders, including employers and employees/trade unions, but without these necessarily leading to worsening workplace conditions (Appelbaum et al. 2013; Appelbaum and Batt 2014). Yet, in general, such 'breaches of trust' put a greater emphasis on improving quantitative measures of short-term financial performance at the expense of the stakeholders who have the least bargaining power, that is workers (Cushen and Thompson 2016). Overall, the main shortcoming of these frameworks is that they provide a relatively one-sided perspective of the financialization-induced rise in atypical work as a top-down decision imposed by management and overlook why workers comply (or not thereof) to such pressures.

Indeed, financialization is a complex, dynamic process that affects directly not only firms but also employees, thus, the underdeveloped links between the growing household financialization and the labour process offer a fruitful area for further investigation (Thompson and Cushen 2020).³ At least since the early 1990s, financial institutions and capital markets have shifted their focus from non-financial firms to financing household spending, real estate investments and investments in assets by pension funds (Ebbinghaus 2021; Froud et al. 2010; McKernan and Sheraden 2008). Therefore, examining how workers' dependence on finance affects their compliance to the corporate financialization-induced reshaping of the labour process is of great importance. Figure 2 reports the evolution of the household debt-to-disposable income ratio and the volume of pension fund assetization since 1997 for the same sample of OECD economies as in Figure 1.

As reported in Figure 2, household debt in OECD economies increased from 72 per cent in 1997 to 129 per cent in 2010 and stabilized at this level for 8 years, followed by a minor decline to 114 per cent in 2019. While returns from assets offer a source of additional income, household credit

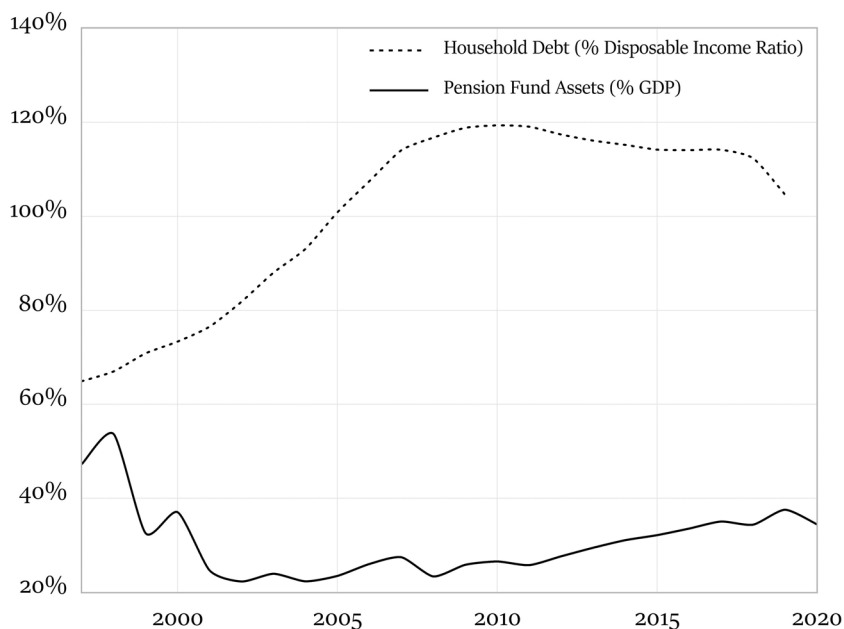


FIGURE 2 Household and pension fund financialization.

Notes: Household Debt is the sum of loans (primarily mortgage loans and consumer credit) and other accounts payable by households (% disposable income). Pension Fund Assets are the sum of assets bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits (% GDP). Both variables are means of the full sample of OECD economies. (Source: OECD)

accumulation increases debt repayments and, thus, financial commitments for households. Relevant sociological and cultural political economy literature argues that the fear of debt default induces self-discipline and risk-averse behaviour (Langley 2007; Lazzarato 2012; Sweet 2018). Hence, household debt exhibits a significant impact on the employment relationship since it makes workers bargain less aggressively and even accept lower wages to maintain their employment and avoid defaulting (Gouzoulis, 2021, 2022; Gouzoulis et al. 2021; Wood 2017). On top of its direct effects on individual wage bargaining, financialization may also disincentivize employees to participate in industrial action as part of the debt-induced self-disciplined behaviour (Grady and Simms 2019).

