



Financialization, labor market institutions and inequality

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ABSTRACT

The last three decades have witnessed rising inequality and deepening financialization in post-industrial democracies. A rapidly growing literature has linked these two phenomena. We go beyond existing scholarship by specifying which aspects of financialization can be expected to increase inequality and where in the income distribution this effect will occur. We also show that this effect is contingent on institutional context. We posit that the shareholder model of corporate governance and the growing demand for financial professionals are the two dimensions of financialization that drive up pre-tax income inequality. Nevertheless, the spread of the shareholder value model only benefits the very top income earners. We further argue that the institutional strength of labor shapes the relationship between financialization and inequality. We analyze effects of indicators of these two dimensions of financialization on the top 1% and the next 9% income shares and on the 90:50 earnings ratio. We test our hypotheses with data on 18 post-industrial democracies between 1960 and 2015.

KEYWORDS

Political economy; financialization; income distribution; labor market institutions; shareholder value model; post-industrial societies

Introduction

On 5th January 2016, in a speech before supporters in New York City, then presidential candidate Bernie Sanders accused Wall Street of ‘destroying the very fabric of our nation’ (NPR Politics, 2016). Senator Sanders decried ‘the extraordinary power [of a handful of people in the banking sector]’, which had ‘rigged’ the U.S. economy and political system to benefit the wealthiest Americans at the expense of everyone else. According to him, this system had led to extreme inequality which threatened the prosperity of the nation.

Official data support Sanders’ claim about the marked rise in economic inequality in recent decades. A 2014 report by the Organization for Economic Cooperation and Development (OECD) indicated that inequality in advanced capitalist democracies,

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 Supplemental data for this article is available online at <https://doi.org/10.1080/09692290.2020.1808046>.

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which had consistently fallen between the late 1920s and the early 1980s, had reached new heights. The GINI coefficient had increased by approximately 3 points, the top 10% now earned 9.5 times more than the bottom 10%, and 24% of total national income went to the richest 10% of households in 2014 (Balestra & Tonkin, 2018; OECD, 2014). These numbers are even more striking in the United States, where the top 1% of adults earned 81 times more than the bottom 50% before taxes and almost none of the gains from economic growth between 1980 and 2014 had accrued to the bottom half of the population (Piketty et al., 2018). This surge in income differentials has prompted politicians to consider inequality one of the ‘defining challenges of our time’ (Obama, 2013).

A rich literature in sociology, economics and political science seeks to identify the determinants of inequality in advanced capitalist democracies. A growing strand of research has focused on the precise dynamics underlined by Senator Sanders. Commonly referred to as financialization, they capture the ‘increasing role [of] financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies’ (Epstein, 2005). This role has manifested itself in less stringent financial regulations, expanded access to credit, greater participation of non-financial firms in financial markets, the rise of the shareholder value model of corporate governance, and higher shares of national income and employment generated by the financial sector. These processes, scholars argue, have meaningfully affected the income distribution.

Most existing work’s point of departure is the assumption that the expansion of the financial services industry invariably leads to higher income differentials. The mechanisms through which this occurs, however, remain insufficiently well theorized. Indeed, the link between different dimensions of financialization and the income position of different groups is still underspecified. Furthermore, few studies focus on the ability of institutions to constrain the financial sector or moderate its impact. This is problematic because the financial services industry does not evolve independently from the broader structure of the economy. Rather, it develops within it. And, despite certain converging trends, modern capitalist democracies continue to exhibit long-lasting differences in their institutional set-up. This set-up shapes interactions among multiple actors and conditions the effects of the financial sector. Nevertheless, research on financialization has rarely recognized this mediating role.

We seek to address these omissions by analyzing the differential impact of financial processes on different income groups and by accounting for enduring institutional differences among modern OECD countries. We argue that the growing importance of financial motives and activities has almost exclusively benefited the top 1%. However, in a departure from previous studies, we posit that the expansion of the financial sector per se does not necessarily lead to higher income inequality. Rather, the institutional context in which the sector develops shapes its distributional consequences. While the capturing of rents by financial institutions, the rising prominence of financial operations in non-financial corporations, corporations’ increasing reliance on the stock market, and corporate governance’s shift to a shareholder value orientation can generate disproportionate growth in the income of the top 1%, this effect has been much more pronounced in economies with weaker organized labor. This is because a stronger institutional position of

labor moderates these transformations, limiting their inegalitarian consequences, constraining the rise of the top 1% income share and boosting the earnings of the median worker. In the absence of strong labor, the expansion of the financial sector concentrates the benefits of rising demand for financial professionals among relatively few highly paying jobs, contributing to widening income differentials. Our empirical analysis, which extends previous studies and covers 18 post-industrial democracies between 1960 and 2015, supports these expectations.

This project enriches our understanding of the implications of the rise of the financial services industry. This expansion has become particularly salient in the aftermath of the global financial crisis. Indeed, the Great Recession brought many – scholars and politicians alike – to question the benefits of a large financial sector. Senator Josh Hawley (R-MI) recently denounced an economic order that allows financial instruments to benefit an ‘aristocracy’ at the expense of middle America, which suffers from ‘flat wages, [...] lost jobs, and [...] and declining opportunity’ (Hawley, 2019). Duménil and Lévy (2001) are equally critical in their analysis of the reemergence of finance as the dominant sector in the economy and the hegemony of neoliberalism as its ideological expression after the Keynesian years inaugurated by the Depression and WWII. Tomaskovic-Devey and Lin (2011, p. 545) have similarly argued that the process has ‘encouraged corporate leaders to switch their investment strategies from long- to short-term’, jeopardizing growth and development (Salento, 2013; Stockhammer, 2004). Others have expressed concern about finance’s potential to weaken representation, constrain policymaking, exacerbate economic instability and deepen political and economic inequality. Examining which parts of the income distribution are most strongly affected by the financial sector and how a country’s existing institutional context moderates this impact can thus greatly improve our analytical leverage and shed light on policies that can help prevent further economic polarization.

Our article also illuminates the implications of the decline of organized labor that has characterized the last four decades. Although noticeable cross-national differences persist, existing research has documented a consistent fall in union membership and collective bargaining across the advanced industrialized world. Indeed, while 30% of workers were members of a union and 45% of employees were covered by collective agreements across the OECD in 1985, these figures did not exceed 17% and 32% in 2016 (OECD, 2017). Our work suggests that this weakening can exacerbate the effect of financialization on the income distribution. Indeed, if these trends continue and extend to all advanced democracies, labor will no longer be able to effectively counteract the impact of the financial sector on inequality.

We begin our analysis by providing a brief overview of the existing literature on financialization and inequality in the OECD area, highlighting the theoretical and empirical questions that remain unanswered. We then present our hypotheses regarding the differential effect of financialization across different institutional contexts and segments of the income distribution. The next section describes our data and model specification. Our results support our expectation that a larger financial sector primarily benefits the top 1% and is less likely to affect the income distribution in market economies where the position of labor is institutionally protected. We conclude with some further theoretical reflections.

Literature

There is a rapidly growing literature on financialization in both advanced and emerging economies. Most empirical scholarship starts with an argument about the expansion of the financial sector, broadly understood as comprising establishments primarily engaged in or facilitating transactions involving ‘the creation, liquidation, or change in ownership of financial assets’.¹ Although it has not been uniform or omnipresent, this expansion has occurred in multiple countries and has taken various forms (Mader et al., 2020).

The growth of the financial sector is generally associated with rising inequality through a variety of channels. Focusing on labor force dynamics, Denk and Cournède (2015) see expanding employment in finance as leading to the creation of relatively few highly paid jobs. Looking into compensation and investment patterns, Dünhaupt (2014) links the spread of the shareholder value movement to higher incomes at the top through its benefits for wealthy asset holders. Examining the process of intensifying securitization,² Godechot (2016), in turn, connects the marketization of finance with the emergence of short-term arbitrage and speculation opportunities. According to him, income inequality widened as banks switched from a system based on long-term personalized loans monitored through a dense network of relationships connecting financial institutions with other economic actors to a system resting on the standardization of financial contracts and liquidity.

