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# Financialization Is Marketization! A Study of the Respective Impacts of Various Dimensions of Financialization on the Increase in Global Inequality

Olivier Godechot

Sciences Po / MaxPo and OSC-CNRS

**Abstract:** In this article, I study the impact of financialization on the rise in inequality in 18 OECD countries from 1970 to 2011 and measure the respective roles of various forms of financialization: the growth of the financial sector; the growth of one of its subcomponents, financial markets; the financialization of non-financial firms; and the financialization of households. I test these impacts using cross-country panel regressions in OECD countries. I show first that the share of the finance sector within the GDP is a substantial driver of world inequality, explaining between 20 and 40 percent of its increase from 1980 to 2007. When I decompose this financial sector effect, I find that this evolution was mainly driven by the increase in the volume of stocks traded in national stock exchanges and by the volume of shares held as assets in banks' balance sheets. By contrast, the financialization of non-financial firms and of households does not play a substantial role. Based on this inequality test, I therefore interpret financialization as being mainly a phenomenon of marketization, redefined as the growing amount of social energy devoted to the trade of financial instruments on financial markets.

**Keywords:** finance; financialization; marketization; inequality; income; top 1 percent

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ONE of the most remarkable transformations in advanced market societies over the last forty years is the increase in inequality, which translates into increasing shares of wages, income, or wealth for the most affluent (Piketty and Saez 2003; Atkinson and Piketty 2010; Piketty 2014). Although this trend is now described with great precision, its origin still needs a better understanding. The growing importance of finance<sup>1</sup>—another remarkable phenomenon in market societies coined as a financialization process (Krippner 2005; Van der Zwan 2014)—is seen by many, from social science scholars to political leaders, as a major driver of inequality. Indeed, the sector breakdown of the better-off fractions has already demonstrated that high salaries in the finance sector contribute substantially to the increase in inequality, thus explaining between one-sixth and one-third of its rise in the United States (Philippon and Reshef 2012; Bakija, Cole, and Heim 2010), half of that in France (Godechot 2012) and two-thirds of that in the United Kingdom (Bell and Van Reenen 2013). Is this movement specific to these few countries? We can now respond by relating aggregate data on inequality such as the World Top Incomes Database—fueled by Tony Atkinson, Thomas Piketty, and their collaborators' researches—and macroeconomic data on financial activity produced by international agencies. Kus, Dünhaupt, and Flaherty thus already showed that during the last twenty years, several financialization indicators were significantly correlated in OECD countries

with rising inequality, measured by the Gini indicator and by the top 1 percent share (Kus 2013; Dünhaupt 2014; Flaherty 2015).

This contribution both confirms and extends recent work by more precisely analyzing the impact of financialization on the share of income at several levels of the income distribution (from the median-to-lower decile ratio up to the top 0.01 percent share), by studying a wider range of time (1970–2012), and especially by more systematically analyzing the impact on rising inequalities of the different varieties of financialization identified so far. Indeed, the concept of financialization is multidimensional: it can refer to the increase of the financial sector as a whole, that of financial market activities only, or beyond the finance sector to the financialization of non-financial institutional sectors, whether firms or households. I show that, measured through its impact on inequality, financialization is primarily a phenomenon of marketization, which I propose to define as the increase in social activity devoted to trade in securities on financial markets. Contrary to previous literature inspired by Marxist or heterodox economics, which generally focus on macro-social mechanisms in terms of financial regimes of accumulation (Krippner 2005), power resources, and global bargaining power (Flaherty 2015), I try to go further by pinning down the precise mechanisms at stake within the financial labor market. I underline that the capacity given to some workers on the financial markets to appropriate and move activity is a substantial driver of modern inequality.

The rest of the article is organized as follows: in the first section, I review previous literature on the impact of financialization on inequality and I point out the underlying mechanisms. In the second section, I describe the data and the models I use throughout the article. In the third section, I study the financialization–inequality link by using the growth of the financial sector share in the GDP as a first proxy. In the fourth section, I go beyond this proxy by comparing the respective impacts of *marketization*, financialization of non-financial firms and that of households. Section five concludes with the role of marketization as the main driver of global inequality.

## How Financialization Turns into Inequality: A Literature Survey

The concept of financialization was first forged by post-Keynesian or neo-Marxist authors as a new "pattern of accumulation in which profit making occurs increasingly through financial channels rather than through trade and commodity production" (Krippner 2005). One of the achievements of this literature is to show that this accumulation shrinks that of productive capital (Stockhammer 2004; Orhangazi 2008; Hecht 2014; Tomaskovic-Devey, Lin, and Meyers 2015; Alvarez 2015). Financialization remains a multifaceted notion—and one could even say a fuzzy one—when defined as "the increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels" (Epstein 2005:3). Examining the impact of financialization on inequality thus helps to achieve two goals. It enables us first and foremost to measure the role of the main

suspected drivers of this transformation of social cohesion. It could also help to clarify the notion of financialization (Van der Zwan 2014) by putting it systematically to the inequality test. Four types of financialization have been identified so far: the rise of the financial sector as a whole, the rise of the financial markets, the financialization of non-financial firms, and the financialization of households. I review previous results on their respective impacts on inequality and the possible channels of determination.

At first glance, the simplest way to measure this impact with accounting tools is to calculate the share of income, wages, or profits achieved in the financial sector. The share of finance in GDP has thus multiplied by a factor of 1.7 in the United States since 1980, rising from 5 to 8 percent (Greenwood and Scharfstein 2013). It increased almost as fast in other OECD countries (Philippon and Reshef 2013). This development goes hand in hand, paradoxically, with the increasing cost of financial services (Philippon 2014; Bazot 2014) and shows the existence of rents (Tomaskovic-Devey and Lin 2011) fueled by financial deregulation (Krippner 2011; Philippon and Reshef 2012) and captured by its highest-paid employees (Godechot 2012; Bell and Van Reenen 2013; Boustanifar, Grant, and Reshef 2014; Denk 2015).

The sector approach, however, aggregates very different financial activities: the most traditional retail banking on the one hand, whose extension in the 1960s and 1970s does not seem to have increased inequalities, and the new financial market activities, which grew strongly since the mid-1980s (Greenwood and Scharfstein 2013). It could be not financialization that is fueling inequality, but rather the *marketization* of finance. This notion entails that banks finance economic activity (i.e., other banks, non-financial firms, governments, and households) through market intermediation rather than through long-term personalized loans they hold on their books and which they grant and monitor through a dense network of relationships linking them to other economic actors. This contrast established for differentiating the liberal market economies from the coordinated ones (Albert 1991; Hall and Soskice 2001) also holds true for describing in each of the "types" of economies the transition (either earlier in the United States or later in Germany) of financial sectors consecutive to financial deregulation (Streeck 2008). Market intermediation profoundly transforms the nature of financing ties by introducing standardization of financial contracts (thus facilitating comparisons) and liquidity (the possibility of cancelling a financial tie at any time at almost no cost), two features that greatly enhance short-term arbitrage and speculation opportunities. Marketization thus combines securitization—the transformation of financial assets, especially loans, into tradable securities—and growth of trading volumes for each security. It drives the development of new organizations on the markets (especially trading rooms) with their specific social division of labor. Finally, a Durkheimian way of approaching marketization would be to define it as the growing amount of social energy devoted to the trade of financial instruments on financial markets.