Extending the rationale of household debt-induced workplace discipline, there are three potential mechanisms through which the financial insecurity of employees can contribute to the rise of atypical employment, and, thus, the transformation of the labour process. First, financially insecure employees are more likely to give in to the pressures of current employers to adjust their employment contracts according to the needs of the firm, on the fear of losing their jobs, thus, their main income stream. For instance, Karacimen's (2015) qualitative study of indebted Turkish households shows that high indebtedness makes their members more willing to work in low-pay, insecure occupations and pressurizes more household members to enter the labour market out of necessity. Second, it is also potentially more straightforward for an employee to obtain an additional temporary/part-time job to secure more income to repay debt, rather than negotiate with a current employer for a higher wage and face the risk of redundancy.⁴ Recent evidence shows that economic hardship is linked to multiple job-holding (Glavin 2020; Smith and McBride 2021). This mechanism is likely to be more prevalent in countries whose labour markets are more deregulated

and financially insecure employees may accept being employed in part-time contracts and, in reality, work more hours, close to the full-time equivalent. Third, household financial insecurity can incentivize employees to be more competitive against their peers, thus, trying to be productive and disciplined in the workplace to secure their employment. As documented by McGovern et al. (2007: 141), indeed insecurity induces employees to put more effort. Thus, employers can employ the same number of employees for fewer hours or fewer employees and obtain similar outcomes in terms of productivity, and further accelerate the intensification of work. Overall, it is reasonable to expect that the fear of debt default will increase faster than linearly as debt ratios increase since not higher debt implies not only higher repayments but also potentially higher losses in the case of a default.

Regarding the second main feature of the financialization of 'everyday life', the financialization of pension funds' portfolios, this has been the main outcome of the privatization of pension funds and social security retrenchment over the last decades (Braun 2022; Engelen 2003). Still, in many cases, public pension funds have become equally or even more exposed to volatile assets than private pension schemes (Triest and Zhao 2014).⁵ As Figure 2 shows, a steady increase in the investment of pension funds in assets has been taking place in OECD economies since 2000. This trend largely reflects investments in riskier assets that involve higher returns in the face of sustainability challenges related to declining worker-retiree ratios due to ageing, cuts in employer contributions and the shift from pay-as-you-go to capital-funded schemes (van der Zwan 2017). Hence, this portfolio shift has made employees and pensioners future or current 'everyday' investors since most of their retirement income increasingly depends on financial market fluctuations (Ebbinghaus 2021; Langley 2008). Scholars have identified such patterns in a wide array of advanced and developing countries (Anderson 2019; Belfrage 2008; Bonizzi et al. 2021; Langley 2004; Macheda 2012; McCarthy et al. 2016; Natali 2018; Rodrigues et al. 2018; Saritas 2020; Waine 2001), but their focus is primarily centred on how the pension funds became financialized and the related political consequences, rather than on potential linkages with labour market dynamics.

How can the assetization of pension funds influence non-standard employment dynamics? Overall, the risk of pension fund bankruptcy due to risky, non-guaranteed investments can result in immediate loss of income for current pensioners and/or reductions in the expected retirement income for future pensioners. Since the government-guaranteed part of pensions has become substantially smaller, a potential default of a large share of assets held by pension funds would generate major income loss for employees close to retirement and pensioners. Also, even if a smaller part of these investments fails or faces a high risk of default, pension managers commonly shift the risk by increasing employee contributions, a strategy that burdens mainly younger pension scheme members rather than those closer to retirement (Platanakis and Sutcliffe 2016; Roberts 2001). Consequently, pensioners and employees close to retirement have incentives to return or remain in the labour market to secure their income, and younger employees are likely to obtain an additional job as a practical solution to rising financial insecurity (Gouzoulis & Galanis, 2021). Given their precarious position, it is likely that these persons will comply more easily to work under non-standard contracts. Also, current and prospective pensioners' financial insecurity might be even more pronounced given that in many advanced economies they accumulated mortgage debt to purchase a home and enjoy returns to compensate for pensions privatization and cuts (Froud et al. 2010; McKernan and Sherraden 2008). Therefore, pension fund financialization also reinforces household debt accumulation, which, in turn, creates more financial insecurity.

Taken together, the increasing financial insecurity that households face makes it easier for employers to *not keep their side of the bargain* with employees, especially concerning the use of non-standard employment and employment insecurity. Here, it is worth underlining that

one could counter-argue that it is low-paid atypical work that incentivizes people to borrow to stabilize their income. Yet, while this could make sense concerning consumer credit, over the last decades, the vast majority of total household debt is mortgages, which require substantial collateral and/or savings and whose expansion has been the outcome of financial liberalization (Kohl 2021).⁶ Accordingly, it is reasonable to assume that household debt is an exogenous independent variable for non-standard employment dynamics. Similarly, the same assumption about exogeneity can be made for private and public pension funds since labour's role in their administration has always been very limited (van der Zwan 2017).

