Size and evolution of the financial wage premium

Olivier Godechot[1], Paula Apascaritei, István Boza, Martin Hallsten, Lasse Henriksen, Are Hermansen, Feng Hou, Jiwook Jung, Alena Křížková, Zoltán Lippényi, Elvira Marta, Silvia Maja Melzer, Eunmi Mun, Halil Sabanci, Naomi Kodama, Max Thaning.

Abstract

We measure the size and evolution of the wage premium for a job in finance. In thirteen developed countries, wages, especially high wages, increased at a sustained pace in this sector during the 1990s and 2000s, contributing strongly to the increase in the share of the national top 1% and hence to inequality. The explanation of this gap by differences in talent is not enough. In France, salaries remain 25 to 30% higher once the effect of the diploma is deducted. We offer an alternative explanation based on the ability of employees to move financial activity with them from one firm to another.

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1 Sciences Po (OSC-Cnrs and MaxPo). Corresponding author.

It is no secret that salaries in finance are high. The financial press in the 2000s was full of examples of bonuses paid in London or on Wall Street. That financial remuneration has strongly contributed to the rise of contemporary inequalities is almost common knowledge. On the one hand, we hear the golden legend of the self-adjusting labor market: high demand for exceptional skills. On the other, the black legend of the dictatorship of financial markets resonates: traders manipulating prices, abusing clients and profiting from the misfortunes of the rest of the economy. Between the two, an intriguing and often misunderstood phenomenon: a persistent wage rent in the financial professions. We propose to evaluate and explain it by pointing out the phenomena of appropriation of economic activity by financial operators.

Persistence of high salaries in finance and contribution to rising inequality

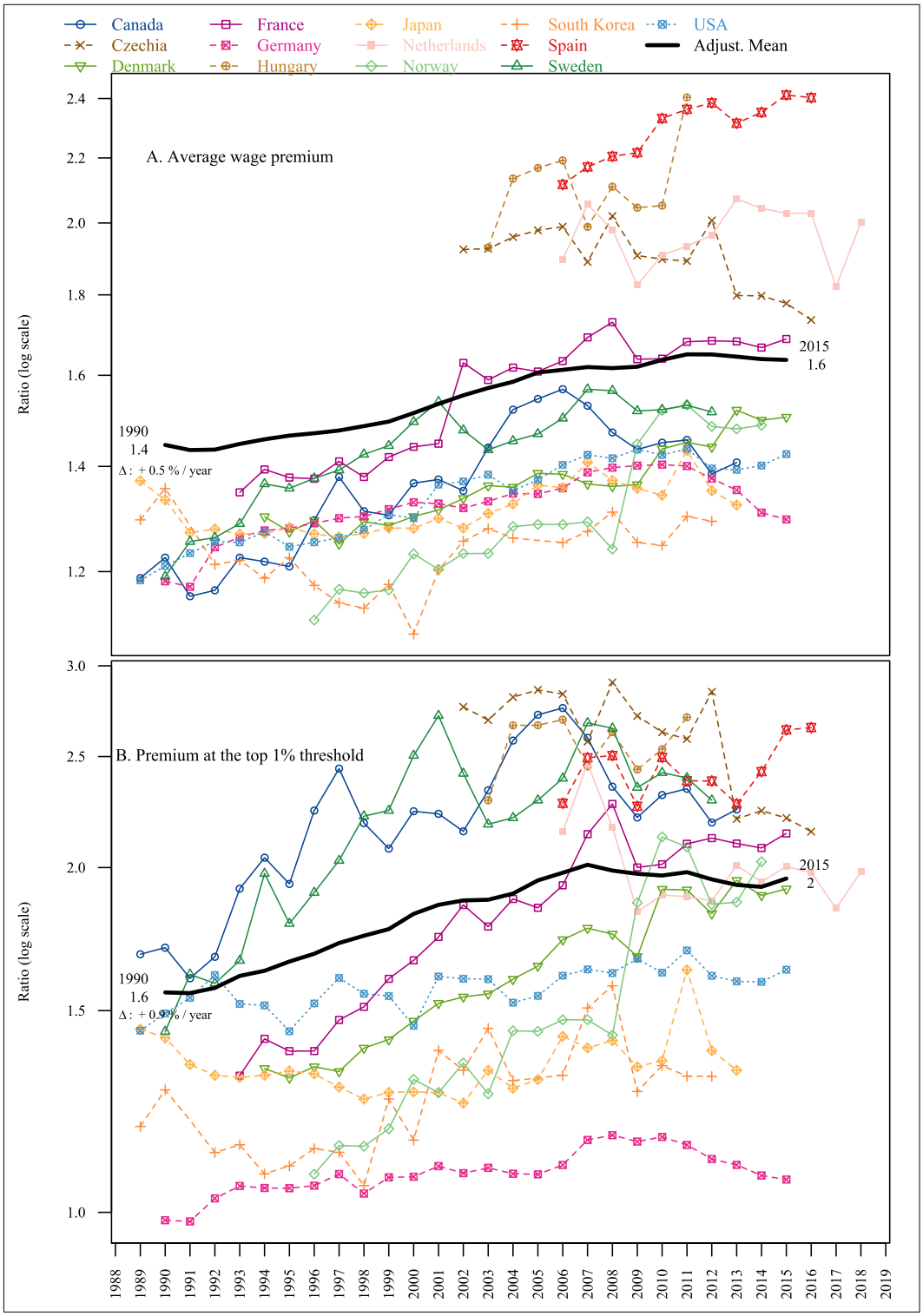
The excesses of the 2000s and the brutal collapse of the financial market in 2008 produced a first wave of largely convergent work showing the contribution of finance to the increase in economic inequality, notably in France (Godechot, 2012), the United States (Philippon and Resheff, 2012), the United Kingdom, or in OECD countries (Kus, 2012; Godechot, 2016).