To the extent that quantitative research formulates clear hypotheses about the impact of the financial sector’s growth on the income distribution (Dünhaupt, 2014; Godechot, 2016; Roberts & Kwon, 2017), it builds on studies of the structural transformations of the U.S. economy. First and foremost, this scholarship underscores the rise of the shareholder value model (SVM) of corporate governance. The SVM doctrine re-conceives of the firm as a set of tradable assets and prioritizes maximizing shareholder value over any other strategic goals. In essence, it encourages a shift from an emphasis on investment and innovation to a focus on short-term increases in stock prices (Davis, 2009; Fligstein & Goldstein, 2015). To attain such increases, firms resort to cost-cutting and stock buy-backs, which puts downward pressure on wages and diverts resources from productive investment (Lazonick, 2014). The SVM also pushes for incentive plans for top management, often in the form of stock options, which boost incomes at the top (Palley, 2008). As a consequence, executive remuneration rises considerably.

Second, these studies highlight non-financial institutions’ transition to a different pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production (Krippner, 2005, 2011). In an attempt to overcome the resource constraints of the 1970s, companies which had previously limited their activities to production and retail entered financial markets. Emblematic of this change is the transformation of GMAC, which was founded by GM in 1919 to finance sales of automobiles. GMAC (later renamed Ally Financial Inc.) moved into the home mortgage market in 1985 and gradually evolved into one of the largest banks in the United States. This growing reliance on portfolio income as a source of revenue greatly loosened the link between production and the generation of surplus, excluding production workers from revenue-generating and compensation-setting processes, decreasing labor’s share of

income and boosting executive compensation (Lin & Tomaskovic-Devey, 2013). Together, these trends increased earnings dispersion among employees.

Third, studies of the transformation of the U.S. economy have focused on the link between top executive compensation and the rising share of profits generated by the financial sector. As changes in the regulatory framework led to a decline in market competition and facilitated the concentration of financial activities in a few large conglomerates, the financial sector's profits grew (Tomaskovic-Devey & Lin, 2011). Indeed, existing scholarship indicates that deregulation has led to vertical integration instead of intensified competition, creating 'lucrative financial niches' (Godechot, 2020; Goldstein & Fligstein, 2017). In a context characterized by weaker oversight and insider board appointments, top executives captured a large fraction of these rents, further widening income differentials.

In addition to driving up top executive compensation, the growing importance of the stock market has increased the proportion of income derived from capital. Ownership of the latter is generally concentrated in, but not limited to, the top of the income distribution. Large numbers of people have investment in pension funds, for instance, that are administered by large institutional investors. Nevertheless, Wolff (2017, p. 19) shows that although 'almost half of all [US] households owned stock shares either directly or indirectly [...], the richest 10 percent [...] controlled 84 percent of the total value of these stocks' in 2016. The top 1%, in turn, owned 40%. The concomitant emergence of new investment opportunities has thus disproportionately benefited higher-income households which, in addition to owning more capital, also access credit more easily and entered markets earlier, when returns were higher (Kremp, 2010). Affluent customers have thus gained new high risk/high return opportunities, particularly in poorly regulated financial markets. In contrast, low-income households often face considerable barriers to entry and borrow under unfavorable conditions, paying higher fees and interest rates in order to access credit and accumulating lower gains from investment (Iversen & Rehm, 2019; Piketty, 2014).

Existing scholarship thus anticipates a positive relationship between financialization and inequality. This expectation, however, has not always been confirmed by cross-national quantitative work. This is not surprising given that different studies have used different independent and dependent variables. While some measure the financial sector in terms of its contribution to total GDP or employment (Denk & Cournède, 2015; Godechot, 2020), others opt for a financialization (Kus, 2012) or a financial liberalization (Flaherty, 2015) index which is supposedly better able to capture the multiple channels through which financialization influences inequality. Furthermore, whereas some conceptualize finance as only including financial intermediation, others see it as encompassing real estate (Roberts & Kwon, 2017). Similarly, scholars have focused on a variety of different dependent variables, examining top income shares, wage ratios and pre- and post-tax-and-transfer Gini coefficients, often without a clear rationale why a specific dimension of financialization should affect a particular outcome of interest. Empirical work has thus yielded inconclusive results.

Somewhat surprisingly, despite these inconsistencies, most cross-national quantitative work assumes that the relationship between finance and inequality is straightforward and homogenous across different contexts. This relationship, however, is conditioned by countries' institutional setting (Roberts & Kwon, 2017).

Institutions structure the environment in which the financial sector is embedded and shape interactions among different actors. Crucially, they affect the extent to which the shareholder value model of corporate governance can take hold. In developing our theory, we focus on the specific aspects of financialization that affect top income groups and build on the literature on capitalist diversity (Baccaro & Pontusson, 2016; Hall & Soskice, 2001; Rueda & Pontusson, 2000). In particular, we draw on research that shows that the organizational strength of labor exerts a moderating effect on the share of the top 1% (Hope & Martelli, 2018; Volscho & Kelly, 2012; author cite).

Theoretical framework and hypotheses

The focus of this article is on two aspects of financialization, the shift to the shareholder value model of corporate governance, which has been an integral part of the growth of the financial sector (van der Zwan, 2014), and the increasing reliance of non-financial corporations on financial transactions as a source of revenue. As stated above, the SVM posits that top managers' primary responsibility is to 'ensure that the assets of the firm [are] returning the highest possible profit for their shareholders', placing the latter above any other constituency (Fligstein & Shin, 2007). This profit maximization requires strategic decisions about production, employment and technology to be guided by financial criteria that make corporate balance sheets attractive to investors. The stock market and the threat of hostile takeovers are conceived as effective disciplining mechanisms to promote efficiency and enforce economically and socially optimal firm competition, which essentially moves from product markets to stock markets (Erturk, 2020). Short-term considerations about financial performance thus replace longer-term goals related to growth and corporate innovation (Tomaskovic-Devey & Lin, 2011).

This transition shortens the horizon for executive performance evaluation and pushes for substantial financial reorganization. Existing work anticipates that the adoption of the shareholder value model incentivizes downsizing, increases layoffs, promotes subcontracting and accelerates the substitution of labor with technology (Dünhaupt, 2014; Fligstein & Shin, 2007). Management is motivated to engage in financial manipulations and buy back shares to drive stock prices up. Corporations are thus under pressure to 'de-diversify, restructure around core activities, and out-source and downsize all activities which are not essential' (Godechot, 2020, p. 419). Tomaskovic-Devey and Lin (2011) note that such re-organization hurts labor as workers lose ground vis-à-vis capital. According to them, the spread of the shareholder value model is associated with wage stagnation and a lower share for labor in national income.

While this expectation has received mixed empirical support (Godechot, 2020), the SVM has been conclusively linked to rising incomes at the top. Why could that be? Existing work indicates that, to better incentivize executives, the SVM ties their compensation to the stock market. This is accomplished through bonuses dependent on performance and through remuneration packages that include stock options. Godechot (2020) notes that the average bonus on Wall Street increased 8.9 times between 1989 and 2006. These bonuses are traditionally in line with employees' standing in the company's hierarchy. Bell and Van Reenen (2014) estimate that around 40% of workers in the UK received a bonus in 2008, with bonuses

accounting for 8.6% of total pay for those outside the top decile. Simultaneously, 83% of employees in the top percentile received bonuses amounting to 35% of their total remuneration. Executive stock option pay has also become much more prevalent over the last few decades (Gomez & Tzioumis, 2006; Tomaskovic-Devey & Lin, 2011). Indeed, even in countries where stock options are not very widely spread, such as Germany, stock options ‘are [now] offered to top management in large [...] companies, especially those which are oriented towards the shareholder value principle’ (Jürgens et al., 2000, p. 74). The specific forms of financial compensation that the SVM promotes thus benefit top executives much more than ordinary employees, leading to widening differentials within firms.