4 | EMPIRICAL STRATEGY AND METHOD

The arguments presented in the previous section can be evaluated via different approaches at the micro, sectoral and macro levels, including qualitative methods (structured or semi-structured interviews), larger-scale surveys and econometric analysis (time series and panel data). In this paper, we utilize panel data econometric analysis using an unbalanced, economy-level/macroeconomic dataset for all OECD economies where the key dependent and independent variables are available. Our approach aims to offer a first general conclusion for a wide range of economies and help highlight pathways for future research that can be explored through different methodological approaches. A further reason for choosing this method is that while the household debt mechanism can be evaluated at the micro level using certain labour surveys that collect information for household credit and employment status, the pension fund financialization mechanism is more difficult to be assessed since labour surveys rarely contain pension scheme information. Therefore, we evaluate empirically the effects of household indebtedness and pension fund assetization on atypical work (see Figures 1 and 2), as well as corporate financialization, over the period 1997–2018 via the following baseline equation:

$$NSE_{it} = \alpha_0 + \alpha_1 F_{it} + \alpha_2 SI_{it} + \varepsilon_{it} \quad (1)$$

where i designates the country of our sample and t the year in which the observations were recorded. The NSE_{it} vector includes our dependent variables, which are proxies for non-standard employment. These include the series reported in Figure 1, that is the involuntary part-time employment rates for the total population (PT), for employees over 65 years old ($PT(65+)$) and for women (PTF), as well as the temporary employment rates for the total population ($TEMP$), for employees over 65 years old ($TEMP(65+)$) and for women ($TEMPF$). All data for the dependent variables come from the OECD Labor Market Statistics database. Vector F_{it} includes our proxies for financialization and vector SI_{it} includes proxies for structural, institutional and cyclical factors that are widely used in the relevant literature as control/additional independent variables.⁷

4.1 | Financialization variables

The proxies for the financialization of everyday life include the household debt-to-net disposable income ratio and pension funds' assets (total private and public pension funds' investments) from the OECD database. The main corporate financialization proxy that we include is Stocks Traded (share of GDP) from the World Bank database to capture the impact of shareholder value orientation. While the ideal indicator to proxy shareholder value orientation would be dividend

payments, such data are available only for a handful of economies. Thus, we choose the volume of stocks traded as the best available proxy for our sample of OECD economies, since it captures the rise in stock market trading, including share repurchases. While most OECD economies converge towards the Anglo–Saxon shareholder capitalism model, we also experiment with the rate of net lending for the corporate sector from the OECD as an alternative indicator that captures better ‘corporatist financialization’.

In terms of specification design, we choose to incorporate the volume of stocks traded only in the equations where the indicator for the financialization of everyday life is household debt. Since stock market fluctuations and household debt are likely to be correlated with pension funds’ assets, we choose to not include them in the same equation to avoid multicollinearity. On the one hand, pension funds invest heavily in financial instruments which are linked to stock markets. On the other hand, household debt is partly increasing due to rising residential investment triggered by welfare state retrenchment, which includes pension cuts.

4.2 | Control variables

The vector of control variables (SI_{it}) includes proxies for human capital development, public expenditure on labour market programmes (LMP), wage rates, wage coordination and union density, following hypotheses that find empirical support in the relevant literature (see Section 2). Regarding labour market institutions, we use the degree of coordination of wage setting systems from Visser (2019). This is a categorical variable that captures the scope of wage-setting coordination, from the complete fragmentation of wage bargaining (value 1) to the binding wage-setting procedures, with or without the involvement of social actors and government actors (value 5). Further, we include trade union density (union members as a share of total wage and salary earners) to capture the extent of employees’ associational power within the labour market. As regards the impact of skills acquisition on contingent work, we use the human capital index from Feenstra et al. (2015), a proxy based on the average years of schooling and returns to education. Despite skill differentials would have been a substantially more accurate indicator for this mechanism, the issue is that the availability of such series is very limited in terms of country and time coverage.⁸

Additionally, we also include public spending on LMP as a proxy for the labour market-related social safety net (including unemployment benefits and in-work benefits) from the OECD. We also incorporate the minimum-to-full-time wage ratio (Source: OECD) as a proxy for the standard hypothesis that, *ceteris paribus*, an increased wage rate for non-standard employment contracts relative to full-time/permanent contracts may make atypical work relatively more appealing (or less undesirable). Since typically the reward for contingent contracts is closer to the minimum wage rate, we use this proxy for this hypothesis. Finally, regarding the effects of the business cycle/recessions, we use the deviation of real GDP growth from its long-term trend (calculated using data from the World Bank). More details on data sources can be found in the online Appendix.

