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Politics, markets, and CEO pay: a congruence analysis of two competing theoretical explanations of executive compensation at large firms in Finland

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Abstract

This article conducts a congruence analysis on the historical development of CEO pay at large firms in Finland to contribute to the debate between prominent competing theoretical perspectives on the causes of CEO pay and consequent income inequality. It examines the alignment of the empirical evidence on CEO pay in Finland with a market-based theory, which emphasizes market forces, and a politics-based theory, which emphasizes the distribution of power between labor and employers, drawing from Power Resources Theory, to see whether a particular perspective holds more explanatory power. The congruence analysis finds that the expectations of the politics-based perspective are aligned with CEO pay developments in the 1970s and 1980s, when labor was strong and CEO pay was modest, as well as the difference between CEO pay developments before the mid-1990s and afterward, when employers were strong and CEO pay grew rapidly to new heights. It also finds that the market-based perspective is helpful for explaining developments starting in the mid-1990s. The impact of the market on CEO pay is shown to be contingent on the distribution of power in society.

Keywords Power resources theory · Market disembeddedness · Income inequality · Labour relations · Sociology · Congruence analysis

1 Introduction

Income inequality significantly shapes people's life chances by impacting the distribution of resources (Jensen and Kersbergen 2016). High income inequality drives poverty (World Inequality Lab 2018) and social instability (Hauner et al. 2017), and it has been linked to slower economic growth (OECD 2015), and health and social problems, including increased income anxiety, and decreased health, life satisfaction, and social mobility (Jensen and Kersbergen 2016; Wilkinson and Pickett 2011).

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While Finland is among the most egalitarian countries in the world in terms of income distribution (Kenworthy 2020, 54; Riihelä et al. 2010; Fritzell et al. 2012), it has become significantly more unequal since the early 1990s—a trend observed in many countries in recent decades (Aaberge et al. 2018; Lynch 2020; World Inequality Lab 2018)—with Riihelä and Tuomala (2020) characterizing the decades preceding the mid-1990s as an egalitarian era of welfare state development, and the decades since the mid-1990s as a comparatively inequalitarian era of global competition. The rise in inequality in the Finnish case has largely been associated with the impact of increased capital incomes, reduced tax progressivity, including the 1993 reform to tax capital and earned income separately, increased disparities in earned income,¹ reduced redistributive government spending, weakened unions, increased unemployment, and increased firm profitability (Mäki-Fränti et al. 2022; Heino 2021; Riihelä et al. 2010; Roikonen 2021; Riihelä and Tuomala 2020). However, as pointed out by international research, executive compensation² is also an important mechanism underlying increased income inequality in countries around the world (Huber et al. 2019; Kenworthy 2017; Piketty 2018). Yet in Finland, executive compensation has received less scholarly attention in the income inequality literature although it can be seen as a key part of the explanation for increased disparities in earned income. For instance, in 1999 and 2000, 85 out of 87 of Finland's top earners were Nokia executives (Heino 2011a)—a group that received the majority of all stock option compensation in Finland in some years (Helaniemi et al. 2003). Further, both executive compensation at large firms and the national income share of the top .1% richest citizens—a group that generally includes executives at large firms³—have increased rapidly in recent decades (World Inequality Lab 2018; Heino 2011a). Allowing for the fact that most of the increase in income inequality in Finland in recent decades has come through increased capital income (Riihelä et al. 2010)—also a key factor underlying income inequality increases in countries around the world (Bengtsson and Waldenström 2018)—increased capital income in part results from savings from previously earned labor income (Berman and Milanovic 2020; Roikonen 2021, 13), as well as labor income re-classified as capital income for tax purposes (Pirttilä and Selin 2011). Beyond increasing income inequality, the surge in executive compensation may contribute to perceptions of ‘makers and takers’ in society, threatening the egalitarian foundations of social democratic welfare state regimes (Aaberge et al. 2018; Esping-Andersen 1990).

International and country-specific research on increased executive compensation and income inequality has highlighted the superior explanatory power of a politics-based over a market-based theoretical perspective (Bivens and Mishel 2013; Huber et al. 2019; Hacker and Pierson 2010, 189–192; Korpi 2018; Piketty 2022; Piketty and Saez 2003; Piketty and Saez 2014), although both perspectives likely play some role (Kenworthy 2017). Internationally, Huber et al.'s (2019) politics-based explanation of increased executive compensation and income inequality centers around weakened labor power relative to employer

¹ From 1995 to 2018, ‘wages and salaries per consumption unit’ grew fastest for the top 10% highest earners in the income distribution, 63% total growth, modestly outpacing growth in other deciles and the national average (55%). Among the top 10% highest earners, growth in ‘wages and salaries per consumption unit’ was substantially higher for the top 1% highest earners than for the next nine percent—99% total growth for the top 1% vs. 58% for the next nine percent (Statistics Finland 2020a).

² Compensation for an organization's management.

³ From 1980 to 2008, average annual executive compensation from Heino's (2011b) dataset covering CEOs at five of Finland's largest firms, and average annual pre-tax income for the top .1% richest citizens (World Inequality Lab 2018) are correlated at .69. Average annual executive compensation in Heino's dataset is high enough to fall among the top .1% every year from 1980 to 2008.

power—as represented by weaker unions, top marginal tax rate and government spending cuts, lesser collective bargaining centralization, and strengthened right political party power. In the US, executive compensation has increased in lockstep with market capitalization since 1980 (Gabaix and Landier 2008), a period characterized by an unrestrained market and high pay. However, from 1936 until the 1970s—a period characterized by a socially embedded market in the form of strong unions, high top marginal tax rates, and social norms less accepting of high pay and inequality (Bivens and Mishel 2013; Piketty and Saez 2003)—executive compensation held steady at low levels, despite large increases in market capitalization (Frydman and Saks 2010). Only a politics-based perspective was able to explain the transition from a period where executive compensation was socially embedded and modest, to a period where it was disembedded and high.