One might expect that the growth of financial activities would spread benefits wider than the narrow circle of top executives. Indeed, financial workers are often overrepresented at the top of the income distribution. Although the sector employs around 4% of the labor force across Europe, its employees make up approximately 19% of the top 1% earners (Denk, 2015). Accordingly, numerous studies point to a financial wage premium. Philippon and Reshef (2012) find that financial workers in the United States have enjoyed higher salaries relative to employees with similar qualifications in other sectors throughout the twentieth century. Bell and Van Reenen (2014) calculate that the financial industry accounted for 70% of the rise in the top 1% income share in United Kingdom between 1998 and 2008. Denk (2015) shows that this phenomenon is not limited to Anglo-Saxon states. In fact, the financial wage premium averaged 28% in 19 European countries, reaching a high of 52% in Italy in 2010.³

Nevertheless, this wage premium is not evenly distributed across the income distribution. Denk (2015) notes that it is ‘essentially flat for workers in the lower two-thirds of the income distribution at 15–20%’, rising continuously to reach 40% for the top decile. In actuality, financial sector employees in the bottom 90% of the overall earnings distribution receive a 16% boost, while the premium for those in the top 10% amounts to 27% (ibid.), with particularly high levels at the very top. Cumulatively, whereas the bottom five deciles receive close to 0% of total rents, the top 10% get around 67%. This suggests that not only are financial sector employees better paid than workers with similar education and skill levels in other industries, but that the highest-earning among them capture a much larger share of the rents accruing to the sector.

Thus, while the growth of financial transactions across both financial and non-financial corporations generates well-paid employment opportunities for financial professionals, the shareholder value orientation that is intricately linked to this growth ensures that the largest gains accrue at the very top of the income distribution. We therefore anticipate a differential impact on the upper tail of the income distribution, with the SVM primarily benefiting top executives, in the top 1%. Those under them – the rest of the integrants of the top 10% in particular – do not benefit directly from the SVM but can expect an income boost from the growth of demand for financial professionals.

The extent to which the growth of financial transactions in general and the shareholder value model in particular affect the income distribution, however, is not independent of the broader structure of the economy. Existing research indicates that the configuration of institutions and actors shapes actual outcomes at the firm and the aggregate macro level (Aguilera & Jackson, 2010). Although the SVM

has spread geographically, it does not look the same across different contexts. Indeed, local rules have modified its operations or created new hybrids (Aguilera & Jackson, 2010), which has the potential to change its results. Crucially, the protection of labor interests in general and the legally anchored position of labor in corporate governance in particular ameliorate some of SVM's side-effects. Germany illustrates this point. The presence of labor representatives on supervisory boards of large corporations in the country makes hostile takeovers extremely difficult. As a result, only 1.5% – or 5 out of 338 – merger and acquisitions transactions between 1981 and 2010 constituted hostile takeovers (Mager & Meyer-Fackler, 2017). In contrast, Gosh (2001) found that in the United States 28% – or 89 out of 315 – mergers and acquisitions in the period 1981–1995 were hostile. This contrast indicates that the effects of the shareholder value model are contingent on the strength of labor.

While a variety of structural transformations have weakened this strength in most post-industrial democracies (Darcillon, 2015; Meyer, 2019; Visser, 2019), variation across capitalist economies persists (Baccaro & Howell, 2017; Thelen, 2014). This is evident in metrics on contract extension, centralization of unions and collective bargaining and the presence and power of works councils, all of which enhance the institutional position of labor. And, as Baccaro and Howell (2017, p. 45) show, although employer discretion has increased, union density has declined, managers' obstruction has deepened (Behrens & Dribbusch, 2020) and industrial relations have followed a similar liberalizing trend in most post-industrial societies, the institutionalization of labor power has changed little over time (Figure 1(b)). The variation exhibited by different countries has also persisted. Some states, such as Austria, Belgium, Denmark, Norway and Sweden continue to score much higher than others. We argue that these persisting differences matter for distributive outcomes.

How exactly do they matter? Unions and work councils have traditionally defended the interests of wage earners. They advocate for higher pay, better working conditions and greater job protection. These demands not only exclusively benefit members but also extend to non-members. As Rosenfeld (2014, p. 10) argues in the context of the twentieth-century USA, 'unions helped pattern pay and benefit packages among union and non-union workers, as employers often matched union contracts to forestall organizing drives and maintain a competitive workforce'. As part of this arrangement, productivity increases were tightly tied to worker pay, effectively raising the economic fortune of the vast middle of the income distribution. Surplus was thus distributed more equitably among management and workers, limiting the amount that corporations could allocate to executive compensation or dividends for shareholders.

This is not only dictated solely by the availability of resources but also by the cultural environments that unions create. On the one hand, Jensen and Murphy (1990) suggest that high executive pay signals good financial standing and gives unions grounds on which to demand higher wages in labor negotiations. Executive boards might thus be forced to decrease CEO remuneration to quell such demands. On the other, Western and Rosenfeld (2011, pp. 517–518) show that labor organizations '[promote] norms of equity that [claim] the injustice of unchecked earnings for managers and owners'. They protest the pay of upper management, making it more difficult for executives to receive exorbitant salaries, especially if they want to

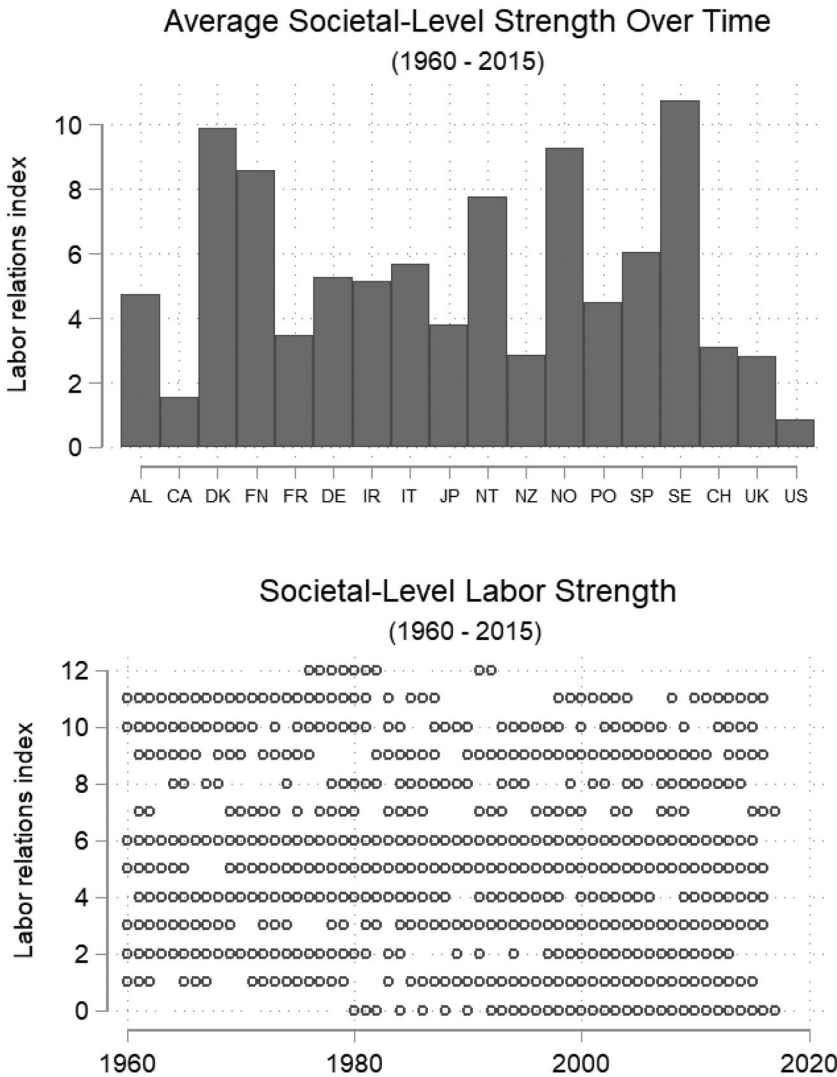


Figure 1. (a) Labor strength over time and across countries (1960–2016). (b) Labor strength over time and across countries (1960–2016).

avoid production disruptions and maintain a collaborative relationship with labor. Indeed, Gomez and Tzioumis (2006) find that union presence is associated with lower levels of total CEO compensation at the firm level. This effect is primarily due to substantially lower stock option values and, consistent with our expectations, is stronger the higher up the income distribution one moves.