4.3 | Econometric methodology

Regarding our estimation approach, we use a feasible generalized least squares (FGLS) estimator which, in contrast to standard OLS, has the advantage of yielding efficient estimates even in the presence of unit roots (Wooldridge 2013: 428). More specifically, we choose to utilize

the cross-section (clustering by period) SUR approach (see Zellner 1962), which corrects for heteroskedasticity and contemporaneous correlation between cross-sections (Baltagi 2005). Correcting for contemporaneous correlation between cross-sections is important since in our case many of the explanatory variables are correlated between countries. For example, many countries in our sample are EU economies, where uniform policies related to labour market regulation and the interbank financial market have been adopted since at least the mid-1990s (Milberg and Winkler 2013). Further, domestic business cycles are correlated among most countries due to the impact of the 2008 global financial crisis and international trade ties, while pension funds' investments are also exposed to interconnected, international capital markets (van der Zwan 2017). In Tables C1–C16 and E1–E2 of the online Appendix, we report the relevant contemporaneous correlation matrices and panel unit root tests.

Moreover, using FGLS-based estimators requires that the time dimension (T) of the panel dataset must exceed or be at least equal to the number of cross-sectional units (N) (Brooks 2008: 490). If this condition is violated, deriving estimates via FGLS is impossible since the estimated residual correlation matrix would become non-singular. In our dataset, T varies from 18 to 22, and N varies from 14 to 18, depending on data availability for certain countries. To capture the impact of household indebtedness on the dependent variables, we assume instead of a linear form for the variable capturing household debt, a quadratic one of the form αx^2 . This implies that the same increase in personal debt will have stronger effects the higher the level of existing debt is.⁹ While a detailed discussion of this non-linear relationship is beyond the scope of this paper and there can be various mechanisms which can explain this, we mention one of these. Assuming a (roughly) fixed loan to value ratio, high levels of debt should also imply more assets to be lost in a case of a default. Furthermore, as debt repayments are also expected to be higher, the possibility of default becomes also higher. Finally, for continuous independent variables that grow exponentially, we use their natural logarithm transformation to capture the fact that their impacts reach a plateau, that is their marginal effect is diminishing the larger their level value is.

5 | ECONOMETRIC FINDINGS AND DISCUSSION

Table 1 reports the results of the regression analysis for the determinants of involuntary part-time employment. Household debt has a positive and statistically significant effect on the involuntary part-time employment rates for the total workforce, for all model specifications. At this point, we should highlight the relative importance of debt is much higher than what may appear by having a quick look at the coefficients. This is because we have used the squared value of household debt and also that the normalization of the variable used is such that it takes values between 1 and 100. This implies that if, for example, the debt ratio is 10 (normalized value), the coefficient captures the equivalent effect of 100 of the variable being in a linear form. For female employees, the effect is also positive and statistically significant, except for specification (5), where we use stocks traded as the variable that captures corporate financialization. For older employees, the effect of household debt is positive and statistically significant only in the specification (10), where we control for net corporate lending. The volume of stocks traded also exhibits a positive impact on all three dependent variables, and the coefficients are statistically significant for the involuntary part-time employment rate for the total population and women. Net corporate lending exhibits negative and statistically significant effects on the dependent variables, as expected. Regarding the impact of pension fund financialization on involuntary part-time employment rates, its coefficients are strongly positive and statistically significant in all cases. Concerning the control variables, wage