Many studies highlight the unequal potential of these activities in France, the United Kingdom, or the United States (Godechot 2012; Bell and Van Reenen 2013). Internationally, the activity indicators of financial markets and the growth of securities on bank balance sheets are correlated with the increase in the Gini index and the share of the 1 percent (Kus 2013; Dünhaupt 2014; Flaherty 2015). Human

capital—very important in market activities—and incentive policies could be suspected of being responsible for this correlation. However, they poorly explain pay discrepancies and therefore inequality (Godechot 2011; Philippon and Reshef 2012). Recently, a neoclassical explanation of financial wages was proposed based on a "superstar" market mechanism (Célérier and Vallée 2015). The size of financial activities could leverage micro differences in talent. If a financial operator can obtain a return on a portfolio an epsilon higher than that of her colleague, then it is efficient to assign her a larger portfolio. She thus can claim an additional compensation of this epsilon multiplied by the size of her portfolio. The skewness of portfolio sizes translates into the skewness of bonuses. This interpretation, based on a perfect market matching of the hierarchy of innate talent and that of portfolio sizes, may have some relevance. Nevertheless, it fails to explain the rent extraction dimension of market finance, shown for instance by the much better careers obtained by students of top business schools who entered the labor market in times of financial boom relative to those who entered during financial crisis (Oyer 2008). A more realistic explanation of such remuneration and inequalities can be given thanks to a hold-up mechanism (Godechot 2008, 2014). This differs from the "superstar" theory by extending the concept of talent not only to innate (or acquired during studies) talent but also to on-the-job acquired talent and, more generally, to all resources accumulated in the financial business. Because market finance put so much emphasis on standardizing its activity and making it liquid (Ho 2009) while being incapable of protecting it through patents or non-compete clauses, it allows more than elsewhere for individually appropriating human capital (knowledge, know-how, etc.) and social capital (clients, staff) and moving them elsewhere—or threatening to do so. Employees who can carry the business then get considerable remuneration, which, far from being anecdotal, could feed contemporary inequality dynamics.

However, the effects of financialization are not limited to financial markets only. Financialization overflows the boundaries of institutional sectors and therefore also affects non-financial firms. Non-financial firms have been profoundly transformed by the shareholder value form of control (Useem 1996; Fligstein 2002). This doctrine, forged by liberal academic economists (Jensen and Meckling 1976) and supported by consulting firms (Froud et al. 2000; Lordon 2000), has spread amid struggles between raiders, institutional investors, and CEOs for domination in the economic field (Heilbron, Verheul, and Quak 2014). It advocates a *downsize and distribute* policy against the traditional *retain and reinvest* one (Lazonick and O'Sullivan 2000). It gives priority to shareholder remuneration through the payment of dividends or share repurchases. It also promotes the use of debt (as a source of funding and as a discipline) and generous incentive pay packages for CEOs (Jensen and Murphy 1990; Dobbin and Jung 2010). This new orientation not only reduces productive investment (Orhangazi 2008; Hecht 2014) but could also promote inequality through several channels: increased dividend payments that feed the incomes of the wealthy, more incentive and higher compensations for CEOs and executive officers, and shrinking salaries of middle and lower classes under the pressure of restructuring. Dünhaupt thus shows that the priority given to shareholders' dividends goes with rising inequality (Dünhaupt 2014).

In addition, non-financial firms start acting as banks, engaging significantly in financial operations (Krippner 2005). They thus acquire large portfolios of securities and combine the sale of goods and services with the sale of consumer credit enabling their acquisition, especially in the automobile industry. I therefore propose to designate this second trend as non-financial firms' *bankarization*. Although substantially different, it is generally considered as a proxy for shareholder orientation, promoting inequality for the aforementioned reasons. In addition, it also contributes to marginalizing productive work comparatively to financial work. It goes hand in hand with a decline in the labor share of value added, a phenomenon shown both for France (Alvarez 2015) and the United States (Tomaskovic-Devey, Lin, and Meyers 2015), as well as in this country, with an increase in inequality and rising executive pay (Lin and Tomaskovic-Devey 2013).

In non-financial firms, however, shareholder orientation and bankarization are not completely congruent. Indeed bankarization goes against the imperative of de-diversification and concentration on core business activities promoted by the shareholder value doctrine and supported in particular by financial analysts (Zuckererman 1999; Dobbin and Jung 2010). Crotty (2005), however, proposes to reconcile the two dimensions by explaining that financialization subjects non-financial firms to new constraints (shareholder orientation) while allowing them to take advantage of new opportunities (bankarization).

Finally, work on financialization emphasized a third institutional sector: households (Martin 2002). The promotion of "popular capitalism" in the 1980s and of mutual funds (Montagne 2006) guided household savings into securities. Moreover, when growth is sluggish and the welfare state is in crisis, households can use debt as a way for them to maintain or increase their standard of living (Streeck 2014), especially thanks to mortgages, but also consumer credit (Poon 2009) or student loans. The crucial role of debt in the 2007–2008 financial crisis (through the role of subprime loans) led to a reassessment of the role of household debt in the dynamics of financialization. Debt could be its major component all the more so as it contributes significantly to the regular bursting of financial bubbles (Jordà, Schularick, and Taylor 2014). The financialization of households can contribute to inequalities through several channels: the richest households, who can borrow at low cost, invest in more lucrative investments (Piketty 2014; Fligstein and Goldstein 2015; Denk and Cournède 2015), whereas low-income households, in order to maintain their standard of living, go into debt at high interest rates and pay high fees on loans that, through securitization, are held by the wealthiest households (Kumhof, Rancièrè, and Winant 2015). Finally, the financialization of households also increases the intermediary role of the financial industry, which receives an income stream for this role.

Finally, this literature review suggests that, among the varieties of financialization, marketization is one of the major drivers of inequality, a link for which both some macro and micro evidences have already been provided. It also shows that the link from financialization to inequality can be much more indirect and transit through the financialization of firms and households. Therefore, it stresses the need for a more systematic and comparative study on the respective impacts of various forms of financialization on inequality.

## Data and Model

I will therefore study how some trends—varieties of financialization—impact another trend: growth in inequality. I am more interested in within-country variations than between-country contrasts—especially the well-known contrast between liberal market economies with high levels of financialization and high inequality and the coordinated market economies with low levels of financialization and low levels of inequality (Hall and Soskice 2001). To this end, I selected as many countries as possible among a homogenous set of advanced market economies ruled by democratic governments. I therefore work on eighteen OECD countries for which I have measures of both inequality and financialization: Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.<sup>2</sup> In emerging and transition economies, the financialization process also coincides with other major shocks such as the transition to capitalism, democratization, or economic booms, which make final interpretation harder.<sup>3</sup>