A potential concern about this mechanism linking union power to the effect of financialization might be that workers are not likely to know how much their CEO earns. Nevertheless, the Corporate Governance Factbook indicates that remuneration disclosures at the individual level are mandatory in 14 of the postindustrial economies in our analysis (OECD, 2019, pp. 127–131). In fact, the only countries where pay disclosure is obligatory at the aggregate level only or simply

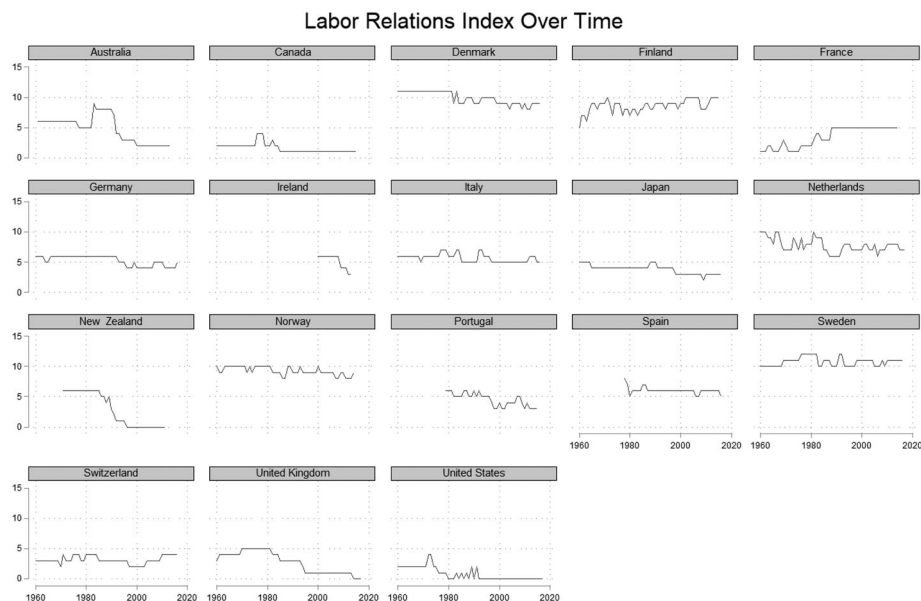


Figure 1. Continued.

recommended at the aggregate and the individual levels – Norway, Denmark, Finland and Austria – all have legally-guaranteed representation of employees on company boards, where pay levels are typically approved (OECD, 2019, pp. 148–149). Employees in Germany, France, the Netherlands and Sweden are also represented on corporate boards of firms above a certain size. Whereas information alone does not necessarily enable labor to counteract runaway executive compensation, having a presence where remunerations are approved opens the possibility for influencing pay levels.

The degree of influence in turn depends on the ability of labor to shape public opinion and press claims for commensurate compensation. Although unions' voice is normally loudest during formal collective bargaining negotiations, it can also be heard outside of the board room, resonating in public spheres (Rosenfeld, 2014). Western and Rosenfeld (2011) highlight that unions have fought to establish pay norms in local labor markets and have generally used a language of social solidarity in public discourse. Together with the scrutiny on executive compensation that works councils place, these trends can mobilize public opinion against rising incomes at the top.

Lastly, stronger labor can influence the extent to which executives can benefit from the stock market. Through their say in decisions on staffing, investment, work organization and technology adoption, work councils can affect the degree to which firms prioritize financial engineering as opposed to productive investment. Furthermore, because strong labor unions can expose rent seeking, opportunities to generate and appropriate rents are more limited in economies where labor is more institutionally powerful. Lastly, existing work has shown that the presence of strong unions in a firm is negatively associated with its market value (see Gomez & Tzioumis, 2006). As previously noted, the latter is strongly tied to executive

compensation, as pay packages increasingly include equity shares. Thus, we would expect that top incomes will decrease in all of these scenarios.

In summary, we argue that the shareholder value model of corporate governance should lead to an increase of the income share of the top 1% but should not matter much for other high earners. The top 1% is heavily driven by top corporate management; business occupations make up some 60% and generate some two thirds of income in this category in the United States (Bakija et al., 2012, pp. 35, 41). To the extent that firms emphasize quarterly financial performance and tie executive compensation to this performance, we would expect the SVM to drive up top 1% incomes. The growth of financial activities by non-financial corporations may benefit the next 9% by creating more highly paying jobs for financial professionals. However, the institutional strength of labor at both the enterprise and the societal level should moderate both effects, keeping top executive compensation in check and moderating the salary premium of the rest of the top decile.

Measurement

Dependent variables

The variables included in our analysis, their measurement and data sources are listed in Table 1. Consistent with our expectations about the steep rise in top executive compensation and the concentration of financial sector workers among top earners in the OECD area (Bakija et al., 2012; Kremp, 2010), we focus on the pre-tax income shares of the top 1% and the next 9%. We choose not to zoom in on the top 10% because differences across countries and over time in this groups are mostly driven by dynamics in the top 1%.

The top 1% income share captures the share of total national pre-tax-and-transfer income going to the top 1% of income units – individuals or households, depending on the tax laws of the country and period. In line with Saez and Veall (2005), who show that treating individuals as the unit of taxation increases the level of measured inequality in Canada, we include a methodological dummy for individuals.⁴

The share of the 90th to 99th percentile of income earners is the difference between the top 10% and the top 1% income shares. We call this group ‘the next 9%’. Data for both variables come from the World Wealth and Income Database (Alvaredo et al., 2011), which relies on tax returns to distribute national income across population groups. Our analysis covers 18 advanced post-industrial democracies (Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom and the United States) between 1960 and 2015.

Financialization

We identify the shareholder value model of corporate governance as a key aspect of financialization. Unfortunately, the literature has not converged on a direct measure of the SVM or produced consistent data over time. Scholars have instead created different indirect measures. Martynova and Renneboog (2010), for example, calculate indices that reflect how the law in different countries regulates conflicts

Table 1. Variable definitions and sources.

	Definition	Original data source
Dependent variables		
Top 1% income shares	Income of the top 1% as a percent of total income	WWID
Next 9% income shares	Income of the 90–99% as a percent of total income	WWID
Ratio of top 1 to next 9	(Top 1% share/next 9% share) $\times$ 100	WWID
90–50 wage ratio	Ratio of gross earnings received by an employee at the 90th earnings percentile to that received by an employee at the 50th percentile.	OECD
Independent variables		
<i>Financialization variables</i>		
Stock market capitalization	Market value of publicly listed stocks as a percentage of GDP	Roine et al., 2009
Nonfinancial corporations' financial assets	Total financial assets held by non-financial corporations as a percentage of GDP	OECD
Labor relations index	Index of labor relations characteristics (union density, union centralization, contract coverage and wage coordination)	Visser (2019)
Works council rights	Index with presence and extent of rights of works councils	Visser (2019)
Financial variable $\times$ labor relations index	Interaction term of financial variable and the labor relations index	
Financial variable $\times$ works council rights	Interaction term of financial variable and the works council rights index	
Control variables		
Secular center and right government	Seats of secular right and center parties as proportion of the seats of all governing parties, cumulative from 1945 to date of observation	Brady et al. (2020)
Veto points	Index of presidentialism, bicameralism, federalism and referenda	Brady et al. (2020)
GDP per capita	GDP per capita in thousands of 2005 U.S. dollars, PPP	Penn World Tables
Union density	Net union membership as a percentage of wage and salary earners	Visser (2019)
Centralization	Summary measure of power of confederations in appointments, wage agreements, strike funds and strikes	Visser (2019)
Individuals	Unit of analysis = individuals	WWID

All control variables are available in Brady et al. (2020).

between shareholders and managers, minority and majority shareholders and shareholders and bondholders. Similarly, Aminadav and Papaioannou (2016) focus on corporate control and trace ultimate controlling shareholders. Although they capture the relational dimension of the SVM, these measures do not tap into the emphasis on maximizing shareholder value, which Lazonick and O'Sullivan (2000) call 'a new ideology for corporate governance'.

To remedy this, we use stock market capitalization as a proxy. As Jürgens et al. (2000, p. 56) argue, a highly developed stock market is a material precondition for a shareholder value economy. It can also be seen as a result of the emphasis firms put on stock prices and stock market transactions. Furthermore, stock market capitalization is a particularly appropriate proxy for exploring the impact of the SVM on inequality because an important part of executive compensation under SVM comes in the form of stock options. The variable captures the market value of all publicly listed stocks as a percentage of GDP. Roine et al. (2009)'s database was supplemented with data from Beck et al. (2010) and Čihák et al. (2012) for recent time points.⁵

Our second measure of financialization is financial assets held by non-financial corporations. This variable reflects corporations' emphasis on financial performance, the weight accorded to financial activities for corporate revenue and the rising demand for financial expertise. Non-financial corporations' financial assets are measured at the aggregate level as a percentage of GDP. Data are available through the OECD's National Accounts data base (OECD various years).