To complement this finding we use the very detailed administrative wage data collected by the COIN group (Tomaskovic-Devey et al. 2020) for 13 countries.[2] Figure 1 presents the wage gap between employees in finance and those in other sectors and allows us to draw several conclusions. First, wages are higher in finance than elsewhere, with a ratio ranging from 1.2 times higher in South Korea to 2.3 times higher in Spain. Second, in most countries, this gap is more pronounced at the top of the distribution. In Canada and Sweden, for example, the top percentile of finance salaries is, in 2006, 2.5 times higher than the top percentile of other sectors, while the ratio of the average of these two sectors was 1.4.[3] Third, the wage gap between finance and other sectors increased over the period in almost all countries (with the exception of the Czechia, the Netherlands and South Korea). The pace of growth is more pronounced before the crisis, especially at the top 1% threshold, and it slows down (for the average) or stabilizes (for the 1%) after 2008. Despite a major financial crisis and the beginnings of bonus regulation in Europe, there has been no significant decline in compensation in the financial sector.

2 These data are exhaustive for France, Canada, the Scandinavian countries, and the Netherlands, almost exhaustive for Hungary and the Czech Republic, and represent 4 to 8 percent of female employees in Germany, Spain, South Korea, and Japan. Finally, we add data from the US employment survey (CPS) based on a more modest population of 50,000 to 100,000 workers.

3 Recall that the top percentile of wages is the wage threshold above which the top 1% of earners are found. The wages reported in the German and US databases are respectively capped around the top decile (Germany) and P97 (US). Our method for "de-capping" them probably underestimates the differential in these two countries between the top percentile in finance and that in other sectors.

Figure 1. Wage gap between the finance and insurance sector and other sectors



Note: In 2015, in France, average salaries were 1.6 times and the top percentile 2.1 times higher in the finance-insurance sector than elsewhere.

Although the size of the financial sector remains modest (between 2 and 6% of the workforce), this high wage gap is not without consequences for inequality.