In Finland, Heino (2011a; b) previously explored the long-run evolution of executive compensation for chief executive officers (CEOs) at five of the largest firms, emphasizing the role of ideological changes and foreign ownership in popularizing equity compensation, which led to higher executive compensation. Equity compensation, now commonplace in Finland and around the world (Kotnik and Sakiç 2022), has been a key mechanism for increased executive compensation internationally, as it has directly linked executive compensation to market capitalization (Huber et al. 2019). Additional studies have examined executive compensation trends over shorter intervals (Mäkinen 2008; Vittaniemi 1997), while others have focused on particular aspects of executive compensation, for instance, pay package preferences among investors (Peltomäki 2021). Yet, while the important role of equity compensation in the rise of executive compensation has been established, there is still a void in the research when it comes to theoretical explanations underlying the historical development of executive compensation, along with the historical development of equity compensation, in the Finnish setting.

This article aims to fill this void by analyzing the explanatory power of two alternative theories in the historical development of executive compensation at large firms in Finland. It will do so with the help of the congruence analysis method, a method examining the alignment of empirical evidence with theory to contribute to the theoretical discourse in a research area (e.g., Blatter and Blume 2008). We focus on two prominent competing theoretical schools—the politics-based and the market-based theory—and their roles as drivers of executive compensation. If the same politics-based explanations found to be important in the US and internationally (e.g., Bivens and Mishel 2013; Huber et al. 2019; Hacker and Pierson 2010, 189–192; Piketty and Saez 2003; Piketty and Saez 2014) also apply in Finland—a small, egalitarian, social democratic capitalist (Kenworthy 2020), coordinated market economy, in each way divergent from the US case—their validity will be bolstered.

The research contribution is threefold. First, it employs the Finnish case, which is hitherto an understudied case in the literature on executive compensation, to contribute to the debate between competing theoretical perspectives on the causes of income inequality. Testing the validity of different theoretical frameworks of the causes of increased executive compensation and income inequality will allow for more informed societal debates on how to best combat inequality if it is deemed too extreme. Second, this paper draws upon prominent theoretical perspectives to develop a more complete explanation of long-term trends in executive compensation in Finland. While these theoretical perspectives have been tested in countries around the world, particularly in the US, this research tests their validity in the Finnish context, expanding their generalizability to a diverse case, and improving their validity for future international research. Finally, it demonstrates the efficacy of a mixed method ‘congruence analysis’ methodology in the executive compensation and income inequality literature.

This article is structured as follows. The next section reviews the empirical evidence on the historical development of executive compensation in Finland. The section that follows outlines the theoretical frameworks to be tested in this study. The methodology section details the congruence analysis approach. The congruence analysis then begins by examining the alignment of the empirical evidence of the Finnish case with the market-based perspective. It proceeds to consider the alignment of the empirical evidence of the Finnish case with the politics-based perspective. The article concludes with a summary of the findings.

2 The Historical development of executive compensation in Finland

2.1 Summary and discussion of primary dataset by Heino (2011b)

Sampling differences and short time spans limit the usefulness of most previous research for examining the historical development of executive compensation in Finland. This article primarily relies upon Heino's (2011b) dataset, featured in a 2011 documentary for Yle News, as it uniquely does not possess these limitations. The dataset includes executive compensation for CEOs at five of Finland's largest listed firms throughout the analysis period, selected to be broadly representative of large Finnish firms across a diverse set of industries, from 1971 to 2009. The firms included are Nokia, Konecranes, Nordea, Fortum, and UPM-Kymmene. For firms that have gone through mergers over the period analyzed, their predecessor firms are used pre-merger. All firms have been listed on The Nasdaq Helsinki over the period analyzed outside of brief transitional periods. This paper updates the dataset through 2018 by hand-collecting executive compensation data from company reports, including annual reports and remuneration reports, and from Helsinki Sanomat's Verokone (<https://verokone.hs.fi/>), a newspaper database that publishes top incomes in Finland annually.⁴ Executive compensation captures the total of all forms of earned income for CEOs before taxes. All forms of earned income includes base pay, equity pay—including stock awards and options—bonus, short and long-term incentive pay, other miscellaneous pay, and pension pay.⁵ Where possible, the equity portion of executive compensation is measured as realized gains rather than estimated fair value, following Kotnik et al. (2022) recommendation to avoid understating pay and capture what executives actually earn before taxes. In any case, they find small differences between alternative measures of executive compensation in Finland, unlike in some other countries, for instance, Sweden and Belgium. As earnings from capital are included in Heino's (2011b) measure of executive compensation, the updated executive compensation measure also includes them, as reported in Verokone, to maintain consistency throughout the dataset. They are unlikely to skew the analysis as they comprise only a small portion of total earnings: 9% of total executive compensation from 1993 to 2018. Before 1993, the tax authorities did not distinguish between earned income and capital income. This paper is concerned with the typical level of executive compensation across firms as a driver of income inequality rather than executive compensation at a particular firm. Thus, this paper's key summary metric of

⁴ To measure earned income, company reports are given precedence over Helsinki Sanomat's Verokone, as Verokone only captures earned income reported to Finnish tax authorities.

⁵ Note the value of executive pensions, a part of executive earnings, is not consistently reported across companies.