Institutional power of labor

We rely on two measures to capture the institutional differences in the position of labor that we expect to mediate the effects of financialization on inequality. First, we account for the strength of labor at the enterprise level through a measure of the power of works councils. The variable is a four-point index, with 0 indicating the absence of such councils and 3 implying extensive economic and social powers for works councils, including codetermination on certain issues. Data are available through Visser (2019).

Second, we construct an index based on four different aspects of labor relations that shape labor strength at the societal level: union density, union centralization, bargaining coverage and wage coordination. Union density captures net union membership as a percentage of wage and salary earners. Bargaining coverage is the percentage of workers covered by a collective bargaining agreement. Wage coordination reflects the degree of coordination of wage setting, with involvement of major actors other than unions, including the government, judicial awards, employers' associations and major companies as trendsetters. It is measured on a five-point scale, from fragmented wage bargaining confined largely to individual firms or plants to economy-wide bargaining. Lastly, union centralization is a summary indicator that combines measures of union authority and union concentration at multiple levels. As the correlation matrix in the Supporting Information Appendix indicates, each of these dimensions captures a unique feature of labor relations. In order to weigh the four indicators roughly equally, we collapse the two continuous variables (union density and contract coverage) into four categories, 0 through 3, each containing a quarter of the cases, and transform the eight-point centralization

indicator and the five-point wage coordination measure into a four-point index. The four variables are then summed resulting in a scale with 12 categories, varying from 0 (lowest) to 12 (highest). Data for all components come from Visser (2019).

If works councils are important for keeping top executive remunerations in check, why does the strength of labor at the societal level matter as well? Resources from strong unions are necessary for works councils to be able to exercise their rights effectively. The information sharing, mobilizational capacity, public platforms and solidarity that unions foster make it much more difficult for top management to play works councils in different enterprises against each other and disregard their interests. National-level variables thus play a meaningful role in allowing local-level institutions to successfully shape inequality.

Figure 1 reveals the marked variation in the institutional strength of labor across time and space. While 1(a) shows the average value of the index for each of the 18 industrial democracies in our sample over the entire time period examined here, 1(b) plots how the index behaves in each country between 1960 and 2016. As we can see, while labor strength is on average very high in some countries, such as Denmark, Norway and Sweden, over the entire time period included in our analysis, it seems particularly weak in others (Canada, United Kingdom and the United States). The fact that the index is capable of reflecting well-documented differences in labor relations across political economies suggests that it is a good indicator of the type of political economic environment in which the financial sector operates. Moreover, we notice that although observations at the highest level of strength disappeared after the early 1990s (Table 1 lower panel), labor remained quite strong (at the second or third highest level) in a good number of country-years.⁶

Control variables

We include a battery of controls to account for the impact of other factors that have been shown to affect our measures of inequality. Our top 1% and next 9% models control for GDP per capita, partisan government and veto points. Partisan incumbency is the cumulative share of parliamentary seats occupied by secular right and center parties as a proportion of all governing parties' seats. Veto points is an additive index of presidentialism, bicameralism, federalism and referenda (see Supporting Information Table A1). It reflects the ease with which national policy-makers can implement economic or social policies that can affect the fortunes of the top. Existing work finds that the presence of multiple veto points forces consensus-seeking and facilitates policy blockage by special interests, resulting in policy drift (Hacker & Pierson, 2010; Huber et al., 1993; Immergut, 1992). The models with works council powers also feature union density and centralization to account for the strength of labor at the societal level.

Statistical estimation

Pooling time-series cross-sectional data presents several estimation challenges. We address serial correlation by correcting for first order auto-regressiveness. Beck and Katz (2004, 2011) have shown that this strategy (ar1 corrections) is equivalent to

including a lagged dependent variable on the right-hand side of the regression equation without suppressing the explanatory power of other independent variables.⁷ Consistent with a rich literature on economic inequality, we measure our outcome of interest as a level. This is because we expect changes in the dependent variable to occur gradually, with causes operating over long periods of time. Such dynamics resemble cumulative causes in Pierson's typology of causes and effects (Pierson, 2003, p. 198) and make error correction models, which model the dependent variable as a first difference, inappropriate. Augmented Dickey-Fuller tests reject the joint presence of unit roots across panels ($p = 0.000$) for both the top 1% and the next 9% income shares.

In line with Beck and Katz (1995), we include country dummies to address omitted variable bias (Beck, 2001). We also add period dummies – for the golden age of post war growth (1960–1972), the oil shocks and stagflation years of the seventies (1973–1979), the episode of deregulation up to the introduction of the single European market (1980–1992) and the global financial crisis and its aftermath (2008–2012) – to control for common economic shocks, using the transition to the knowledge economy (1993–2007) as our reference period. We check the robustness of our findings by running stripped form models and by estimating random effects and fixed effects models. Thus, although time-series cross-sectional analysis has its limitations, we do our best to choose a conservative estimation technique that addresses the most common challenges and thus inspires greater confidence in our approach.

Results

Table 2 reports the results from our analysis of the impact of financialization on the top 1% income share. Models 1 and 2 use stock market capitalization as our indicator of the SVM. Models 3 and 4 rely on non-financial corporations' financial assets to capture rising demand for financial professionals. While models 1 and 3 draw on our societal-level labor relations index, models 2 and 4 capture the strength of labor at the enterprise level through works council rights. Consistent with Brambor et al. (2006, p. 74), who argue that one cannot 'infer whether X has a meaningful conditional effect on Y from the magnitude and significance of the coefficient on the interaction term', we use margins plots to identify the impact of financialization on the share of the top 1% over the range of labor strength. Figure 2(a–d) indicates that stronger labor is associated with a weaker effect of financialization on income inequality in every case.

As shown by Figure 2(a), stock market capitalization meaningfully affects the top 1% income share. SVM has a positive declining effect on the top of the income distribution over the range of the labor relations index. This positive effect becomes insignificant only when the LRI reaches its highest values, suggesting that it takes a very powerful institutional position of labor at the societal level to neutralize SVM's impact on the top 1% of the income distribution. Such levels of strength occur in approximately 7% of our country/year observations. In other words, stock market capitalization drives the top 1% share up in 93% of our observations.

Figure 2(b) reveals similar dynamics with works council rights. Only the strongest works councils, present in approximately 11% of our country/year observations, are able to counteract the effect of the SVM spread on the very top of the

Table 2. Financialization impact on top 1% income share by labor strength.

	Top 1%			
	Model 1	Model 2	Model 3	Model 4
Stock market capitalization	0.012***	0.012***		
Stock market capitalization × labor relations index	0.000			
Stock market capitalization × work councils, rights		−0.002		
NFC financial assets			1.137*	2.006***
NFC financial assets × labor relations index			−0.101	
NFC financial assets × work councils, rights				−0.928***
Labor relations index	−0.004		0.075	
Work councils, rights		−0.536**		1.253
Union density		−0.061***		−0.158***
Centralization		−0.636		−0.669
Secular center and right government	0.000	0.000	0.000	−0.001
Veto points	0.668**	0.520*	1.024***	1.536***
GDP per capita	0.088***	0.076***	0.188***	0.123***
Individuals	0.581	0.665	0.847	0.569
Constant	7.307***	9.782***	2.919*	4.681*
Common ρ	0.88	0.86	0.72	0.65
Adjusted R^2	0.63***	0.66***	0.62***	0.69***
Observations	690	695	337	337

*Significant at 0.05.
**Significant at 0.01.
***Significant at 0.001.