Previous work has shown that, in the decade before the crisis, 40% of the increase in the top 1% share of the wage bill in France, and 70% in the UK, benefited members of the national top 1% working in finance (Godechot, 2012; Bell and Van Reenen, 2014). Table 1 replicates this analysis over our group of 13 countries for about 20 years. With the exception of Japan and the Czechia, finance is a strong contributor to rising inequality, and more often than not by more than 30 percent, especially before the crisis.

Table 1. Evolution of wage inequality in 13 countries and contribution of the finance-insurance sector to this increase

	Top 1 % share				Pre-crisis	
Country	Start	End	Yearly evolution	Finance contribution	Yearly evolution	Finance contribution
Germany (1991-2014)	3.3%	3.8%	+0.023%	14%	+0.034%	26%
Canada (1990-2012)	6.5%	8.4%	+0.084%	47%	+0.207%	33%
South Korea (1990-2011)	4.0%	4.2%	(+0.012%)	(76%)	(+0.024%)	(126%)
Denmark (1995-2014)	3.7%	4.8%	+0.060%	38%	+0.050%	45%
Spain (2007-2015)	6.3%	6.9%	+0.071%	50%	/	/
United-States (CPS) (1990-2014)	6.9%	11.3%	+0.186%	4%	+0.105%	19%
France (1994-2014)	5.5%	6.5%	+0.050%	66%	+0.108%	49%
Hungary (2004-2010)	8.7%	8.7%	(-0.002%)	(1705%)	(-0.019%)	(-79%)
Japan (1990-2012)	3.5%	3.8%	(+0.015%)	(-117%)	(+0.012%)	(-207%)
Norway (1997-2013)	3.7%	4.7%	+0.062%	30%	+0.109%	19%
Netherlands (2007-2017)	6.6%	7.1%	+0.046%	27%	/	/
Sweden (1991-2011)	3.7%	4.5%	+0.042%	49%	+0.060%	52%
Czechia (2003-2015)	5.7%	6.2%	+0.043%	-41%	+0.166%	-6%

Note: The share of the national top 1% in Sweden increased from 3.7% to 4.5% of the national wage bill between 1991 and 2011, an increase of +0.04 percentage points per year. 49% of this increase went to members of the national top 1% working in finance. To mitigate volatility, we smooth the series with a three-year moving average. Insignificant changes are shown in parentheses.

The wage rent in finance

The wage gap between finance and other sectors is not sufficient in itself to characterize finance salaries as rent.[4] It could be that these exceptional salaries are the product of rare skills. Indeed, the financial sector underwent a major revolution in the 1980s, with the mathematization and computerization of securities portfolio management, leading to the recruitment of highly qualified people trained in mathematics, physics, economics and computer science (Godechot, 2001; Ho, 2009).

4 Rent can defined as a difference in the remuneration of a given factor of production compared with the situation that would prevail in a perfect market and with perfect factor mobility. If human capital were perfectly mobile, it should be remunerated at the same price in different sectors. The difference with respect to this reference is therefore a rent.

Célérier and Vallée (2019) attempt to demonstrate that high salaries in finance are solely due to "talent", which they approach through the rankings of French engineering schools. The return on "talent" is certainly much higher in finance than in other sectors (Célérier and Vallée, 2019). But this fact shows above all that the financial rent is captured mainly by employees from the best *grandes écoles*. Unless one is invoking a rent phenomenon, the article does not explain why alumni from the same *grandes écoles* would earn less in other sectors. Moreover, the much better careers achieved by business school cohorts who entered the labor market during the financial boom, compared to those who entered during the financial crisis, offer a quasi-experimental evidence that finance offers wage rents (Oyer 2008). Indeed, cohorts in bad years are no less "talented" than those in good years. They are just less likely to start their careers in finance and stay there.