Income inequality, my dependent variable that combines both wage inequality and property income inequality, can be approached through many indicators. Synthetic indicators of inequality (such as the Gini index, Theil, etc.), because they summarize a whole distribution into one figure, do not enable us to discriminate between the widening of income gaps at the bottom, the middle, or the top of the distribution. As inequality has been rising both tremendously at the top (Atkinson and Piketty 2010) and more moderately at the bottom, it is interesting to disentangle the responsibility of finance in those evolutions by focusing on gaps at different levels of the distribution. In order to approach the bottom and the middle of the distribution, I therefore use the OECD gross earnings decile ratios D5/D1 (ratio of the median to the upper threshold of the bottom 10 percent), D9/D1 (ratio of the lower threshold of the top 10 percent to the upper threshold of the bottom 10 percent) and D9/D5 (ratio of the lower threshold of the top 10 percent to the median)—all variables are described in Table 1 and in more detail in Table A1 of the online supplement.<sup>4</sup> The top 10 percent, top 1 percent, top 0.1 percent, and top 0.01 percent income shares from the World Top Incomes Database enable me to focus on the top of the distribution, whose share grew very substantially in recent years. As in previous literature, and for comparison purposes, I also use the Gini index contained in the SWIID 4.0 database (Solt 2009), but it should be noted that the significant use of interpolation for its estimation makes its quality debatable.<sup>5</sup>

The increase in inequality across my sample is general and obvious since 1980 (Figures 1 and A1 to A8): from 1980 to 2007, the Gini index is multiplied by 1.2, moving from 0.37 to 0.43; the ratio D9/D1 by 1.1, moving from 2.9 to 3.2; the top 1 percent income share is multiplied by 1.6, moving from 6.5 percent to 10.2 percent; and that of the top 0.01 percent by 2.7, moving from 0.5 percent to 1.4 percent.

As explanatory variables, I use indicators of various forms of financialization and some control variables that are available for all countries during a large time period—GDP per capita, unionization rate, importation rate—variables for which literature on inequality underlines their possible impact (Kristal 2010; Volscho and Kelly 2012; Kus 2013; Dünhaupt 2014). I also checked that the inclusion of additional

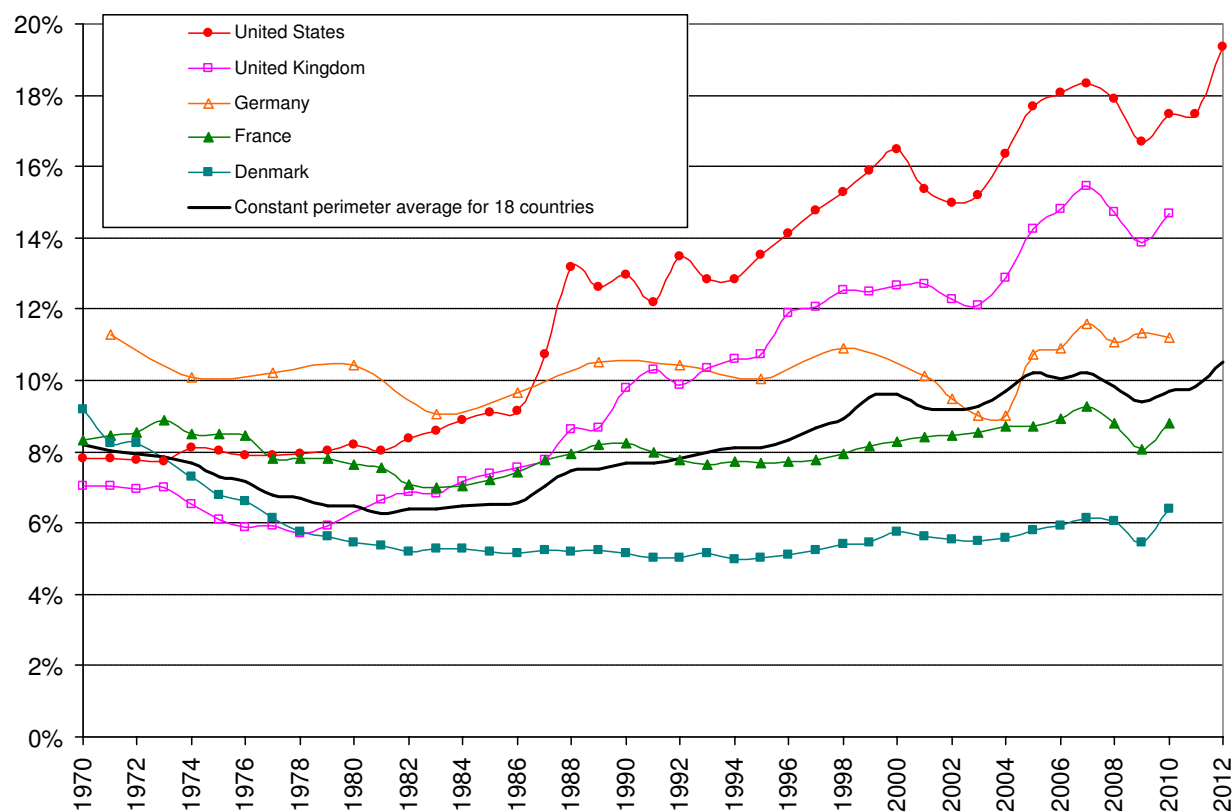
**Table 1:** Dependent, Independent, and Control Variables

Types of variable and concepts	Indicators	Sources
Dependent variables	Gini index	SWIID 4 (Solt 2009)
	D5/D1	OECD
	D9/D1	OECD
	D9/D5	OECD
<i>Inequality measures</i>	Top 10% income share	World Top Incomes Database
	Top 1% income share	World Top Incomes Database
	Top 0.1% income share	World Top Incomes Database
	Top 0.01% income share	World Top Incomes Database
<b>Independent variables</b>		
<i>Overall financialization</i>	Finance and insurance/GDP	OECD
<i>Shareholder value orientation in non-financial firms</i>	Net distributed income/Operating surplus	OECD
	Business debt	(Jordà, Schularick, and Taylor 2014)
<i>Bankarization of non-financial firms</i>	Non-financial firms' financial income/gross operating surplus	OECD
	Non-financial firms' financial assets/GDP	OECD
<i>Financialization of households</i>	Household debt	(Jordà, Schularick, and Taylor 2014)
	Households' shares and other equity, except mutual funds shares/GDP	OECD
	Households' mutual funds shares/GDP	OECD
<i>Marketization of financial industry</i>	Volume of stocks traded/GDP	World Bank
	Loans in assets/GDP	OECD
	Shares and related equity assets/GDP	OECD
Other control variables	GDP per capita	World Bank
	Union rate	OECD
	Import rate	World Bank
	Stock exchange indexes	World Bank

Note: I also provide more details in table A1 on the definitions, the sources, and the fields of the variables used throughout this article.

control variables available for a smaller sample (such as investment in ICTs or the share of tertiary educated employees) does not significantly change my conclusions with regard to my variables of interest.





**Figure 1:** Evolution of the top 1 percent income share.

Note: In 2012, the United States' top 1% earned 19.3% of the national income. The constant perimeter average is a simple 18 countries arithmetic mean that I correct additively when the set of country is not complete in order to avoid disruptions in levels and to measure constant perimeter evolutions. (Cf. Online Supplement, *Note on figures and constant perimeter averages* for precise formulas).