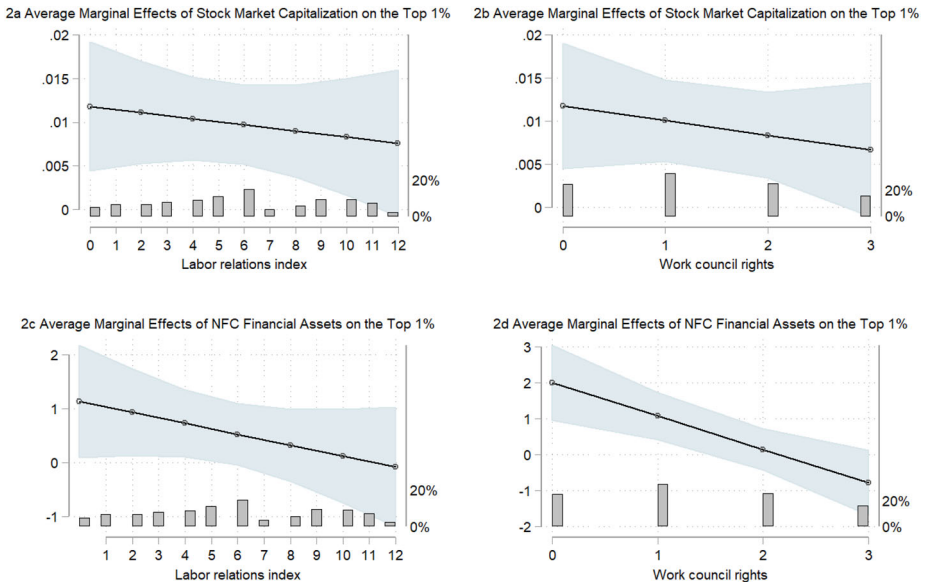


Figure 2. Financialization, labor strength and the top 1% income share (Prais Winsten regressions with country and period dummies).

income distribution. Conversely, SVM is associated with higher top 1% shares in 89% of the cases. Like before, the marginal effect of stock market capitalization declines over the range of works councils' rights.

Figure 2(c) looks into the impact of non-financial corporations' financial assets. This effect, which is positive and significant for LRI values smaller than 6, becomes

Table 3. Financialization impact on next 9% income share by labor strength.

	Next 9%			
	Model 1	Model 2	Model 3	Model 4
Stock market capitalization	0.000	0.000		
Stock market capitalization $\times$ labor relations index	0.000			
Stock market capitalization $\times$ work councils, rights		0.000		
NFC financial assets			0.609*	0.315
NFC financial assets $\times$ labor relations index			-0.049	
NFC financial assets $\times$ work councils, rights				-0.018
Labor relations index	-0.037		0.065	
Work councils, rights		-0.054		0.493
Union density		-0.065***		-0.076**
Centralization		0.308		0.421
Secular center and right government	0.001	0.001	0.002	0.002
Veto points	0.353	0.393	0.747*	1.176***
GDP per capita	0.006	-0.010	0.022	-0.006
Individuals	0.782**	0.735**	0.761**	0.671**
Constant	22.350***	23.974***	19.661***	20.012***
Common ρ	0.99	0.98	0.95	0.94
Adjusted R^2	0.80***	0.86***	0.93***	0.94***
Observations	682	687	337	337

*Significant at 0.05.

**Significant at 0.01.

***Significant at 0.001.

insignificant at the median of our labor relations index. Accordingly, labor movements of medium and high strength are able to effectively neutralize the upward pressure that a high demand for financial professionals puts on top earnings. This does not change when we use works councils' rights as an alternative measure of labor strength (Figure 2(d)). The impact of financial assets held by non-financial corporations on the top 1% share is significant when the index assumes the value of 0 or 1. In the 34% of our observations when works councils are coded 2 or 3, however, this effect disappears.

Taken together, these results suggest that the impact of stock market capitalization on the top 1% share is more difficult to counteract than the effect of financial assets held by non-financial corporations. This fits our expectations. Under the SVM, top executive remuneration comes partly in the form of stock options, so there is a very direct relationship between stock market valuation and the top of the income distribution. Indeed, as Bakija et al. (2012) show in the context of the United States, the income attributed to those who captured most of the increase in the top 0.1% income share strongly mirrors stock market prices. Instead, the effect of non-financial corporations' financial assets on the top of the income distribution works heavily through the demand for – and valuation of – financial professionals.

Models 2 and 4 also indicate that union density is negatively signed and highly significant even when we account for work council rights. We can infer that labor strength at the enterprise and the societal level work together to keep the share of the top 1% in check. These findings are consistent with the literature on the determinants of inequality in post-industrial democracies (Flaherty, 2015; Huber et al., 2019).

How about the rest of the high earners? Table 3 shows the results from our analysis of financialization on the next 9%, or the income earners between the 90th

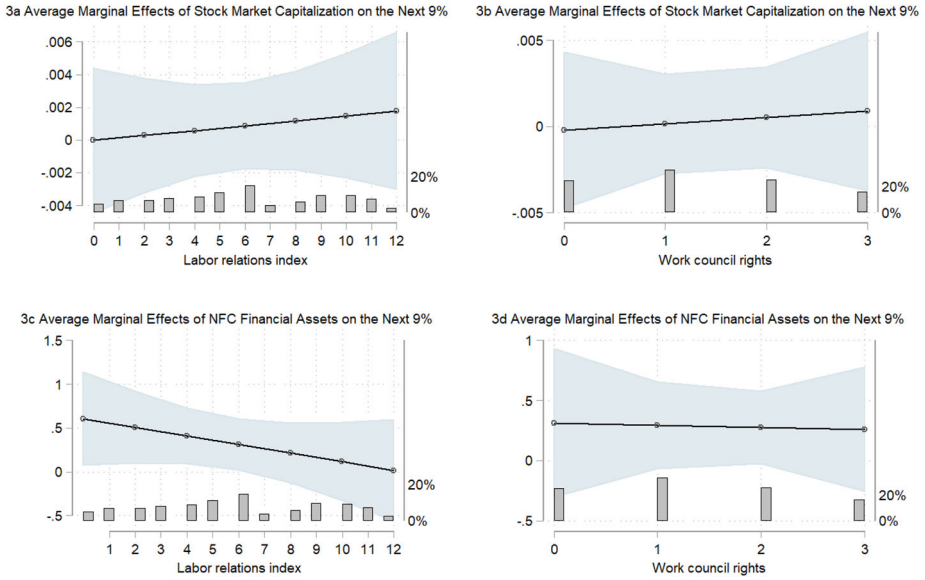


Figure 3. Financialization, labor strength and the next 9% income share (Prais Winsten regressions with country and period dummies).

and the 99th percentile. Like in Table 2, models 1 and 2 measure SVM through stock market capitalization, while models 3 and 4 measure demand for financial professionals through non-financial corporations' financial assets. Furthermore, models 1 and 3 include our labor relations index capturing the strength of labor at the societal level, whereas models 2 and 4 reflect the strength of labor at the enterprise level through works council rights. Figure 3(a–d) plots the effects of financialization on the share of the next 9% conditional on labor strength.

The results are by and large unremarkable; three out of the four models and figures render non-findings. The SVM does nothing for the next 9%, regardless of labor strength at both the enterprise and the societal levels (Figure 3(a,b)). We can thus conclude that the benefits from the adoption of the shareholder value model remain confined to the top 1%. When financialization is measured through the financial assets of non-financial corporations, however, the strength of labor at the societal level mediates the positive impact of financialization on the 90–99% income share. Figure 3(c) shows that this effect becomes insignificant at just about the median of our labor relations index. Labor movements of higher strength thus manage to prevent higher demand for financial professionals from boosting the income share of the next 9%. Nevertheless, the slope of the graph is not very steep and the effect is not large. Furthermore, Figure 3(d) reveals that works council rights do not matter. Consequently, these results support the conclusion that the benefits from the spread of the SVM accrue exclusively to the top 1% (Godechot, 2020) and that increasing demand for financial professionals affects the income share of the next 9% only weakly.

Our results are robust to different estimation techniques and model specifications (Supporting Information Tables and Figures A1 to A6). Removing all controls except for the country and period dummies does not change the analysis in significant ways. Furthermore, in random and fixed effects models both measures of

financialization statistically significantly shape the top 1% income share at low values of the labor relations and the works council rights indices. The patterns are the same as in our Prais Winsten models. When we opt for the income share of the next 9% as our outcome of interest, the interaction between the labor relations index and non-financial corporations' financial assets shows similar patterns to [Figure 3\(c\)](#) in both fixed and random effects models. By contrast, the marginal effects of the financialization measures are wrongly sloped and often insignificant at any values of the works council rights measures.

A cause for concern might be reverse causality. While financialization dynamics shape inequality, it is also possible that rising income differentials might drive the growth of the financial sector. Indeed, in the absence of a redistributive welfare state, wage stagnation and status competition might induce households to resort to indebtedness in order to maintain consumption (Stockhammer, 2015). Such higher reliance on credit can contribute to financialization. Nevertheless, as Godechot (2020) notes, this hypothesis has not yet received much empirical support. If positive, Godechot (2020) expects the effect of inequality on financialization to be modest. It is also pertinent to note that the argument about indebtedness applies to households being hurt by wage stagnation, not those in the top 1% or 10%, which is how we measure inequality.