TABLE 1 Determinants of involuntary part-time employment

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PT	PT	PT	PT	PTF	PTF	PTF	PTF	PT (65+)	PT (65+)	PT (65+)	PT (65+)
<i>GDP Deviation</i>	0.063 (0.205)	0.079*** (0.000)	0.001** (0.072)	-0.007 (0.853)	0.054 (0.328)	0.074*** (0.004)	0.041 (0.161)	-0.028 (0.326)	-0.048 (0.299)	-0.019 (0.615)	-0.037 (0.325)	-0.011 (0.810)
<i>Human Capital</i>	0.283*** (0.000)	0.239*** (0.000)	0.002*** (0.000)	0.080* (0.074)	0.230*** (0.000)	0.174*** (0.000)	0.142*** (0.000)	-0.220*** (0.000)	-0.109 (0.126)	-0.142** (0.014)	-0.172*** (0.002)	0.011 (0.838)
<i>Wage Coordination</i>	-0.328*** (0.013)	-0.326*** (0.000)	-0.003*** (0.000)	-0.355*** (0.000)	-0.307*** (0.000)	-0.292*** (0.000)	-0.307*** (0.000)	-0.142*** (0.001)	-0.253*** (0.000)	-0.142** (0.018)	-0.157*** (0.010)	-0.392*** (0.000)
<i>Ln(Union Density)</i>	-0.020 (0.612)	-0.044** (0.034)	-0.001 (0.283)	-0.048* (0.055)	-0.044 (0.317)	-0.069*** (0.004)	-0.043 (0.113)	-0.129*** (0.000)	0.070 (0.202)	-0.097*** (0.005)	-0.070** (0.039)	-0.082*** (0.007)
<i>Ln(Labour Market Spending)</i>	0.611*** (0.000)	0.662*** (0.000)	0.006*** (0.000)	0.594*** (0.000)	0.745*** (0.000)	0.789*** (0.000)	0.717*** (0.000)	0.203*** (0.000)	0.408*** (0.000)	0.258*** (0.000)	0.219*** (0.000)	0.777*** (0.000)
<i>Ln(Min-to-FT Wage)</i>	0.117** (0.024)	0.091** (0.018)	0.001*** (0.009)	0.176*** (0.000)	0.151*** (0.002)	0.148*** (0.000)	0.149*** (0.000)	0.106** (0.018)	0.110** (0.052)	0.057 (0.221)	0.067 (0.151)	0.238*** (0.000)
<i>Household Debt²</i>	0.053* (0.074)	0.144*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	-0.018 (0.570)	0.083*** (0.000)	0.039* (0.083)	0.067 (0.118)	0.067 (0.118)	0.049* (0.098)	0.035 (0.262)	
<i>Ln(Stocks Traded)</i>	0.203*** (0.000)				0.246*** (0.000)				0.051 (0.372)			
<i>Net Corporate Lending</i>		-0.169*** (0.000)			-0.193*** (0.000)					-0.104** (0.012)		
<i>Pension Assets</i>				0.190*** (0.000)				0.047* (0.094)				0.118*** (0.002)
<i>Adjusted R²</i>	0.73	0.73	0.78	0.69	0.74	0.79	0.75	0.53	0.38	0.38	0.34	0.72
<i>Time Periods</i>	22	22	22	22	22	22	22	18	22	22	22	22
<i>Cross-Sections</i>	14	15	15	16	14	15	15	16	14	15	15	16
<i>Observations</i>	190	234	234	216	190	234	234	188	151	195	195	216
<i>F-Statistic</i>	66.07***	89.30***	102.86***	68.01***	66.79***	113.92***	101.79***	30.96***	12.32***	16.00***	15.25***	81.85***

Note: Statistical significance at 10%, 5% and 1% level is denoted by *, ** and ***, respectively. The coefficients reported are standardized by multiplying the obtained coefficient with the ratio of the standard deviation of the explanatory variable over the standard deviation of the dependent variable. *p*-values in parentheses. Constant terms included, but not reported.

bargaining coordination exhibits negative and statistically significant effects on all three involuntary part-time employment rates, while the effect of public spending on LMP is consistently positive and statistically significant across all six equations. The results for the rest variables are largely inconclusive.

Table 2 reports the econometric findings for the drivers of temporary employment. Household indebtedness has a positive effect on the temporary employment rates for women and the total population. The coefficient becomes statistically insignificant when we account for the effects of stocks traded. The impact of household debt on temporary employment for older employees is not statistically significant. Stocks traded and Net Corporate Lending exhibit positive and statistically significant effects on temporary employment rates for women and total workforce and negative for older employees. As regards the effects of pension fund financialization, its coefficients are positive and statistically significant for the total workforce and women but negative for older employees. Regarding the control variables, unionization, bargaining coordination and the minimum-to-full-time wage exhibit negative effects in the vast majority of equations and the impact of public labour market spending is positive. Further, the results for the impact of GDP deviation are inconclusive, while the effects of human capital development are strongly negative for the total workforce and women but positive for older employees.

On top of these estimations, in the main Appendix, we report regression results for all dependent variables that include only one financialization variable at a time to evaluate whether a potential correlation between corporate and household financialization indicators affects our main findings. All results remain unchanged, except for the effects of net corporate lending on total workforce temporary employment (which becomes statistically insignificant) and older employees (which changes sign) (see Table A1). In addition, we also estimate all main equations using the first lags of the independent variables as a simple robustness check for reverse causation and we find no changes as well (see Table A2). Ergo, these additional estimations confirm the credibility of the baseline results.