I use two types of regression models in order to evaluate the link between financialization and inequality measures. My base model is an OLS panel regression with country and time fixed effects and panel corrected robust standard errors in order to account for the time series autocorrelation (Beck and Katz 1995):

$$y_{it} = \sum_k b_k \cdot x_{ki(t-1)} + g_i + p_t + e_{it} \quad (1)$$

The country group fixed effects  $g_i$  take into account the constant unobserved heterogeneity. Therefore, the financialization parameter does not capture country differences that would result from confounding constant unobserved variables. It enables me to measure the impact of within-country financialization variation on within-country inequality variation  $y_{it}$ . The year fixed effects  $p_t$  capture temporal variations common to different countries. The  $b_k$  parameters for the  $k$  independent variables  $x_{ki(t-1)}$  (i.e., financialization measures and control variables) will therefore capture only the effects of specific within-country variations in time in each country. The introduction of a one-year lag strengthens the interpretation of my results.

Classical panel regression estimated with Equation 1 works very well for establishing robust within-country correlations. Nevertheless, when serial correlation is important, lagged independent variables may not be enough to assess the direction of the link. In order to corroborate my interpretation, I also estimate error correction models (Beck and Katz 2011; De Boef and Keele 2008; Kristal 2010; Lin and Tomaskovic-Devey 2013), which more convincingly handle possible problems of reverse causality. This model consists of estimating the following equation with OLS, also using country and year fixed effects and panel-corrected standard errors:

$$\Delta y_{it} = \sum_k a_k \cdot \Delta x_{kit} - c \cdot [y_{i(t-1)} - \sum_k d_k x_{ki(t-1)}] + g_i + p_t + u_{it} \quad (2)$$

This model combines an estimation of level effects and one of variation effects. The introduction of the lagged dependent variable into the equation limits potential reverse causality due to serial correlations. Here, an independent variable  $x_{i(t-1)}$  will not appear significantly tied to  $y_{it}$  if it depends on  $y_{i(t-1)}$  or one of its previous lag (reverse causality) and if  $y_{it}$  is also correlated with its lag  $y_{i(t-1)}$  (serial correlation). Introducing the lag dependent variable as an explanatory variable enables me to handle this misleading first order correlation. ECM is not the only way of handling this problem, and in the online supplement I test other types of dynamic panel regressions in order to corroborate the results.

ECM also enables me to separate the short-term transitory effect  $a_k$  of a transitory short-term variation  $\Delta x_{kit}$  (i.e.,  $x_{kit} - x_{ki(t-1)}$ ) on a short-term variation  $\Delta y_{it}$  from the  $d_k$  long-term equilibrium effects between  $x_{kit}$  and  $y_{it}$ . It corresponds to the stationary equilibrium towards which series converge when temporary shocks on  $x_{kit}$  and  $y_{it}$  vanish (i.e., when  $\Delta x_{kit} = 0$  and  $\Delta y_{it} = 0$  then  $y_{it} = d_k \cdot x_{kit}$ ). I first estimate the parameters  $a_k$  and  $d_k \times c$  with OLS. I then estimate the parameters  $d_k$  as well as their standard error using the Bewley transformation, which consists of estimating

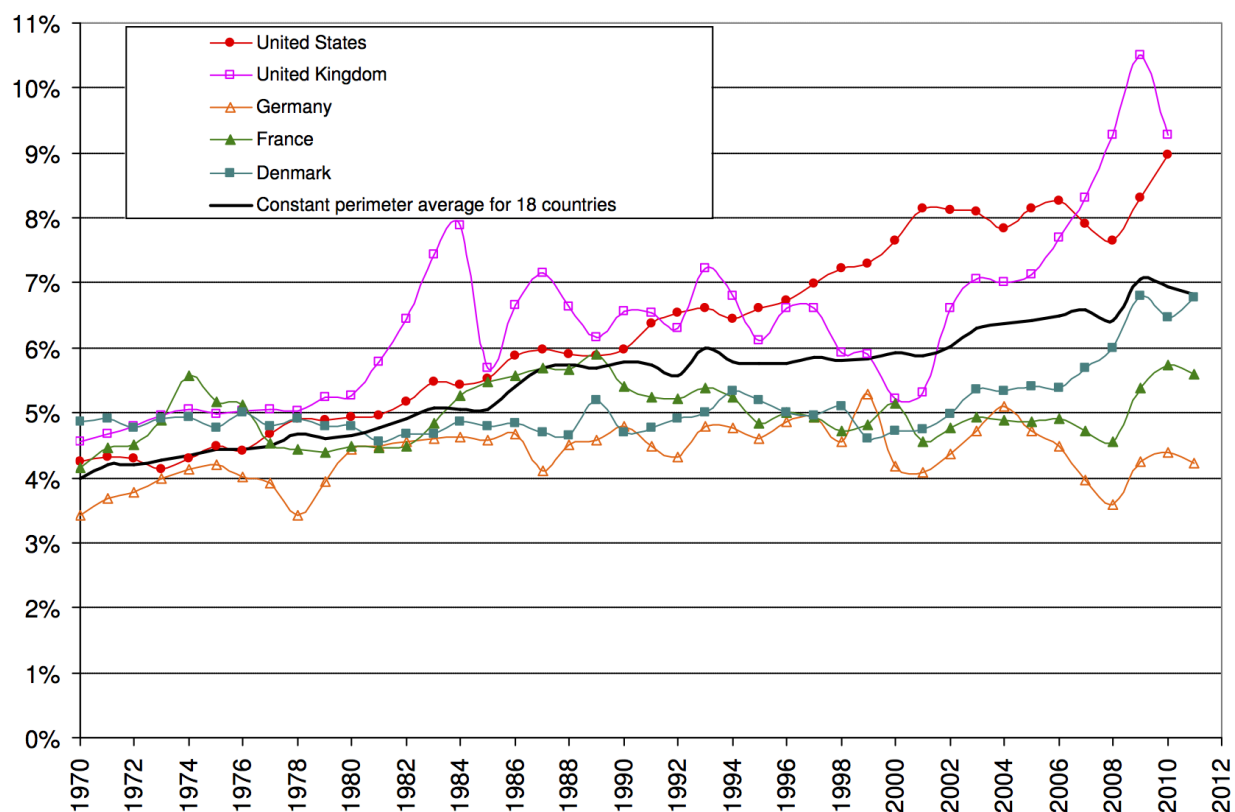
$$y_{it} = \sum_k \beta_k \Delta x_{kit} + \beta_y \Delta y_{it} + \sum_k d_k x_{ki(t-1)} + g_i + p_t + \epsilon_{it} \quad (3)$$

while using equation (2) as the instrument of  $\Delta y_{it}$ .

It should be noted that the introduction of the lag dependent variable as an explanatory variable in the Error Correction Model usually captures a substantial share of the first order correlation between my dependent variable and my interest variable. It thus tends to shrink significance and provides more conservative estimates.

## The Impact of the Financial Sector on Inequality

At first glance, financialization can be approximated by the share of economic activity (i.e., GDP) achieved in the financial sector (comprising both finance and insurance<sup>6</sup>) in industry national accounts gathered and standardized by the OECD (Figure 2). First, the most iconic financial transformations of financialization (like the boom of financial markets) occurred precisely in this sector. Second, most financial transformations taking place outside the financial sector also translate into financial transactions and therefore contribute to the value added of this sector.



**Figure 2:** Evolution of the GDP share of finance sector.

Note: In 2010, the finance and insurance sector amounted to 9% of the United States GDP. The constant perimeter average is a simple 18 countries arithmetic mean that I correct additively when the set of country is not complete in order to avoid disruptions in levels and to measure constant perimeter evolutions. (Cf. Online supplement, *Note on figures and constant perimeter averages* for precise formulas).