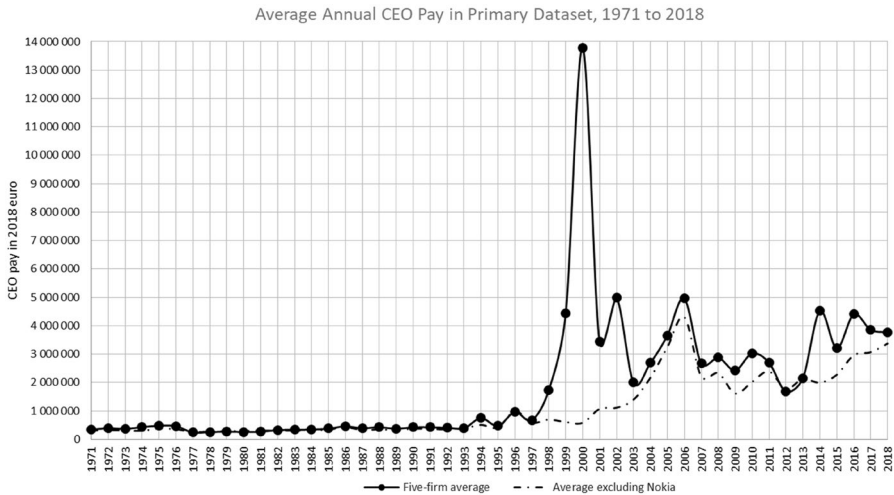


Fig. 1 Average annual executive compensation in primary dataset, 1971 to 2018

theoretical relevance is average annual executive compensation, which captures the average annual executive compensation of the five firms in the primary dataset.

While this dataset only captures executive compensation for each firm's CEO each year, for a total of five CEOs per year, together these firms comprise a large percentage of total stock market capitalization in Finland—e.g., 52% in 2016. Further, this article considers trends in theoretically related indicators, CEO pay across a broader sample of firms, and the top .1% income share, and finds them to be generally consistent with the evidence of the primary dataset, building construct validity. Although five CEOs is too small a group to be a major driver of national inequality levels itself, the economy contains a much larger group of executives whose pay is likely to be subject to similar underlying explanations (Huber et al. 2019), exemplified by Nokia executives comprising 85 of 87 of Finland's top earners across 1999 and 2000 (Heino 2011a). The five-firm primary dataset can be seen as a proxy representation of the broader societal phenomenon that is executive compensation, well-established to be a key causal mechanism underlying income inequality levels (Huber et al. 2019).

Figure 1 shows average annual executive compensation for the five firms in the updated primary dataset from 1971 to 2018. All figures are in 2018 euro. Average annual executive compensation excluding Nokia is also shown, given Nokia's large influence on average executive compensation in certain outlier years.

From 1971 to 1994,⁶ average annual executive compensation was €385,454, with a €104,685 standard deviation. During this period, it fluctuated around the mean, eclipsing €500,000 for the first time in 1994. It exceeded €1 million for the first time in 1998. From 1995 to 2018, average annual executive compensation was €3,381,029, about nine times larger than it was from 1971 to 1994. From 1995 to 2018, the standard deviation of average annual executive compensation was €2,559,113, 24 times larger than the standard deviation

⁶ Throughout the text, we often refer to the first half of the analysis period, 1971 to 1994, and the second half, 1995 to 2018, for convenience. Any mid-1990s cutoff could have been a reasonable choice.

in the earlier period. After an early 2000s Nokia stock price-fueled boom, average annual executive compensation regressed and settled into a higher, more volatile equilibrium compared to the 1971 to 1994 period.

Nokia has been more exposed to international pressures than the other firms, with foreign ownership playing a large role (Jones et al. 2006). In addition to being listed on The Nasdaq Helsinki, Nokia has been listed on The New York Stock Exchange since 1994. Further, Nokia employs a smaller percentage of its full workforce in Finland than any of the other four sample firms (see Fig. 5). It has also seen the largest percentage point reduction in the proportion of its workforce employed in Finland workforce since the mid-1990s. Despite greater internationalization, the pay trends are broadly similar with Nokia excluded. Nokia's extremely rapid growth in the late 1990s was unique, but by 2003, the four-firm average had caught up to a significant extent.

The ratio between average annual executive compensation in the five-firm sample and median income (Statistics Finland 2020b)⁷ is a common measure of the level of income inequality between executives and median citizens. The trend in this ratio mirrors the general trend of executive compensation: from 1971 to 1994, the ratio of average annual executive compensation to median factor income was 24 to 1; from 1995 to 2018, it was 156 to 1.

From 1971 to 1994, median incomes and executive compensation both grew at relatively modest rates annually. Average annual median disposable income growth was 2.2% over this period, ranging from 6% in 1972 to -5% in 1992. Average annual median factor income growth was a bit slower at 1.4%, ranging more broadly, peaking at 8% in 1972, and cratering at -12% in 1993. Executive compensation grew at 5.9% annually on average over this period, though with 1994 excluded average annual growth was 2%, a bit slower than average annual median disposable income growth (2.3%) and a bit faster than median factor income growth (1.4%). Pre-1994, executive compensation grew the fastest in 1982, at 23%, and declined the most in 1977, at 48%. In 1994, executive compensation growth reached unprecedented heights, with pay almost doubling over the previous year. From 1995 to 2018, these sorts of large year-over-year executive compensation growth rates, unprecedented in the earlier period, were not uncommon.

From 1995 to 2018, median incomes continued to grow at a similar rate to the earlier period, about 2% per year on average, ranging annually from -3% to 7%. In contrast, average annual executive compensation growth was 26.2% from 1995 to 2018, sharply diverging from the modest growth rates of the earlier period, and from the typically modest growth rates of median incomes. Table 1 summarizes average annual executive compensation and median income growth rates.

3 Summary and discussion of evidence on related indicators

In alignment with congruence analysis' suggestion to consider a broad range of empirical evidence (Blatter 2012), and to address potential concerns regarding the small sample of the primary dataset, this article turns to examine trends in related indicators next.

Table 2 summarizes executive compensation data from previous studies covering a broader sample of firms than the primary dataset. All of the studies capture large

⁷ Linear interpolation used to impute data for missing years.