Overall, our findings confirm that both household debt and pension fund assetization increase involuntary part-time employment, while the effect of debt is also non-linear. Additionally, we also show that stocks traded and net corporate lending variables exhibit positive and statistically significant effects on involuntary part-time employment, for the total workforce and female population. Thus, taken together, these results constitute significant evidence that the financialization of everyday life increases compliance to involuntary part-time work arrangements in response to relevant pressures from corporate management due to corporate financialization. Regarding temporary employment, we also find that household debt and the volume of stocks traded increase compliance to work under fixed-term contracts for the total workforce and women. Interestingly, however, household debt does not exhibit any statistically significant effect on the temporary employment rates for older employees. A plausible explanation for this result is that older employees who have experienced better working and pay conditions in the past and have invested in housing and the stock market enjoy the returns from these investments on top of current salary or pension income. Moreover, since temporary employment contracts are in general costlier and less flexible to terminate compared to part-time contracts, employers would prefer to hire older and financially insecure employees, under the latter. Further, the effects of the assetization of pension funds are similar to the impact of household debt, since it increases the rates for the total workforce and women, and increases the rates for older employees. As mentioned earlier, this is not necessarily an entirely surprising finding given that pension reforms due to risky investments harm more younger employees. Furthermore, a rising share of pension fund assets might actually be positively correlated with employment rates for older employees, but not necessarily with

increasing atypical work rates. Concerning the positive effects of net corporate lending on temporary employment, this potentially implies that worsening balance sheets due to debt commitments may induce management to move from full-time, permanent to flexible, part-time contracts, and also to not renew existing temporary contracts.

6 | CONCLUSIONS

This paper contributes conceptually and empirically to the literature on the financialization-labour process-atypical work nexus by introducing the role of financialization in everyday life. More specifically, building on existing work that explains how shareholder value orientation accelerates labour market insecurity and flexibilization, we argue that this is only one side of the coin. Since financialization is a multidimensional process that includes the financialization of households and pension funds, here, we argue that compliance with managerial pressures to increase atypical employment is influenced by the level of financial insecurity that households face. Given the significant body of evidence that shows that debt dependence tends to make employees more self-disciplined at the workplace, particularly concerning wage bargaining (Wood 2017; Gouzoulis 2021, 2022, Gouzoulis et al. 2021), it is reasonable to extend this logic to compliance to atypical work arrangements via the complementary mechanisms presented in Section 3. Indeed, our empirical exercise using a panel dataset of OECD economies over the period 1997–2018 shows that household and pension funds financialization, along with corporate financialization, have jointly contributed to the rise of atypical forms of employment, and particularly involuntary part-time employment. These effects are particularly strong for the total workforce and women, and relatively weaker for older employees.

As discussed earlier, there are some differences in how financialization affects involuntary part-time and temporary employment, due to the qualitative differences between the two forms of non-standard employment. On the one hand, the clear positive relationship between financialization and involuntary part-time employment captures the transition from full-time, permanent employment to flexible employment contracts, therefore, to a more precarious labour market. On the other hand, the less clear picture regarding the financialization-temporary employment nexus potentially provides two insights. With respect to corporate financialization, worsening balance sheets for firms could lead managers to either replace permanent contracts with temporary ones and/or not renew existing temporary contracts. By the same token, the effects of household financialization vary with age, since current development does not affect equally older employees who might benefit from asset price inflation and not comply with managerial pressures. Overall, therefore, relevant future work should shed more light on these underlying dynamics by focusing more on the complex relationship between employment, unemployment and underemployment rates, which is beyond the scope of this study.

Summarizing, the results of this study suggest that the financial insecurity of employees should become a central focus both for the non-standard employment literature and for the broader framework of labour process theory. An obvious next step to refine our understanding of the underlying mechanisms is to examine these via case study and micro-level work as well as qualitative methods. Having said that, examining individual countries that represent different varieties of capitalism whose institutions and legal frameworks concerning household debt and pension fund default is fundamental. Finally, potential differences related to firm size and sector can also be of great significance.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in the databases of OECD, World Bank, Feenstra et al. (2015), and Visser (2019).

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NOTES

¹The samples include all economies for which relevant time series were available in OECD.Stat in 24/03/2021 when the data were downloaded. The full sample in the OECD database includes 35 countries, but due to data availability, the atypical work rates cover a maximum of 22 countries. For the full country list, see the econometrics section below.

²As Buddelmeyer et al. (2008) note, reverse causation between union density and atypical work cannot be fully ruled out. Yet, the fact that unions may not be able to engage efficiently with atypical workers does not imply that they necessarily have negative attitudes against unionism. In fact, the seminal study of Goslinka and Sverke (2003) shows little difference between atypical and traditional workers in terms of union turnover intentions.

³A recent contribution by Rothstein (2022) considers how workers can resist to workplace control in financialized firms, but not how financialization directly affects employee behaviour. While the level of analysis is different, our studies are complementary as they look at how workers resist (or not) to the pressures of management.