Table 2 shows the effect of changes in the importance of the financial sector on changes in income gaps at different levels of the distribution. Financialization has no effect on inequality when measured with the Gini synthetic indicator (the quality of which is poor), but significantly affects inter-decile ratios and the share of upper fractiles. It has no effect on the D5/D1 ratio, but increases the D9/D5 and D9/D1 ratios. One standard deviation of finance increases the top 10 percent share by 0.12 standard deviation, the top 1 percent share by 0.23, the top 0.1 percent share by 0.28, and the top 0.01 percent share by 0.41. These first indications show that the unequal impact of financialization is all the stronger as one moves up the income distribution scale.

However, one could fear that this strong link is due to reverse causality. Is it financialization that fuels inequality or inequality that fuels financialization? Elites are important clients of financial services, and their increased resources could impact the value added of this sector. Furthermore, the indebtedness of poor households has been a way of "keeping up with the Joneses"—of coping with the decline in standard of living relative to that of the richest households (Kumhof, et al. 2015). Error corrections models give estimates that are largely in line with that of

**Table 2:** Impact of the Finance Share of the GDP on Income Inequality

	A. Classical panel regression models (Equation 1)						
	Gini Index	D5/D1	D9/D1	D9/D5	Top 10% share	Top 1% share	Top 0.1% share
GDP per capita (t-1)	-0.51*	0.62*	0.34*	0.13	-0.21	0.04	0.02
Union rate (t-1)	-0.27*	-0.16*	-0.23*	-0.25*	-0.36*	-0.23*	-0.14*
Import rate (t-1)	-0.15*	0.41*	0.17	-0.03	-0.11*	-0.13*	0.17
Finance & insurance/ GDP (t-1)	-0.04	-0.04	0.16*	0.18*	0.12*	0.23*	0.41*
Adj. within R2	0.150	0.081	0.086	0.152	0.174	0.147	0.229
Nb. obs./ countries/ years	673/18/42	391/18/42	391/18/42	391/18/42	604/18/42	623/18/42	368/14/42
	B. Error correction models (Equation 2)						
	$\Delta$ Gini	$\Delta$ D5/D1	$\Delta$ D9/D1	$\Delta$ D9/D5	$\Delta$ Top 10%	$\Delta$ Top 1%	$\Delta$ Top 0.1%
$\Delta$ GDP per capita	-0.196	0.380	0.172†	0.052	0.009	0.154	-0.071
$\Delta$ Union rate	-0.026	0.117	0.033	-0.039	-0.220	-0.175	0.044
$\Delta$ Import rate	-0.075†	0.270*	0.156	0.067	-0.035	-0.009	0.021
$\Delta$ Finance & insurance/GDP	-0.048†	0.017	0.006	-0.015	0.069	0.080	0.014
Lagged dependent variable (t-1)	-0.107*	-0.306*	-0.191*	-0.255*	-0.096*	-0.168*	-0.087
GDP per capita (t-1)	-0.663	0.978*	0.586*	0.175	-0.516	-0.448	0.128
Union rate (t-1)	-0.101	-0.009	-0.161	-0.270	-0.234	-0.098	-0.266
Import rate (t-1)	-0.038	0.818*	0.498*	0.048	-0.188	-0.125	0.610†
Finance & insurance/ GDP (t-1)	0.043	0.125	0.315*	0.212	0.122	0.321*	0.554
Adj. within R2	0.091	0.166	0.116	0.117	0.059	0.094	0.044
Nb. obs./ countries/ years	655/18/41	351/17/41	351/17/41	351/17/41	576/18/41	596/18/41	347/13/41

Note: OLS models with country and year fixed effects and panel corrected standard errors. Definitions of variables and their sources are detailed in the online supplement in Table A1. Full regressions with standard errors are shown in Table A2. Here I display country-demeaned standard estimates in order to compare the effects of different variables in terms of within-country standard deviations: a within-country standard deviation of the finance share of the GDP increases the top 1% share by 23% of a within-country standard deviation. For error correction models, I display long-term equilibrium effects obtained with Bewley's transformation (Equation 3) in italics.

\*p < 0.01, †p < 0.1.

the base model. This type of model is more demanding, and the significance of independent variables generally shrinks. Nevertheless, financialization long-term parameters are still significant at the 5 percent or even the 1 percent threshold. Moreover, their magnitude is even bigger. In the long term, one standard deviation of finance increases the top 1 percent and 0.1 percent shares by one-third of a standard deviation and the top 0.01 percent share by 0.56. In the supplement, I obtain similar results with other types of dynamic panel regression models, such as lagged dependent variables models (Table A3) and Blundell-Bond dynamic models (Table A4). These models confirm the significant effect of financialization on the concentration of income at the top of the distribution.

In order to appreciate more concretely the impact of finance on the 1980–2007 sequence of increasing inequality, I can use my models to estimate the counterfactual level of inequality in 2007 in the absence of financialization: for instance, had the share of finance in GDP remained the same in 2007 as it was in 1980 (Tomaskovic-Devey and Lin 2011). Based on classical panel regressions, I estimate that one-fifth of the increase of the top 1 percent share, one quarter of that of the top 0.1 percent share, and 40 percent of that of the top 0.01 percent share result from financialization (Table A5). Based on error correction models of long-term parameters, I obtain bigger estimates: 28 percent of the increase of the top 1 percent share, 32 percent of that of the top 0.1 percent share and, 55 percent of that of the top 0.01 percent share result from financialization.

I also control for this effect of financialization using three independent variables (besides the country and year fixed effects): the variation in GDP per capita, the unionization, and the import rates. As in previous works (Alderson and Nielsen 2002; Kristal 2010; Volscho and Kelly 2012), I find that unionization reduces inequality, especially for the top 10 percent share and for the D9/D5 ratio. Rate of imports, which seeks to approach the effects of globalization (Sassen 2001) and external competition, increases inequality at the bottom of the distribution. In contrast, effects are contradictory at the top of the distribution and go more in the direction of a reduction of inequalities. Finally, GDP per capita captures the effect of modern growth, which many consider to be more unequal at present (Cohen 1997). This is true for median groups, particularly for the lower half, but it does not play out in the concentration of income at the top level of the distribution.

Could this evolution be driven by a few countries following a very specific trend? According to the variety of capitalism literature (Albert 1991; Hall and Soskice 2001), the liberal market economies combine an intensive use of financial markets as way of financing firms, flexible labor markets, and a social tolerance for inequality. This type of capitalism could enable growth in finance to translate into increase in inequality. However, in coordinated market economies in which both financial markets are less central and labor markets are more regulated, this link may not hold true. In order to check whether this is the case here, I run the same regressions on a restricted sample which excludes the two most prominent examples of liberal market economies: the United States and the United Kingdom (Table A6). Indeed, the magnitude of finance's impact on inequality shrinks substantially and is roughly divided by two. However, finance still has a significant positive impact on top 1%, 0.1%, and 0.01% income shares both in panel regressions and in error correction

models. Therefore, the impact of finance on inequality is not uniquely due to some specificities of Anglo-American capitalism. Even in coordinated market economies, such as France or Germany, financial markets can develop as an autonomous labor niche and finally disrupt the national income distribution (Godechot 2012; Streeck 2008). In fact, the boom occurred both later (in the mid 1990s) and from a smaller starting level than in the United States and the United Kingdom. These differences may account for the attenuation effect when excluding the two liberal market economies from the sample.