Table 1 Average annual growth rates for executive compensation and median incomes

Period	Average annual growth rate			Total growth rate				
	Median disposable income (%)	Median factor income (%)	CEO pay (%)	CEO pay excluding Nokia (%)	Median disposable income (%)	Median factor income (%)	CEO pay (%)	CEO pay excluding Nokia (%)
1971 to 1994	2.2	1.4	5.9	3.0	63.5	35.2	120.1	63.2
1995 to 2018	2.0	1.9	26.2	14.3	56.1	50.4	701.0	697.8
1971 to 2018	2.1	1.7	16.3	8.8	159.5	112.4	1002.8	964.5

Table 2 Previous studies of executive compensation in Finland

Period	Previous studies			Primary dataset		
	Average annual CEO pay (Previous studies)	CEO pay to median factor income ratio	Average annual firm size (revenue)	Average annual CEO pay (Primary dataset)	CEO pay to median factor income ratio	Average annual firm size (revenue)
1983	190,908	11	1,738,623,514	336,980	19	2,106,103,675
1989–1993	284,312	15	650,180,000	406,595	22	3,542,349,670
1989–1993	350,915	19	1,223,912,709	406,595	22	3,542,349,670
1996–1998	304,783	18	1,777,988,008	1,124,817	65	7,311,525,842
1999–2002	584,699	29	1,777,988,008	6,663,946	336	9,700,554,788
2013	1,153,035	50	3,023,879,528	2,157,781	93	9,843,408,161

Median factor income from Statistics Finland (2020b). 'Previous studies,' row one, '1983,' covers listed and unlisted firms (Arthur Young 1985); row two, '1989–1993,' covers listed and unlisted firms (Vittaniemi 1997); row three, '1989–1993,' covers listed firms (Vittaniemi 1997); rows four, '1996–1998,' and five, '1999–2002,' cover listed firms, and both report average firm size for the year 2000 (Mäkinen 2008). Row 6, '2013,' covers listed firms (Korhonen 2015). Average firm size for the primary dataset from Yritystieto (1976, 1992), Talouselämä (2006) and Kauppalehti (2006); largestcompanies.com; company annual reports

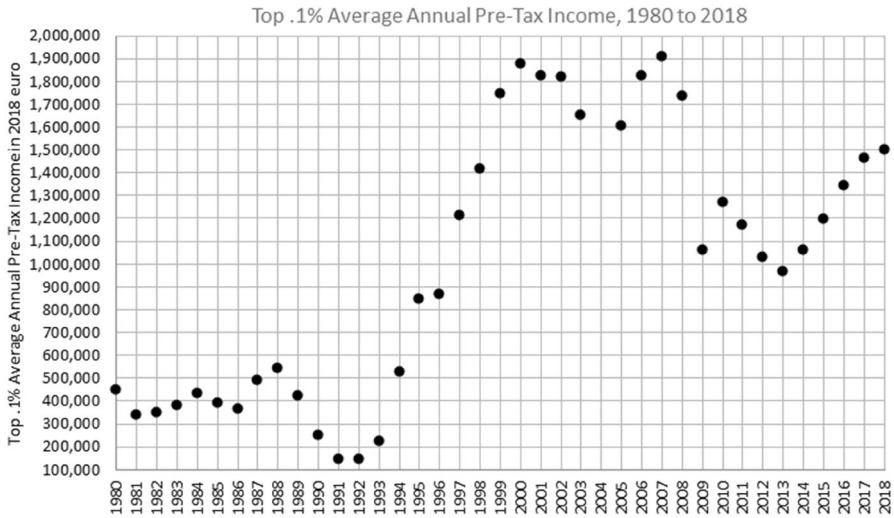


Fig. 2 Average annual top .1% pre-tax income share, 1980 to 2018. *Source:* World Inequality Lab 2018

Finnish firms, though differences in sampling limit the usefulness of comparison across studies, and none of the previous studies spans multiple decades like the primary dataset does. Average firm size, measured here by revenue, is also displayed, given the well-established positive association between firm size and executive compensation in the executive compensation literature. The ratio of executive pay to median factor income is also shown.

Previous studies find that the average annual executive compensation pre-1999 was modest, always less than €500,000, and never more than 19 times larger than median factor income. From 1999 to 2002, average annual executive compensation eclipsed €500,000 for the first time, and its ratio to median factor income increased by 10 over the previous high. By 2013, the ratio of average executive compensation to median factor income had reached 50, almost three times its pre-1999 high. Relative to the primary dataset, the increase in executive compensation is considerably more modest for a broader sample of firms, with the primary dataset capturing significantly larger firms on average. Nonetheless, a transition from a low executive compensation period to a high executive compensation period over time is evident in previous research, broadly paralleling executive compensation trends observed in the primary dataset and income inequality increases in Finland since 1990 (Riihelä and Tuomala 2020).

Two of these studies also produced average annual growth rates for executive compensation. Mäkinen’s (2008) analysis reports average annual executive compensation for a cohort of listed firms from 1996 to 2002: executive compensation grew rapidly over the period, at 105% total growth. In contrast, in Vittaniemi’s (1997) dataset covering 1989–1993, including the depression years, executive compensation’s average annual growth rate was modest and stable at 1.2%. These executive compensation growth patterns are broadly similar to the executive compensation growth patterns observed in the primary dataset, with rapid growth rates only after 1995 (Mäkinen 2008; Vittaniemi 1997).

Next, Fig. 2 shows the average annual income share for the top .1% richest citizens in Finland from 1980 to 2018⁸ (World Inequality Lab 2018). This is a theoretically related indicator to executive compensation, with this group including executives at large firms, among others.

The correlation between average annual executive compensation in the primary dataset and average annual top .1% income is in the expected direction, at .70. Consistent with the executive compensation evidence, average annual income for the top .1% was more modest and stable in the 1980s, then underwent a period of rapid growth during the mid and late 1990s, then settled into a higher, more volatile equilibrium relative to in the 1980s.