⁴As compared to consenting to the pressures of employers, here the argument refers more to a practical, short-term solution to financial difficulties.

⁵A recent example is the so-called 'haircut' of the Greek government bonds held by public pension funds in 2012 (Georgiopoulos and Papadimas 2012).

⁶While lack of 'financial literacy' and 'self-control' are commonly associated with over-indebtedness, empirical evidence shows that it is rising house prices that encourage household debt accumulation (Stockhammer and Wildauer 2018).

⁷Tables A1 and Table B1 in the online Appendix report the data sources and summary statistics, respectively. The full sample used in the econometric analysis includes Australia, Belgium, Canada, Chile, Costa Rica, Czechia, Germany, Spain, Estonia, Great Britain, Hungary, Ireland, Japan, Lithuania, Luxemburg, Netherlands, New Zealand, Poland, Portugal, Slovakia and Turkey. Certain countries are dropped from the estimations when a key series is missing, thus, the minor variation in the number of cross sections across equations.

⁸We experimented with skill ratios from EUKLEMS and the estimations could only cover a 10-year period and a much smaller sample of countries.

⁹We thank an anonymous referee for highlighting this point.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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APPENDIX

TABLE A1 Robustness checks – corporate financialization

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<i>PT</i>	<i>PTF</i>	<i>PT (65+)</i>	<i>PT</i>	<i>PTF</i>	<i>PT (65+)</i>	<i>TEMP</i>	<i>TEMPF</i>	<i>TEMP (65+)</i>	<i>TEMP</i>	<i>TEMPF</i>	<i>TEMP (65+)</i>
<i>GDP Deviation</i>	0.056 (0.309)	0.067 (0.148)	-0.032 (0.414)	0.061* (0.093)	0.070** (0.018)	-0.015 (0.678)	-0.008 (0.553)	0.010 (0.477)	0.008 (0.780)	-0.055*** (0.000)	-0.044*** (0.000)	-0.024 (0.336)
<i>Human Capital</i>	0.265*** (0.000)	0.144*** (0.000)	-0.166** (0.013)	0.245*** (0.000)	0.150*** (0.000)	-0.183*** (0.001)	-0.623*** (0.000)	-0.604*** (0.000)	0.251*** (0.000)	-0.573*** (0.000)	-0.519*** (0.000)	0.243*** (0.000)
<i>Wage Coordination</i>	-0.358*** (0.000)	-0.355*** (0.000)	-0.278*** (0.000)	-0.319*** (0.000)	-0.306*** (0.000)	-0.189*** (0.001)	-0.136*** (0.000)	0.051** (0.046)	-0.012 (0.771)	-0.211*** (0.000)	-0.027 (0.196)	-0.089*** (0.004)
<i>Ln(Union Density)</i>	-0.006 (0.883)	-0.008 (0.833)	0.078 (0.132)	-0.023 (0.344)	-0.051** (0.033)	-0.077** (0.022)	-0.383*** (0.000)	-0.404*** (0.000)	-0.098** (0.014)	-0.099*** (0.000)	-0.106*** (0.000)	0.188*** (0.000)
<i>Ln(Labour Market Spending)</i>	0.561*** (0.000)	0.661*** (0.000)	0.364*** (0.000)	0.650*** (0.000)	0.768*** (0.000)	0.258*** (0.000)	0.073** (0.044)	0.004 (0.896)	-0.094** (0.030)	0.294*** (0.000)	0.235*** (0.000)	0.012 (0.748)
<i>Ln(Min-to-FT Wage)</i>	0.160*** (0.000)	0.240*** (0.000)	0.174*** (0.001)	0.138*** (0.000)	0.210*** (0.002)	0.111** (0.018)	-0.185*** (0.000)	-0.281*** (0.000)	-0.271*** (0.000)	-0.170*** (0.000)	-0.234*** (0.000)	-0.220*** (0.000)
<i>Ln(Stocks Traded)</i>	0.232*** (0.000)	0.267*** (0.000)	0.047 (0.463)				0.309*** (0.000)	0.361*** (0.000)	-0.074* (0.085)			
<i>Net Corporate Lending</i>				-0.129*** (0.000)	-0.169*** (0.000)	-0.086** (0.036)				0.041 (0.104)	0.053*** (0.000)	0.081*** (0.000)
<i>Adjusted R²</i>	0.72	0.70	0.42	0.74	0.79	0.39	0.94	0.98	0.58	0.97	0.96	0.78
<i>Time Periods</i>	22	22	22	22	22	22	22	22	22	22	22	22
<i>Cross-Sections</i>	15	15	15	16	16	16	18	19	18	18	19	18
<i>Observations</i>	207	207	168	250	250	211	241	242	234	288	289	281
<i>F-Statistic</i>	65.78***	70.55***	18.56***	104.87***	131.75***	20.22***	594.53***	1402.04***	47.24***	1220.96***	1047.66***	141.55***

Note: Statistical significance at 10%, 5% and 1% level is denoted by *, **, and ***, respectively. The coefficients reported are standardized by multiplying the obtained coefficient with the ratio of the standard deviation of the explanatory variable over the standard deviation of the dependent variable. *p*-values in parentheses. Constant terms included, but not reported.