One might also worry about the effect of unobserved variables because of the limited number of control variables. In additional models in the supplement, I introduce supplementary control variables that are only available for limited subsamples, such as an indicator of computerization on the one hand (Table A7) and one of human capital on the other (Table A8). Statistical power decreases due to the reduction of the sample, but the conclusions remain broadly the same. One could fear that the introduction of the sole financial sector also captures the effect of other industries' correlated evolutions. The finance effect is maintained relative to other sectors when introducing the full industry partition— at least in the classical regression models. The effect of the financial sector is one of the most significant and robust across the whole income distribution (Table A9).<sup>7</sup>

Finally, OECD industry statistics help to break down the division between capital and labor in value added. Not surprisingly, the decline of labor in value added in the non-financial sectors is correlated with the increase in inequality (Table A10). However, the larger the share of labor in the financial sector, the more inequality in the economy, even when controlling for the share of the financial sector in the overall economy (the contribution of which remains positive). This means that the increase in inequality is due not only to the increase in the share of the financial sector in total profits but, moreover, to the increase in the share of finance in total wages. This result contrasts with those of Tomaskovic-Devey and Lin (2011), who show for the United States that two-thirds of the increase in the financial rent results from higher financial profits.

## The Respective Impacts of Various Forms of Financialization

I now wish to analyze the impact of financialization both above and below the financial sector as defined in industrial accounts. Primarily, financialization has been seen as a movement to change the non-financial firms, subjecting them to new shareholder value constraints. It favored the use of debt (1.2-fold increase between 1990 and 2007—Figure A12) and the payment of net dividends to shareholders (multiplication by 1.1—Figure A13), and it offered them the opportunity of acting as quasi-banks through the granting of loans and the acquisition of securities (multiplication by 1.8 of both financial incomes and financial assets—Figures A14 and A15).

**Table 3:** Impact of Non-Financial Firms' Financialization on Income Inequality

		A. Classical panel regression models (Equation 1)									
	Finance/ GDP	Gini Index	D5/D1	D9/D1	D9/D5	Top 10% share	Top 1% share	Top 0.1% share	Top 0.01% share		
1. Corporate debt/GDP (t-1)	0.17*	-0.03	0.13	0.09	0.04	-0.07	0.01	0.05†	0.05		
N Obs./Countries/Years	563/16/42	600/16/42	373/16/42	373/16/42	373/16/42	536/16/42	555/16/42	503/15/42	384/13/42		
2. Net distributed income/ Operating surplus (t-1)	-0.36*	-0.043	0.031	-0.085	-0.13	0.14*	0.086	0.13	-0.072		
N Obs./Countries/Years	289/15/42	304/15/42	224/15/30	224/15/30	224/15/30	266/15/42	280/15/42	226/13/42	150/10/42		
3. Financial income/ Operating surplus (t-1)	0.08	-0.12	-0.36*	-0.33*	-0.09	-0.4*	-0.3*	-0.23*	0.07		
N Obs./Countries/Years	289/15/42	304/15/42	224/15/30	224/15/30	224/15/30	266/15/42	280/15/42	226/13/42	150/10/42		
4. Financial assets/GDP (t-1)	-0.09	-0.17	-0.3*	-0.16**	0.04	-0.35*	-0.19*	-0.15	-0.18		
N Obs./Countries/Years	267/16/23	287/16/23	236/16/23	236/16/23	236/16/23	260/16/23	260/16/23	225/14/23	165/11/23		
		B. Error correction models (Equation 2)									
	Δ Fin./GDP	Δ Gini	Δ D5/D1	Δ D9/D1	Δ D9/D5	Δ Top 10%	Δ Top 1%	Δ Top 0.1%	Δ Top 0.01%		
1. Corp. debt/GDP (t-1)	0.376	-0.039	0.114	0.328†	0.252	0.008	0.060	0.124	0.441		
2. Net distributed income/ Operating surplus (t-1)	-0.336†	-0.262	0.223	0.145	-0.066	0.240†	0.113	0.196	-0.298		
3. Financial income/ Operating surplus (t-1)	0.141	-0.148	-0.490	-0.495	-0.156	-0.457*	-0.296*	-0.252	0.085		
4. Financial assets/GDP (t-1)	-0.270	-0.450	-0.278	-0.124	0.014	-0.423*	-0.209	-0.264†	-0.696		

Note: Each cell corresponds to a different model. OLS models with country and year fixed effects and panel-corrected standard errors. I also use GDP per capita, union rate, and import rate as control variables and also stock exchange index in order to control for the price of financial assets. Complete models are displayed in the online supplement (Tables A11 to A14). Definition of variables and their sources are detailed in the online supplement in Table A1. Here I display country demeaned standard estimates in order to compare the effects of different variables in terms of within-country standard deviations. For error correction models (B), I display long-term equilibrium effects obtained with Bewley's transformation.  
\*p < 0.01, †p < 0.1.

Submission to shareholder value contributes only moderately to rising inequality (Table 3, lines 1 and 2). Business debt is clearly associated with a greater financial sector, but its impact on inequality is quite heterogeneous: according to panel regressions, it increases inequality at the bottom of the distribution (D5/D1) and at the very top (with an increase in the share of the top 0.1 percent); by contrast, it decreases in the top 10 percent share. Those results also contrast with ECM models showing a long-term positive impact on D9/D1 and D9/D5 ratios. Priority given to shareholders' remuneration has heterogeneous effects on inequality as well: a positive effect in the top of the distribution as in Dünhaupt (2014), but moderate and more strongly significant only for the top 10 percent share. Moreover, it turns negative for the ratio D9/D5. This mitigated result perhaps comes from the fact that in some countries, especially the United States, the shareholder orientation is reflected more by share buyback policies than by the payment of dividends (Hecht 2014).

Bankarization of non-financial firms is not associated with increased within-country inequality. On the contrary, this movement is both negatively and significantly correlated with the increase of the financial sector and rising inequality (Table 3, lines 3 and 4). I would not venture to interpret this result here (which would imply further detailing the mechanisms). I mainly use it as a negative test on my sample of the positive relationship established for non-financial firms in the United States (Lin and Tomaskovic-Devey 2013). The divergence may be due to differences in field (the United States versus OECD), sources, and definition of variables. Moreover, Lin and Tomaskovic-Devey analyze the effects of non-financial firms' bankarization on within-industry inequality rather than on national inequality as I do here. They therefore exclude the financial sector by definition. The dynamic they investigate might not be at odds with the evolution of aggregate inequality in the economy (particularly fueled by the increasing pay differential between the financial and non-financial sectors). Finally, financial income and financial assets from the national accounts are not consolidated and the indicators used can also capture a tendency to reorganize production.

Three variables may be used as a proxy for household financialization: the rise of financial securities in household savings, should they be directly in shares (multiplied by 1.8 between 1990 and 2007—see Figure A16) or managed by a third party within a mutual fund (multiplied by 4.7 over the same period—Figure A17), and the rise in debt (multiplied by 1.6—Figure A18).