In any case, we ran a Granger causality test⁸ to check whether the top 1% and the next 9% income shares Granger-cause stock market capitalization and NFC financial assets. The results indicate that this is not the case in 1- and 2-year lag models: the lagged values of our inequality measures do not predict our financialization measures. When we use 3- and 4-year lag models, the top 1% income share does Granger-cause stock market capitalization. However, the results suggest that lagged values of financialization are much stronger predictors of inequality than the other way around.

To further explore the effect of financialization on the top part of the income distribution we focus on the ratio of our two dependent variables. The Top 1/Next 9 ratio allows us to capture any trade-offs between income gains within the top 10%. As [Table 4](#) shows, stock market capitalization and nonfinancial corporations' financial assets are always positively signed and statistically significant at the 10% or lower level (in both Prais Winsten and fixed effects specifications). Consistent with our findings above, this implies that the largest gains from a bigger financial sector accrue to the top 1%. The marginal effects graphs show no significant effects of labor strength at the societal level. This is not surprising, as one would expect that labor institutions' role is not to redistribute from the top 1% to the next 9% but to those below the top 10%. In contrast, works councils' rights moderate the effect of financialization on inequality, suggesting that upper level employees may be influential in works councils and help divert income from top executives to themselves along with the rest of employees ([Figure 4](#)).

Lastly, does the impact of financialization extend below the top 10%, to the median? Since we ascertained that the SVM exclusively benefits the top 1%, we would not expect it to have any impact on the distance between earners at the 90% percentile and any earners below it. While higher demand for financial professionals is advantageous to the next 9%, it is not clear where these benefits are concentrated. If they are concentrated in the 95–99%, they would not affect the 90:50 ratio. By contrast, if they are more evenly spread throughout the 90–99%, they

Table 4. Financialization impact on ratio of top 1% to next 9% income share by labor strength.

	Ratio of top 1% to next 9%			
	Model 1	Model 2	Model 3	Model 4
Stock market capitalization	0.043**	0.045**		
Stock market capitalization × labor relations index	0.000			
Stock market capitalization × work councils, rights		−0.003		
NFC financial assets			3.827*	7.377***
NFC financial assets × labor relations index			−0.294	
NFC financial assets × work councils, rights				−3.207**
Labor relations index	0.023		0.342	
Work councils, rights		−1.677*		2.709
Union density		−0.127		−0.402**
Centralization		−4.047		−3.518
Secular center and right government	−0.003	−0.001	−0.005	−0.009
Veto points	2.335**	1.610	2.801**	3.239*
GDP per capita	0.297**	0.283**	0.692***	0.526***
Individuals	1.694	1.660	3.312	2.294
Constant	33.058***	40.315***	20.887***	28.995**
Common ρ	0.86	0.86	0.67	0.63
Adjusted R^2	0.67***	0.67***	0.61***	0.65***
	682	687	337	337

*Significant at 0.05.
**Significant at 0.01.
***Significant at 0.001.

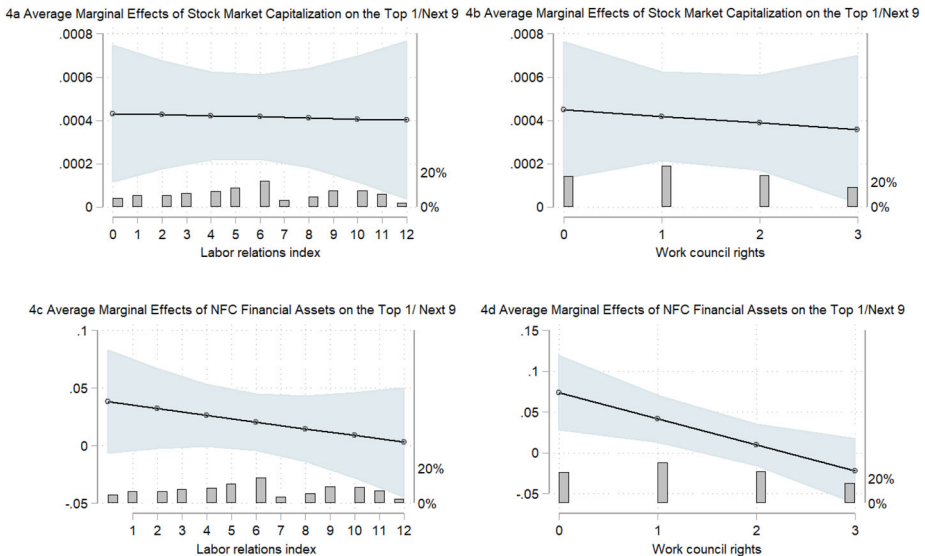


Figure 4. Financialization, labor strength and the top 1/next 9% ratio (Prais Winsten regressions with country and period dummies).

might have an effect on this ratio. The models in Table 5 replicate our analysis of the impact of NFC’s financial assets using the 90:50 earnings ratio as our outcome of interest.

As our marginal effects’ graphs (Figure 5(a,b)) show, demand for financial professionals positively affects the 90:50 ratio. Greater NFC financial assets are associated with a widening distance in the earnings of earners at the 90th percentile and

Table 5. Financialization impact on 90–50 wage ratio by labor strength.

	Model 1	Model 2
NFC financial assets	0.027	0.028
NFC financial assets $\times$ labor relations index	−0.008*	
NFC financial assets $\times$ work councils, rights		−0.032*
Labor relations index	−0.009	
Works council rights		0.024
Union density		−0.006***
Centralization		0.041
Center-right government	0.000	0.000
Veto points	0.022*	0.042***
GDP per capita	0.008***	0.005*
Constant	1.732***	1.841***
Common ρ	0.47	0.45
R^2	0.92***	0.92***
Observations	307	307

*Significant at 0.05.

**Significant at 0.01.

***Significant at 0.001.

the median. This confirms that financialization does generate spillover effects for those directly beneath the very rich. Strong labor movements at the societal and the enterprise level can effectively counteract this effect. It takes labor movements and works councils of more than medium strength, though, to turn this effect negative. Strong works councils and strong unions are likely to insist on tying productivity increases to wage increases as well as to be able to impose norms of fairness in wage setting at the enterprise and the societal levels that lift the median wage earners along with the top. Consistent with Rosenfeld (2014), the mechanism here may also be solidaristic wage bargaining whereby strong labor is able to divert wage funds that would have gone to financial professionals in the top 10% downwards and thus induce higher wages for the median wage earner.

Discussion

Three main conclusions emerge from our analysis. First, the spread of financialization, through the mechanisms of the shareholder value model of corporate governance, captured by stock market capitalization, and demand for financial professionals, captured by non-financial corporations' financial assets, drives up the earnings of the top 1%. Second, the strength of labor at both the societal and the enterprise level can neutralize this effect. Third, the impact of financialization on the share of the next 9% depends on the way we conceptualize and measure it. Whereas the effect of stock market capitalization is indistinguishable from zero, there is some evidence that larger non-financial corporations' financial assets also increase the income share of the next 9%.