The empirical evidence on executive compensation and top .1% average annual income paints a clear picture. By the mid-1990s, executive compensation had shifted away from the comparatively modest, stable levels of the relatively egalitarian 1970s and 1980s, when median incomes and executive compensation grew at similarly modest magnitudes, and each had a relatively low growth ceiling. Instead, executive compensation entered a new equilibrium characterized by increased volatility, unprecedented potential annual growth, and high levels, further diverging from median incomes.

4 Reviewing prominent theoretical frameworks of executive compensation

4.1 Market-based theoretical framework

Turning to one prominent theoretical framework, the market-based perspective views executive compensation as determined by marginal productivity and the interaction of supply and demand, negotiated at arm's length between executives and boards of directors representing shareholders, efficiently designed to maximize shareholder value and minimize agency costs (Murphy 2012, 141–145). Proponents of this perspective tend to view increases in executive compensation as an outcome of competitive markets rewarding executives more as globalization and technological change allow firms to operate on a larger scale, increasing executives' marginal productivity (Gabaix and Landier 2008; Kaplan and Rauh 2013). In a perfectly competitive market, executives are paid the value of their marginal product (Mankiw 2013); other factors that could explain pay and productivity, like bargaining power, monopsony power, or intellectual property rights, are assumed away.

Executives at larger firms, with consequent higher marginal productivity, indeed typically receive higher compensation (Fernandes et al. 2013; Abowd and Bognanno 2007; Frydman and Saks 2010; Gabaix and Landier 2008). While the market-based perspective expects individual firm size differences to explain executive compensation differences between firms at a given time, aggregate firm size, the total size of all firms in a market, is expected to explain over time and cross-country differences in the average level of executive compensation (Gabaix and Landier 2008): as the firm size of all potential employers grows, competition to hire executive talent raises the equilibrium level of executive compensation (Frydman and Saks 2010; Gabaix and Landier 2008). Equity compensation, in the form of stocks and option awards, directly links executive compensation increases to firm size increases. Firm size is typically measured by revenue or especially market

⁸ 1980 is the earliest year with available data for the top .1%.

capitalization, i.e., the total market value of a company's outstanding stock. Equity compensation is now commonplace worldwide (Ludwig 2019), including in Finland (Kotnik et al. 2022), where its use has grown substantially since it was first introduced in 1987 (Jones et al. 2006). Proponents justify it as a means for aligning shareholder and CEO incentives (Jensen and Murphy 1990), and for providing executives with a pay premium for taking on greater pay risk (Fernandes et al. 2013). By linking executive compensation to firm size, equity compensation has allowed executive compensation to reach previously unprecedented heights in countries around the world (Frydman and Saks 2010; Heino 2011a, Kenworthy 2017), driving increases in income inequality (Huber et al. 2019). As this case study is concerned with over time differences in average annual executive compensation in Finland rather than inter-firm differences, the market-based perspective offers the following hypothesis for this case: average annual executive compensation will increase at the same rate as the aggregate firm size of the Finnish market (Frydman and Saks 2010; Gabaix and Landier 2008)—like witnessed in the US since 1980 but not beforehand (Frydman and Saks 2010). Factors that would likely contribute to explaining inter-firm differences in executive compensation (Core et al. 2008, 1999), e.g., tenure, are safely ignored as they fall outside the scope of the study. If the market-based perspective holds, average annual executive compensation will increase at approximately the same rate as aggregate firm size across the analysis period, in both the egalitarian 1970s and 1980s, and in the inegalitarian period that started in the 1990s.

4.2 Politics-based theoretical framework

A second prominent theoretical framework of executive compensation, the politics-based theory, views the extent of the impact of the market as shaped by political factors mediated by institutions (Huber et al. 2019) that determine the market's embeddedness in society (Polanyi 1944).

Power Resources Theory (PRT) serves as the foundation for the politics-based perspective (Huber et al. 2019; Korpi 2018). Through the lens of PRT, different social groups use their power resources, mediated by institutions, to support policies that push for their preferred distributional outcomes. Korpi (1985, 33) defines power resources thusly: “the attributes (capacities or means) of actors (individuals or collectivities), which enable them to reward or to punish other actors.” PRT emphasizes the importance of socioeconomic class—focusing on the distribution of power between labor and employers—though cross-class coalitions and additional societal cleavages are also considered. From the perspective of PRT, labor's⁹ main power resource is human capital, which typically requires collective action to be effective because it is decentralized. Leftist political parties and unions are viewed as the major organizations representing labor, each allowing labor to act collectively. Economic resources (wealth) and control over the means of production are seen as employers' major power resources. Rightist political parties are viewed as the major organizations representing employers.¹⁰ Additionally, institutions and ideologies are theorized to emerge out of conflict reflecting the distribution of power in society. Institutions and ideologies are expected to continue to shape the distribution of power after emerging.

⁹ Non-executive employees.

¹⁰ Owners and executives.

Although, as the market-based perspective lays out, executive compensation is set as a result of negotiations between executives and the board of directors representing shareholders, the politics-based perspective expects political context to significantly impact these negotiations. Following PRT, then, the politics-based framework expects the market to become more socially disembedded when employers are stronger relative to labor, resulting in higher compensation for executives for a given aggregate firm size—and it expects the market to be more socially embedded when labor is stronger relative to employers, resulting in lower compensation for executives for a given aggregate firm size. In a context of strong labor, boards and executives are more constrained from agreeing to higher executive compensation—whether in the form of higher base compensation or equity compensation, or in some other form—as this may lead to unwanted consequences, for example, increased wage demands or strikes from labor, or additional regulations to combat high executive compensation.