Financial securities in household savings increased, particularly thanks to the development of intermediated asset management by mutual funds, boosted by favorable policies, especially in the United States (Montagne 2006; Saez and Zucman 2014). This form of financialization of household savings is the most correlated with the growth of inequality in particular by contributing to the widening gaps between the upper and bottom deciles, but also by impacting the concentration at the highest level (Table 4).

Similarly, the rise in indebtedness contributes significantly to the increase in inequality in the middle of the income distribution and, to a lesser extent, to the concentration of remuneration at its top. Given these initial statistics, the



**Table 4: Impact of Households' Financialization on Income Inequality**

		A. Classical panel regression models (Equation 1)							
Finance/ Gini		Index	D5/D1	D9/D1	D9/D5	Top 10% share	Top 1% share	Top 0.1% share	Top 0.01% share
1. Shares and other participations without mutual funds/GDP (t-1)	-0.29*	-0.25*	-0.16	-0.25*	-0.24*	-0.18*	-0.04	0.06	0.1
Mutual funds/ GDP (t-1)	0.1	0.41*	0.3*	0.55*	0.5*	0.07	0.11	0.17*	0.36*
N Obs./Countries/Years	245/15/23	263/15/23	219/15/23	219/15/23	219/15/23	238/15/23	238/15/23	211/14/23	155/11/23
2. Household debt/ GDP (t-1)	0.52*	0.01	0.29*	0.27*	0.03	0.11	0.17*	0.17*	
N Obs./Countries/Years	563/16/42	600/16/42	373/16/42	373/16/42	373/16/42	536/16/42	555/16/42	503/15/42	384/13/42
		B. Error correction models (Equation 2)							
ΔFi./GDP		ΔGini	ΔD5/D1	ΔD9/D1	ΔD9/D5	ΔTop 10%	ΔTop 1%	ΔTop 0.1%	ΔTop 0.01%
1. Shares and other participations without mutual funds/ GDP (t-1)	-0.462	-0.026	-0.299	-0.435*	-0.279	-0.280*	-0.152†	-0.071	0.029
Mutual funds/ GDP (t-1)	0.151	0.167	0.413*	0.663*	0.473*	0.075	0.110	0.207	0.416
2. Household debt/ GDP (t-1)	0.814*	-0.120	0.448	0.887*	0.577*	-0.108	0.141	0.225	0.359

Note: Each cell corresponds to a different model. OLS models with country and year fixed effects and panel-corrected standard errors. I also use GDP per capita, union rate, and import rate as control variables and also, for Panel 1 models, stock exchange index in order to control for the price of financial assets. Complete models are displayed in the online supplement (Tables A15 to A16). Definition of variables and their sources are detailed in the online supplement in Table A1. Here I display country-demeaned standard estimates in order to compare the effects of different variables in terms of within-country standard deviations. For error correction models (B), I display long-term equilibrium effects that I calculate using Bewley's transformation.

\*p < 0.01, †p < 0.1.

financialization of households contributes more to the increase in inequality than that of firms.

Let us now consider financialization within the financial sector. Financialization relates less to the evolution of the full sector than to the rise of the financial markets and the replacement of personalized credit relationships with the anonymous trade of securities. Two variables capture this phenomenon: first, the tremendous increase in the volume of stocks traded in national stock exchanges (multiplied by 11 between 1990 and 2007—Figure A19) and second, the growth of shares held on the asset side of banks' balance sheets (multiplied by 3.2 over the same period—Figure A21).

The models in the first line of Table 5 confirm the work of Dünhaupt (2014) and Kus (2013). They clearly show that market activity, measured by the volume of transactions, contributed substantially to rising inequality. Its impact increases as one moves up the income distribution: a standard deviation increase in volume increases my inequality measures ranging from D9/D1 to the share of the top 0.01 percent significantly, by 0.2 to 0.3 standard deviation (while panel regressions and ECM differ for the top 0.01 percent share). Models in the second line not only show the crucial impact of the swelling banks' balance sheets but also their marketization. Hence, loan assets have no robust significant role. On the contrary, shares and related equity held in the banks' balance sheets are significantly correlated with the increase in inequality—and all the more so when one puts the focus at the highest level.

What conclusions can we draw from these different results? The various dimensions of financial activity are strongly intertwined, making their interpretation "all things being equal" somewhat delicate,<sup>8</sup> not to mention the fact that the combination of missing data in my different series can dramatically reduce statistical power. In Table 6, I try the exercise with the four variables that are the most related to increasing inequality in the models above: household savings through mutual funds, household debt, the volume of stocks traded in stock exchanges, and the amount of shares in the assets of banks. The first striking result—the unequal effect of household debt—disappears once I control for market activity. So it is not so much the growth of the somewhat traditional credit to households that promotes inequality, but rather its recent securitization, which has also contributed significantly to the financial crisis (Fligstein and Goldstein 2010). The impact of household savings through mutual funds also substantially diminishes with the introduction of the financial markets activity indicator, but retains a significant positive effect on the gap between upper and lower deciles. The volumes of stocks traded and banks' assets held through shares keep their explanatory power and particularly explain the concentration of pay in the most prosperous fractions. The volume of stocks traded has, in the end, the most robust effect, resulting in 0.2 to 0.4 standard deviation of the inequality indicator considered.

**Table 5:** Impact of Financial Sector Securitization on Income Inequality

A. Classical panel regression models (Equation 1)										
	Finance/ GDP	Gini Index	D5/D1	D9/D1	D9/D5	Top 10% share	Top 1% share	Top 0.1% share	Top 0.01% share	
1. Volume of stocks traded/ GDP (t-1)	0.39*	0.1	-0.06	0.18	0.22*	0.24*	0.28*	0.3*	0.49*	
N	356/18/23	385/18/23	308/18/23	308/18/23	308/18/23	355/18/23	355/18/23	285/15/23	206/12/23	
Obs./Countries/Years										
2. Loans in assets/ GDP (t-1)	0.42*	-0.07	-0.05	-0.06	-0.05	-0.14†	-0.06	0.18*	0.08	
Shares and related eq- uity assets/ GDP (t-1)	0.12	0.31*	-0.08	0.15	0.26	0.14	0.17	0.43*	0.61*	
N	267/16/23	287/16/23	236/16/23	236/16/23	236/16/23	260/16/23	260/16/23	225/14/23	165/11/23	
Obs./Countries/Years										
B. Error correction models (Equation 2)										
	$\Delta Fi./GDP$	$\Delta Gini$	$\Delta D5/D1$	$\Delta D9/D1$	$\Delta D9/D5$	$\Delta Top 10\%$	$\Delta Top 1\%$	$\Delta Top 0.1\%$	$\Delta Top 0.01\%$	
1. Volume of stocks traded/ GDP (t-1)	0.472	0.420	-0.171	0.104	0.202†	0.262†	0.272	0.275†	-0.175	
2. Loans in assets/ GDP (t-1)	0.310	-0.059	0.115	0.288	0.074	-0.043	0.058	0.256	0.281	
Shares and related eq- uity assets/ GDP (t-1)	0.043	-0.354	-0.093	0.068	0.129	0.100	0.216	0.522*	1.203*	

Note: Each cell corresponds to a different model. OLS models with country and year fixed effects and panel-corrected standard errors. I also use GDP per capita, union rate, and import rate as control variables and also stock exchange index in order to control for the price of financial assets. Complete models are displayed in the online supplement (Tables A17 to A18). Definition of variables and their sources are detailed in the online supplement in Table A1. Here I display country-demeaned standard estimates in order to compare the effects of different variables in terms of within-country standard deviations. For error correction models (B), I calculate long term-equilibrium effects that I calculate using Bewley's transformation.