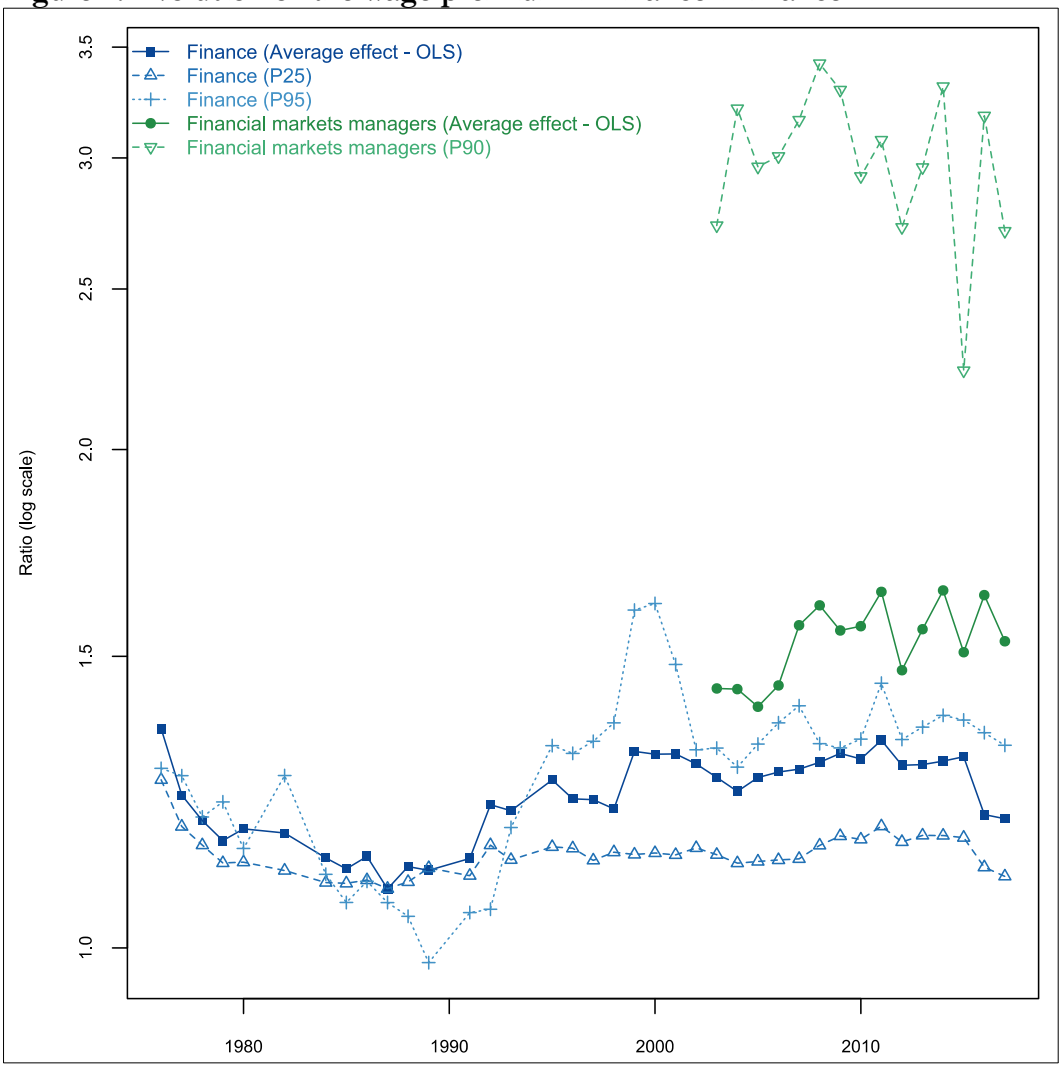
The existence of a financial wage premium is now well documented. Philippon and Reshef (2012) show, taking into account skill differentials, how finance in the United States paid its employees more than other sectors throughout the twentieth century. The wage premium peaked at 40 percent in the early 1930s, then fell to 0 percent between 1945 and 1980, before rising sharply again to +50 percent in the mid-2000s. Using data from the U.S. CPS Employment Survey, Lin and Tobias Neely (2019) further investigate the heterogeneity of the wage gap and its evolution between finance and other sectors. In the early 1970s, employees at the bottom of the wage distribution benefited more strongly from a job in finance (+35% more pay for the top decile in finance compared to the top decile in other sectors) than those at the top (+20% for the top 5% threshold).[5] In contrast, a few decades later, employment in finance favors the top (+60%) more than the bottom (+10%). Finally, Denk (2015) finds that the financial wage premium in 2010 averaged +28% in European countries.