The politics-based framework thus expects that a review of the empirical evidence will show that the distribution of power has tilted toward employers and away from labor during the inegalitarian era that started in the mid-1990s compared to in the egalitarian era during the 1970s and 1980s, when labor is expected to have been stronger, with this shift creating a more favorable context for higher executive compensation tightly linked to firm size.

5 Methodology

Congruence analysis¹¹ is a theory-oriented form of case study used to evaluate the relative strength of alternate theories (Blatter and Blume 2008; Blatter 2012). Unlike process tracing, another form of case study that analyzes causal chains to ensure cause and effect are linked in the expected manner, congruence analysis examines the alignment of the empirical evidence of a case with expectations deduced from alternate theories of the case. This allows for a comparison of the explanatory power of competing theories, making it a suitable methodological choice for contributing to the debate between prominent theories in a hotly contested research area (Blatter and Haverland 2012), like in the literature on executive compensation and income inequality, where the politics-based and market-based theoretical frameworks dominate, with previous research often arguing on behalf of the explanatory power of one framework over the other (e.g., Huber et al. 2019; Mankiw 2013). This article examines the alignment of these two prominent theories with the empirical evidence of the Finnish case in the two broad eras distinguished by previous research (e.g., Riihelä and Tuomala 2020), the egalitarian 1970s to early 1990s, and the inegalitarian mid-to-late 1990s to 2018.

This congruence analysis features an ‘explanatory,’ mixed methods design, where initial quantitative results are further explored following the logic of a case study (Creswell and Clark 2007, p. 71), combining the strengths of quantitative and qualitative analysis—the “fundamental principle,” of mixed methods research (Johnson and Onwuegbuzie 2004, 18). It begins by testing the market-based framework in an initial statistical analysis whose validity is further explored in the politics-based theory section. Statistical analysis offers several benefits (Punch 2016, 344): it allows for estimating how much of the variance in average annual executive compensation can be accounted for by a given theoretical model;

¹¹ For an example of congruence analysis, see Owen (1997).

Table 3 Average annual executive compensation and average annual firm revenue, primary dataset

Year	Average CEO pay	Average firm revenue
1975	483,300	996,159,701
1991	425,431	3,216,047,649
2005	3,658,501	12,772,163,432
2016	4,404,452	8,745,124,935
2018	3,768,608	8,935,459,004

it allows for estimating the relative effect size of key variables and any interaction effects. Further, the market-based framework hypothesizes average annual executive compensation is a function of aggregate firm size, just a single variable, making it feasible to test in a statistical analysis. The statistical analysis also includes a dummy variable to differentiate the inegalitarian era that began in the mid-1990s from the egalitarian era in the decades prior, to serve as an initial test of the validity of the politics-based framework. If the market-based perspective holds, the relationship between firm size and executive compensation should be the same across the two eras. If the link between executive compensation and firm size is weaker in the 1970s and 1980s, this would be initial evidence in support of the politics-based perspective. This initial validity is then tested more in-depth in the politics-based theory section, where a broad range of indicators on the distribution of power are considered following the logic of a case study.

A key benefit of the ‘explanatory’ mixed methods design featured in this congruence analysis is that, relative to a pure statistical analysis, it allows for a broader accounting of empirical observations and an in-depth reflection on the fit of empirical observations with abstract theories (Blatter and Haverland 2012). This approach permits testing the validity of the initial statistical findings more in-depth, by considering the alignment of a broad range of indicators of the distribution of power with the expectations of the politics-based framework. The indicators of the distribution of power analyzed are anyway too broad and diverse to each be captured together in a statistical model, especially given the collinearity of these indicators, and small sample size issues common to country-level research.

6 The congruence analysis

6.1 Analysis of the congruence of the expectations of the market-based theoretical framework with the empirical evidence of the case

The market-based theory expects average annual executive compensation to increase at the same rate as aggregate firm size. This section reviews the empirical evidence to test this hypothesis, first analyzing descriptive statistics and then conducting a regression analysis.

Table 3 shows average annual executive compensation and aggregate firm size proxied by average firm revenue¹² in the five-firm Finland sample.

From 1975 to 1991, executive compensation remained stable and moderate even while average firm revenue approximately tripled, increasing from around €1 billion in 1975 to

¹² Average firm size, the size of the typical firm, is a suitable proxy for aggregate firm size (Gabaix and Landier 2008).

Table 4 Regression results for natural logarithm of average annual executive compensation, 1971 to 2018

	Dependent variable: natural logarithm of executive compensation
Constant	12.02*** (.34)
Natural logarithm of market capitalization	.12** (.05)
Inegalitarian period dummy (1995 to 2018 = 1, 1971 to 1994 = 0)	− 10.07*** (1.21)
Natural logarithm of market capitalization*inegalitarian period dummy	1.19*** (.13)
Adjusted R-squared	0.94
Number of observations	48

Standard errors are reported in parentheses

*, **, *** indicated significance at the 90%, 95%, 99% level, respectively

around €3 billion in 1991. This runs counter to the market-based perspective. However, aligned with the market-based perspective, firm revenue approximately tripled again from 1991 to 2018—and this time executive compensation increased rapidly along with it.

Finland's decision to join the weakly socially embedded European Union Single Market in 1995 (Hyman 2005; Rodrik 2011)—a point we will return to in the 'politics-based theory' section—likely placed additional upward pressure on executive compensation by increasing aggregate firm size, at least to the extent that the European and Finland labor markets integrated. However, evidence suggests they have largely remained separate despite formal free movement of labor, citing other obstacles, e.g., language (Bartz and Fuchs-Schündeln 2012; Dorn and Zweimüller 2021; Krause-Pilatus et al. 2014).

The analysis next considers the relationship between average annual executive compensation in the five-firm sample and aggregate firm size of the Finnish market, this time proxied by the OMX Helsinki General Index of market capitalization, following the operationalization of firm size used in Frydman and Saks' (2010) US case. The five-firm sample comprises a substantial portion of the index, e.g., 52% in 2016.