\*p < 0.01, †p < 0.1.

Table 6: Overall View

A. Classical panel regression models (Equation 1)										
	Finance/ GDP	Gini Index	D5/D1	D9/D1	D9/D5	Top 10% share	Top 1% share	Top 0.1% share	Top 0.01% share	
Household participation in mutual funds/ GDP (t-1)	-0.12	0.28*	0.38*	0.43*	0.24*	-0.08	-0.01	-0.01	0.15	
Household debt/ GDP (t-1)	0.18†	-0.08	-0.28*	-0.14	-0.03	-0.21*	-0.12†	0.04	0.39*	
Volume of stocks traded/ GDP (t-1)	0.39*	-0.08	-0.12	0.18†	0.38*	0.22*	0.28*	0.24*	0.21†	
Shares and related equity in banks' assets/ GDP (t-1)	0.26*	0.14	-0.3*	-0.01	0.24*	0.04	0.19	0.44*	0.66*	
N Obs./Countries/Years	245/15/23	263/15/23	219/15/23	219/15/23	219/15/23	238/15/23	238/15/23	211/14/23	155/11/23	
B. Error correction models (Equation 2)										
	$\Delta Fin./GDP$	$\Delta Gini$	$\Delta D5/D1$	$\Delta D9/D1$	$\Delta D9/D5$	$\Delta Top 10\%$	$\Delta Top 1\%$	$\Delta Top 0.1\%$	$\Delta Top 0.01\%$	
Household participation in mutual funds/ GDP (t-1)	-0.175	0.225	0.554*	0.603*	0.214	-0.054	-0.060	-0.004	0.302	
Household debt/ GDP (t-1)	0.191	0.459	-0.079	0.277	0.119	-0.185	-0.212†	0.058	0.639	
Volume of stocks traded/ GDP (t-1)	0.719*	0.248	-0.485*	-0.272	0.313†	0.210†	0.285*	0.183	-0.596	
Shares and related equity in banks' assets/ GDP (t-1)	0.163	-0.411	-0.483*	-0.156	0.293†	-0.079	0.192†	0.413*	1.075	

Note: OLS models with country and year fixed effects and panel-corrected standard errors. I also use GDP per capita, union rate, and import rate as control variables and also stock exchange index in order to control for the price of financial assets. Definition of variables and their sources are detailed in the online supplement in Table A1. Complete models are displayed in the supplement (Table A19). Here I display country-demeaned standard estimates in order to compare the effects of different variables in terms of within-country standard deviations. For error correction models (B), I display long-term equilibrium effects that I calculate using Bewley's transformation.

\* p < 0.01, † p < 0.1.

## Financialization is Marketization

This statistical overview based on 18 OECD countries confirms the link between financialization and growing inequality in advanced market societies. It also measures the relative impact of its various forms. In these countries, financialization of non-financial firms does not contribute to inequality when it takes the form of bankarization, or only little when it takes the form of shareholder orientation. Households' financialization nourishes more inequality, but only if it is accompanied by the delegation of powers to financial intermediaries (in the form of mutual funds) and through the securitization of credit. Within the financial sector, not all financial activity promotes increasing inequality. The traditional credit activities to households and businesses have little impact. The new activities around financial markets favor more inequality, as shown by the impact of shares on bank balance sheets and the volume of stocks traded. Why? On financial markets, the work organization allows some actors (traders, salespersons, and, moreover, heads of trading rooms) to capture some of the key assets, move them elsewhere (or threaten to do so), and, consequently, collect their fruits (Godechot 2008). Put to this inequality test, financialization appears essentially as a phenomenon of marketization.

Therefore, the link between finance and inequality is mainly due to the appropriation of a rent on the financial markets and its appropriation by a minority. Some aspects of this phenomenon are well explained, whereas others need further exploration. The theory of superstars—and moreover that of hold-up—account well for the very unequal distribution of this rent. In addition, the origin of financial rent is beginning to be elucidated. Financial deregulation of the past thirty years, creating new markets, favored its emergence (Philippon and Reshef 2012, 2013; Boustanifar, Grant, and Reshef 2014). So, as in Flaherty (2015), I logically find in my data a link between financial deregulation and income inequality (see Table A20). However, the reasons for the persistence of this rent are less known. Why does it increase in the medium term and why doesn't it decrease over time due to free entrance and dissemination of the knowledge necessary for its exploitation? The banking concentration, which limits competition, probably helps, as shown by its significant positive impact on the D9/D1 and D9/D5 ratios and the share of the top 0.01 percent (see Table A20). Through their frequent rescue plans, states and central banks also artificially fuel finance profitability. Finally, the theory of hold-up could contribute some elements as well. If the organization of financial work cannot prevent some employees from appropriating part of the key assets and if firms cannot index the employment contracts for this possibility, then this appropriation becomes a sunk cost required for the existence of financial activity. Through free entry, profits of financial sector firms could drop to the level of those in other sectors, although those employees who can appropriate assets remain better paid than elsewhere. Ultimately, the financial rent could only be earned by some employees. Unraveling the reasons for the long-term persistence of the financial rent would help us to better understand the unequal dynamics of contemporary capitalism.

## Notes

- 1 Finance is a notion difficult to define and, moreover, delimitate precisely. Throughout this article, I will consider finance as the set of firms in charge of managing money in its various forms—ranging from deposits to credits and from fiduciary money to the most complicated financial securities.
- 2 The top 0.1 percent share is not defined for Finland. The top 0.01 percent share is not defined for Finland, Ireland, New Zealand, and Norway.
- 3 In my sample, the transitions to democracy in Spain and Portugal in the 1970s occurred many years before their financialization.
- 4 Due to lack of space, I only display main results throughout the article. Description of variables (Table A1), figures (A1 to A23), plotting evolutions, full regressions, and variants (Tables A2 to A19) can be found in the online supplement.
- 5 Solt estimates the Gini index every three years using the Luxemburg Income Study data and completes for missing years through interpolation (Solt 2009). This leads to a lack of precision in this variable for within panel regression. Moreover, some evolutions for some countries seem a little curious and contradict what we know from elsewhere (Cf. Denmark for the 1970s—Figure A1).
- 6 A distinction between banking and insurance is not always available. Moreover, it is rather heterogeneous from one year or one country to another.
- 7 I find a positive effect of agriculture as noted elsewhere (Alderson and Nielsen 2002). The reduction in the size of this sector therefore contributed to the decrease in inequality in the 1970s. Construction is also strongly linked to the increase in inequality, especially at the top of the distribution. The underlying mechanisms are far from clear and need further investigation.
- 8 When one financial activity mechanically implies another, then the variable representing the first must be seen more as an interaction variable than as a variable whose effect could be measured independently from the others.

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**Olivier Godechot:** Sciences Po / MaxPo and OSC-CNRS, Axa Chair Holder  
E-mail: [olivier.godechot@sciencespo.fr](mailto:olivier.godechot@sciencespo.fr).