TABLE A2 Robustness checks – baseline specification with first lags

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PT	PTF	PT (65+)	PT	PTF	PT (65+)	TEMP	TEMPF	TEMP (65+)	TEMP	TEMPF	TEMP (65+)
GDP Deviation _{t-1}	0.001 (0.252)	0.033 (0.496)	-0.001 (0.979)	0.050 (0.195)	0.042 (0.269)	-0.002 (0.953)	-0.017 (0.328)	-0.007 (0.569)	0.012 (0.698)	-0.013 (0.580)	-0.021 (0.427)	-0.010 (0.610)
Human Capital _{t-1}	0.002*** (0.000)	0.173*** (0.000)	-0.198*** (0.003)	0.020 (0.659)	-0.052 (0.277)	-0.345*** (0.000)	-0.425*** (0.000)	-0.394*** (0.000)	0.256*** (0.000)	-0.737*** (0.000)	-0.640*** (0.000)	0.188*** (0.000)
Wage Coordination _{t-1}	-0.004*** (0.000)	-0.346*** (0.000)	-0.272*** (0.000)	-0.359*** (0.000)	-0.344*** (0.000)	-0.258*** (0.000)	-0.190*** (0.000)	-0.010 (0.704)	-0.027 (0.501)	-0.233*** (0.000)	-0.113*** (0.000)	-0.086*** (0.001)
Ln(Union Density) _{t-1}	0.001 (0.877)	-0.039 (0.359)	0.060 (0.232)	-0.040 (0.118)	-0.059** (0.035)	-0.145*** (0.000)	-0.384*** (0.000)	-0.401*** (0.000)	-0.076* (0.079)	-0.138*** (0.000)	-0.129*** (0.000)	0.191*** (0.000)
Ln(Labour Market Spending) _{t-1}	0.006*** (0.000)	0.771*** (0.000)	0.397*** (0.000)	0.593*** (0.000)	0.666*** (0.000)	0.304*** (0.000)	0.490*** (0.000)	0.358*** (0.000)	-0.014 (0.784)	0.246*** (0.000)	0.253*** (0.000)	0.045* (0.076)
Ln(Min-to-FT Wage) _{t-1}	0.001* (0.079)	0.124*** (0.006)	0.079 (0.109)	0.178*** (0.000)	0.215*** (0.000)	0.096** (0.041)	-0.536*** (0.000)	-0.536*** (0.000)	-0.321*** (0.000)	-0.017 (0.655)	-0.098*** (0.003)	-0.108*** (0.000)
(Household Debt _{t-1}) ²	0.001*** (0.000)	0.042 (0.184)	0.132*** (0.001)			0.032 (0.114)	0.001 (0.999)	0.002 (0.924)				
Ln(Stocks Traded) _{t-1}	0.002*** (0.000)	0.232*** (0.000)	0.056 (0.280)			0.235*** (0.000)	0.287*** (0.000)	-0.086* (0.057)				
Ln(Pension Assets) _{t-1}				0.184*** (0.000)	0.099*** (0.005)	0.058* (0.055)				0.299*** (0.000)	0.265*** (0.000)	-0.097*** (0.000)
Adjusted R ²	0.77	0.81	0.49	0.70	0.74	0.54	0.96	0.94	0.61	0.92	0.92	0.68
Time Periods	22	22	22	22	22	22	22	22	22	22	22	22
Cross-Sections	15	15	15	16	16	16	17	18	17	18	19	18
Observations	192	192	157	218	218	191	234	236	234	244	246	240
F-Statistic	79.52***	101.67***	19.61***	73.80***	90.49***	32.88***	638.66***	493.06***	475.63***	399.36***	384.24***	72.34***

Note: Statistical significance at 10%, 5% and 1% level is denoted by *, ** and ***, respectively. The coefficients reported are standardized by multiplying the obtained coefficient with the ratio of the standard deviation of the explanatory variable over the standard deviation of the dependent variable. *p*-values in parentheses. Constant terms included, but not reported.