In France, when controlling in the EDP-DADS panel for degree and standard demographic variables, the "financial wage premium" varies between +10% and +40% (Figure 2). While it fluctuated between +8% and +15% in the 1980s, it rose considerably in the 1990s to reach a high plateau in the 2000s between +25% and +30%. This premium has heterogeneous effects on the different regions of the wage distribution. At the beginning of the period, the finance effect is maximal at the level of the third quartile. From the mid-1990s onwards, the effect becomes maximal for the top of the wage hierarchy, in particular for the top 5% of earners. We then see their remuneration vary according to the rhythm of the economic situation: booms in 2001 and 2008 rewarding the good years of the stock market in 2000 and 2007, declines in 2003 and 2009 following the bursting of the internet bubble and the subprime crisis.

The salary premium for the "financial market managers" occupations, with the same controls, is even more spectacular. These occupations earn between 40 and 64% more than managers and professionals in other sectors. Moreover, the distribution of these salaries is very unequal. The bottom quartile is not much better off in these occupations than in others. On the other hand, the advantage is considerable for the 90th percentile, which is paid three times more than elsewhere.

5 Recall that the first decile is the wage threshold below which the lowest paid 10% are found.

Figure 2. Evolution of the wage premium in finance in France



Note: We calculate the wage premium for working either in the financial sector or as a financial markets manager controlling for gender, age, seniority, social category, working in the Île-de-France region, and degree. The average effect is obtained with an ordinary least squares regression. We use quantile (unconditional) regression models to obtain the effect at the 25, 90 or 95 percentile level. Sources: EDP-DADS panel.[6]

The appropriation of the activity

We propose to explain this financial rent on the basis of a "hold-up" mechanism, i.e. a situation in which one party obtains an economic advantage by threatening the other with a contractual breach that would devalue its investments. More than elsewhere, certain employees, such as traders, can appropriate the key assets of financial companies, in particular intangible assets that the company cannot easily protect, such as human capital (knowledge, know-how, etc.) and social capital (clients, teams). They can then move or threaten to move these assets to a competing company in exchange for higher salaries. For example, the head of a trading room and his deputy managed to obtain 10 and 7 million euros in bonuses respectively in

6 The EDP and DADS data were accessed through the CASD (*Centre d'accès sécurisé aux données*) after authorization from the *Comité du secret statistique*.

2001 after threatening to move their entire teams, and thus the core of the firm's financial activity, to another bank (Godechot, 2017). The "hold-up" mechanism thus offers a more realistic explanation for some very high salaries than the superstar theory (Rosen, 1981; Célérier and Vallée, 2019). According to the latter, small initial differences in talent are multiplied by the size of the market (or stock portfolio) to which they are applied. The leverage effect of size may have some relevance. But above all, we propose to extend the notion of "talent" not only to "innate" talent or talent acquired during education, but also to "talent" acquired in the workplace and more generally to all the resources accumulated (including social resources) in the financial firm and that can be transported elsewhere. In a work in progress, we are trying to quantify the benefits of shifting activity, in particular the wage gains obtained by employees during a full shift migration to a competing firm. For example, financial market executives increase their wages by 12% more when moving as a team rather than individually.

Conclusion

The appropriation of financial activity thus provides a strong lead to explain the distribution of income in finance and to understand why, at "market equilibrium", compensation in this sector is higher than elsewhere. It shows how the ordinary functioning of the financial labor market can contribute to global inequality.

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