From 1971 to 1989, the OMX Helsinki General Index increased from 34 to 1,827; it then decreased during the depression, not returning to its 1989 level again until 1994. Average annual executive compensation, on the other hand, grew modestly from 1971 to 1989, a mere 10% total increase despite the large increase in market capitalization. The OMX Helsinki General Index increased from almost 2000 in 1995 to almost 10,000 in 2018. Over the same period, average annual executive compensation increased about eight-fold in the five-firm sample. As seen with revenue and executive compensation, trends in the earlier egalitarian period run counter to the market-based perspective, while trends in the latter period adhere to it.

The relationship between average annual executive compensation and aggregate firm size is analyzed with a regression model depicted in Table 4. The dependent variable is the natural logarithm of average annual executive compensation in the primary dataset. The independent variables are as follows: the natural logarithm of market capitalization, as measured by the OMX Helsinki General Index; a dummy variable delineating 1995 to

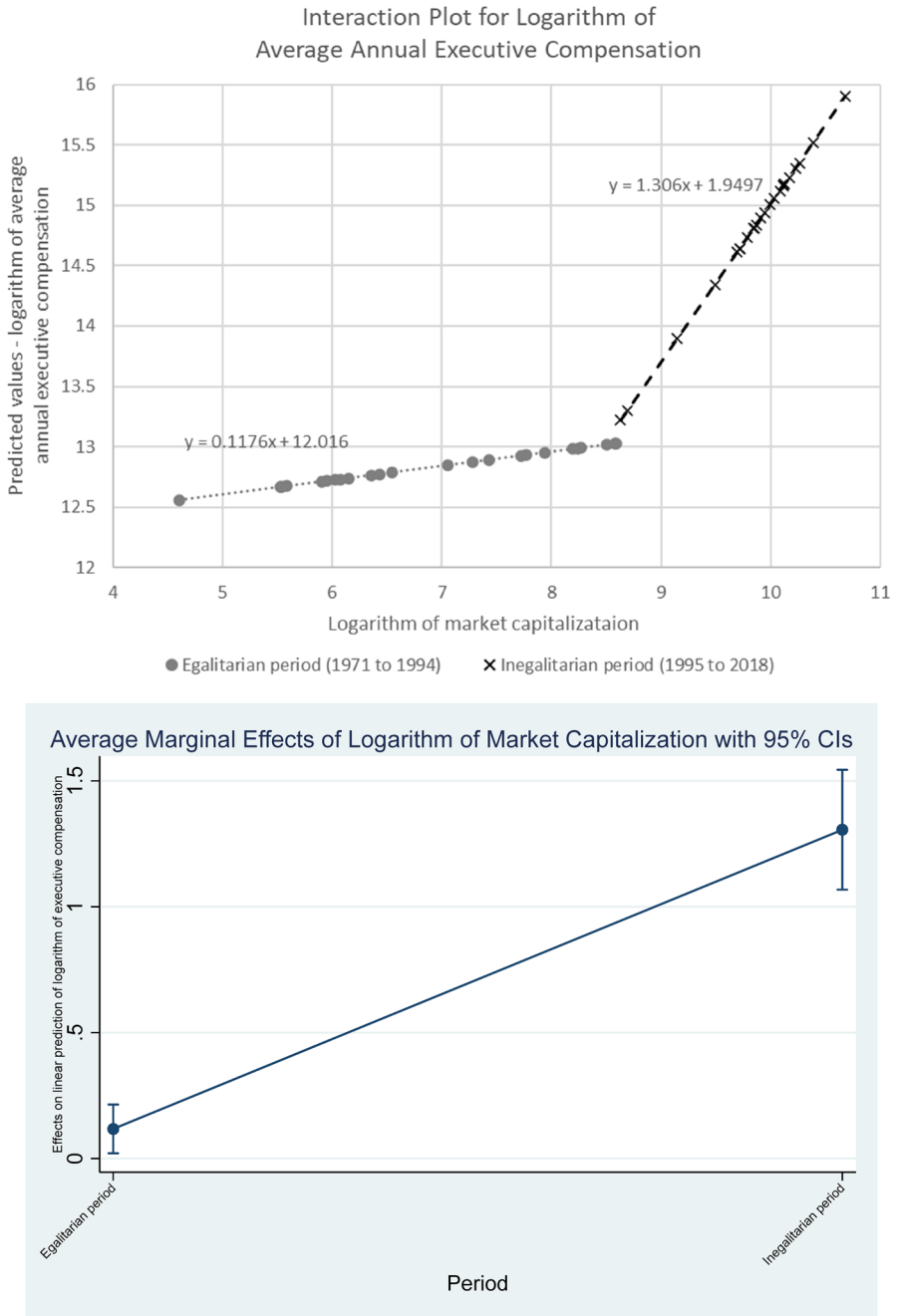


Fig. 3 Interaction plot for logarithm of average annual executive compensation (upper). Marginal effects of logarithm of market capitalization on logarithm of average annual executive compensation (lower)

2018, to distinguish the inegalitarian period; a variable capturing the interaction of market capitalization and the dummy variable. The market-based perspective expects to find executive compensation positively associated with market capitalization, with the two increasing at roughly the same rate. It expects to find no difference in the effect size of market capitalization across the two periods. On the other hand, if the effect of market capitalization on executive compensation is smaller in the earlier egalitarian period compared to in the latter inegalitarian period, this will serve as initial evidence in favor of the politics-based perspective, to be further tested in the politics-based theory section.