The effect of stock market capitalization on the top 1% income share is more difficult to counteract than the impact of financial shares held by non-financial corporations. Only labor movements that are at the highest levels of institutional strength can neutralize the inequality-enhancing effect of stock market capitalization. In contrast, moderately strong labor can prevent financial assets held by NFCs from driving up the income share of the top 1%. This is because executive

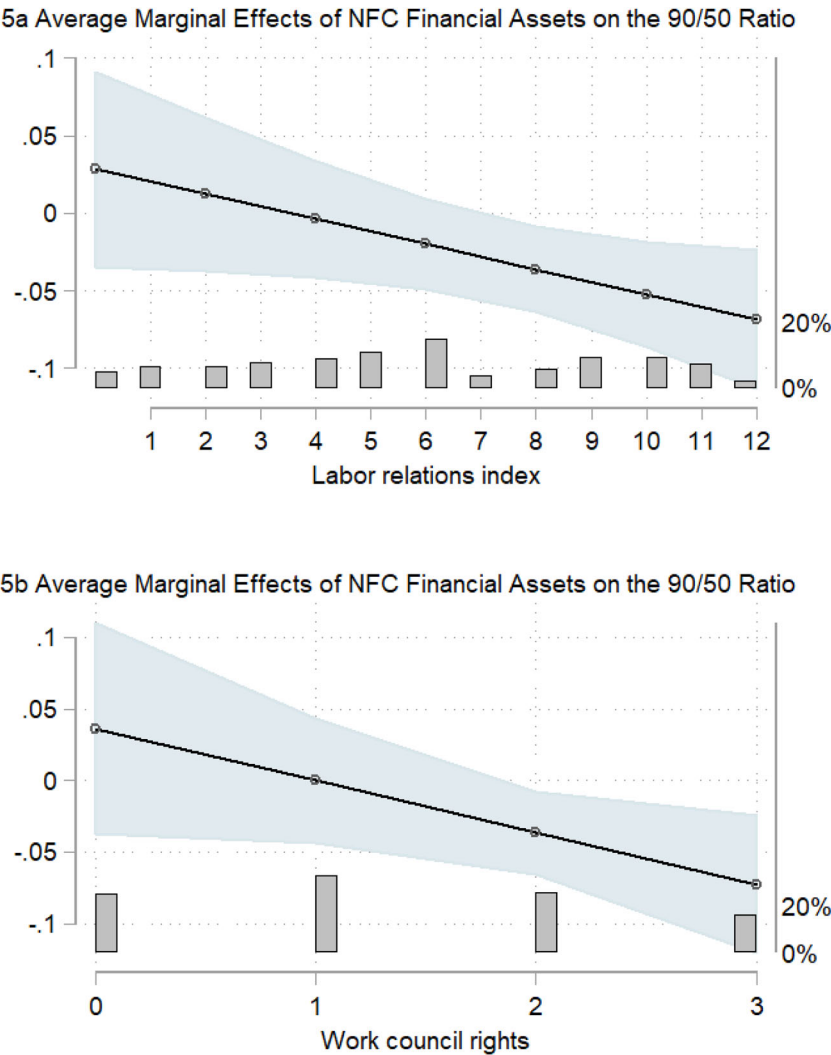


Figure 5. Financialization, labor strength and the 90/50 ratio (Prais Winsten regressions with country and period dummies).

pay is directly tied to stock prices, which gives managers an incentive to pursue higher valuations.

Similarly, stock market capitalization affects the top 1% and the next 9% income shares differently because top executives quite uniformly belong to the top 1%. Arguably, the primary mechanism that links financialization operationalized through financial assets held by non-financial corporations to the income share of the next 9% is the creation of highly paid jobs for financial professionals who are not top executives. Parallel to the findings of the effect of financial assets on the top 1% share, we find that stronger labor movements at the societal level are able to neutralize the inequality-enhancing effect on the next 9%.

To interpret the different results for labor strength at the enterprise level, we need to keep in mind that we control for union density at the societal level in the

model with works council rights. Union density is negatively signed and highly significant, implying that works council rights do not shape the share of the next 9% once union density is controlled for. This makes sense since – in contrast to top executives – the next 9% are likely to be subject to collective bargaining in countries with strong labor movements.

Our findings are consistent with other recent studies that have highlighted the importance of labor strength for the top 1% income share. For example, (Huber et al., 2019) have shown that union density and union centralization have a strong negative association with the top 1% share. Similarly, Hope and Martelli (2018) demonstrate that wage coordination, bargaining coverage and employment protection legislation all counteract the effects of increases in knowledge intensive sectors on the top 1% share. The present study enriches this literature by showing that the institutionalized strength of labor at the enterprise level is also important to keep the top 1% share in check and its strength at the societal level is also important to keep the share of the next 9% from rising.

Conclusion

We argue that the link between the growth of the financial sector and inequality needs to be specified more clearly with regard to mechanisms, target groups and institutional context. We posit that one of the key mechanisms that links financialization to growing inequality is the shareholder value model of corporate governance, which drives incomes at the top. We show this to be the case for the top 1% but do not find the same effects for the next 9%. Furthermore, we argue that a second mechanism, demand for financial professionals, increases the shares of the top 1% and the next 9%. We identify the institutional strength of labor as the crucial dimension of post-industrial democracies' institutional setup that can modify the extent to which the SVM and demand for financial professionals pushes top incomes up.

This implies that labor has historically been capable of shaping aggregate outcomes. This ability, however, varies across different contexts and time periods. Such variation has important implications not only for domestic policy-making and socio-economic outcomes but also for configurations beyond the borders of the nation-state. Indeed, recent work has shown that, although effective at protecting their constituency at home, German labor unions could contribute to exacerbating inequality and deepening financialization abroad (Behringer et al., 2020; Jacoby, 2020). By agreeing to wage moderation, German labor allows domestic corporations to accumulate enormous financial resources (Braun & Deeg, 2020) and directly enables the country's export-dependent growth model. Because every current account surplus in the international system demands some other country/ies to run deficits, this model contributes to imbalances in the European periphery (Jacoby, 2020). Furthermore, the massive amounts of savings that Germany generates as a result of its pursuit of wage suppression fuels the expansion of financial sectors in the economies that become the recipients of capital flows – such as the United States (Oatley & Petrova, *forthcoming*; Schwartz, 2019). Such dynamics – the persistent trade deficits in the European periphery and the financialization in international financial centers – have the potential to further weaken labor abroad. They could also sow the seeds for future shifts in the balance of power between capital and labor at home (Silvia, 2020).

If this is the case, then the strength of labor in some contexts can lead to its demise in others. Future research should explore what conditions enable and/or prevent such developments. In the current article, we have focused on showing that the strength of labor has been relevant for domestic distributive outcomes. Nevertheless, the long-term implications of this strength should be analyzed in more detail. The trajectory of decline that labor has experienced in the last four decades also raises important questions with respect to its ability to continue counteracting the effect of financialization on inequality.

Taken together, our findings suggest that structural transformations, such as financialization, do not necessarily exacerbate income differentials. It is important to understand the different channels through which financialization can enhance inequality and the different ways in which different institutional contexts can enable or obstruct these channels. Institutions are political creations which can be protected or undermined. Specifically, labor rights at the enterprise level and at the societal level can be strengthened or weakened by national legislation. Our findings thus illuminate important dynamics related to the ability of national governments to ameliorate the rise in income inequality in an age of intensifying globalization, when this ability is often put into doubt.

Notes

1. Bureau of Economic Analysis, Table 3.1 US Trade in Services, available at <http://www.bea.gov/iTable/iTable.cfm?ReqID=62&step=1#reqid=62&step=2&isuri=1&6210=1> (accessed 9 December 2016).
2. Or the transformation of financial assets, especially loans, into tradable securities.
3. Denk (2015, p. 19) defines the financial wage premium as 'the percentage by which gross annual earnings of weighted full-time full-year equivalent employees in finance exceed those in other sectors'.
4. Individuals are used as the unit of analysis for some years in the series for Canada, Denmark and United Kingdom.
5. To address missing values, Roine et al. (2009) interpolate the values for 1961–1969 and 1971–1974. One might object to this since the stock market fluctuates considerably from year to year. We ran the models with and without the interpolated observations. Our results remained substantially the same. Therefore, we have retained the interpolated data in order not to lose observations with data for the other independent variables.
6. The existence of 3256 currently registered European Corporations, which are not subject to the labor laws of any particular country, might raise concern. Nevertheless, most of these corporations are subsidiaries, and the status of workers in corporate governance is the result of negotiations at the founding of the European Corporation. While insufficient data do not permit a comprehensive analysis, it seems common for companies to maintain the works council rights of the headquarter country. Such is the case, for instance, of Airbus and Porsche. At most, inconsistencies between national laws and company practice would be noise in our data and weaken the observed relationships (<https://www.etui.org/Services/European-Company-SE-Database>).
7. The combination of panel corrected standard errors and ar1 corrections is known as Prais Winsten estimations.
8. A Granger causality test allows one to test whether the past values of one variable are useful for predicting another variable given the past values of the latter (Granger, 1969). The test is carried out by regressing y on its own lagged values and on lagged values of x . The null hypothesis – that the estimated coefficients on the lagged values of x are jointly zero – is rejected when x Granger-causes, or effectively forecasts, y .

Acknowledgement

The authors would like to thank Dorothee Bohle, Roland Erne, Julian Garritzmann and Frank Nullmeier for comments and suggestions

Disclosure statement

No potential conflict of interest was reported by the author(s).

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