Given the conditional nature of our hypothesis, the unconditional coefficients in Table 4 are not particularly informative, but the considerable explanatory power of the model is notable—it explains 94% of the variation in executive pay despite its simplicity (Brambor et al. 2006). Following best practices for reporting interaction effects, to demonstrate the conditional effects of the independent variables, the upper graphic in Fig. 3 shows the predicted values of executive pay for each observation in the dataset; the lower graphic shows the marginal effect of market capitalization on executive compensation in each period.

Contrary to the expectations of the market-based perspective, the relationship between market forces and executive compensation appears to have changed a great deal from the earlier, egalitarian period to the later, inegalitarian period, with pay only strongly linked to market capitalization in the later period. In the egalitarian period, from 1971 to 1994, a 1% increase in market capitalization is associated with a .12% increase in average annual executive compensation ($p < .05$), deviating sharply from the expectations of the market-based perspective. In the inegalitarian period, from 1995 to 2018, a 1% increase in market capitalization is associated with a considerably larger 1.31% increase in executive compensation ($p < .05$), in strong alignment with the market-based perspective. The difference between these effects is statistically significant at the 95% confidence interval. Note that this finding is robust to setting the cutoff year for the earlier period at 1990, 1991, 1992, or 1993, in addition to setting it at 1994 (only the model with the 1971 to 1994 cutoff is shown).

In sum, the market-based perspective works well to explain executive compensation developments in the mid-90s and beyond, with large pay increases tightly linked to aggregate firm size increases, the two almost increasing at the same rate. In the 1970s and 1980s, however, the market-based perspective fails to explain the development of executive compensation. The evidence shows a positive link between aggregate firm size and executive compensation, but it was weaker and resulted in significantly smaller executive compensation increases for a given increase in aggregate firm size. This is initial evidence in favor of the politics-based perspective. The next section considers the politics-based perspective more in-depth, to test whether the statistical finding is spurious or not.

6.2 Analysis of the congruence of the expectations of the politics-based theoretical framework with the empirical evidence of the case

This section proceeds to examine the congruence of the empirical evidence of the case with the expectations of the politics-based perspective. This evidence includes various indicators representing, through the lens of PRT, the societal distribution of power among labor and employers: union density, collective bargaining centralization, capital mobility, political party power, unemployment rate, top marginal tax rate, state ownership, ideology, and state intervention in the economy. These indicators have been chosen for analysis as each has been highlighted for its theoretical relevance in previous international literature on the drivers of

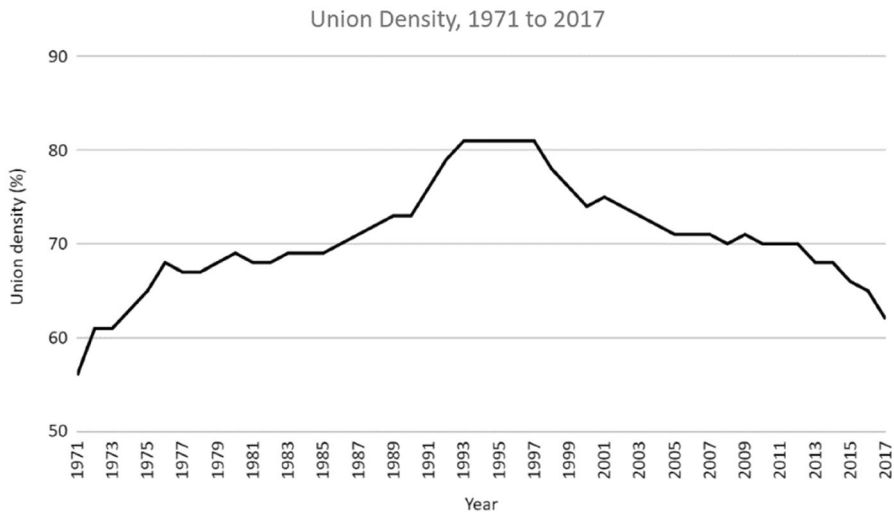


Fig. 4 Union density, 1971 to 2017

executive compensation and income inequality (Bakker et al. 2015; Huber et al. 2019; Korpi 2018, 25). From the perspective of PRT, weakened unions, decentralized collective bargaining, increased capital mobility, rightward shifts in political party power, increased unemployment rate, decreased top marginal tax rate, shareholder value ideology over a stakeholder ideology, reduced state ownership, and reduced state intervention in the economy can be seen as indicators of stronger employer power relative to labor power. If these indicators show stronger labor power in the 1970s and 1980s, when the market-based perspective was incongruent with the facts of the case, and weaker labor power afterward, the explanatory power of the politics-based framework relative to the market-based framework will be bolstered.

Additionally, this section also considers firm ownership as an indicator of the distribution of power among owners and executives, an intra-employer class cleavage that has also been highlighted as an important indicator of the societal distribution of power by past research (Gourevitch and Shinn 2005). It examines whether owner control has weakened over time, with the politics-based framework expecting weaker owner control relative to executive control to be associated with higher executive compensation.

6.2.1 Union density

PRT views union strength as a key representation of labor power (Korpi 2018, 24–25). Higher union density strengthens workers by allowing more workers to coordinate demands collectively (Huber et al. 2019). Executive compensation increases resulting from weakened unions is a key mechanism highlighted in Huber et al.'s (2019) explanation for increasing top income shares.

Unions serve as a form of implicit regulation of executive compensation, theorized to constrain it in various ways (Huber et al. 2019). Unions often publicize data on executive compensation. Executives and boards may be reluctant to increase executive compensation when unions could leverage this fact to demand increased worker pay (Bank et al. 2016; DeAngelo and DeAngelo 1991). Unions tend to oppose high executive compensation relative to worker compensation, and equity compensation for executives, on solidarity

grounds (Gomez and Tzioumis 2006). Markets reacting negatively to union presence may further limit the value of equity compensation.

Most Finnish citizens have expected unions to fight for pay increases commensurate with executive compensation increases (Jones et al. 2006, 7; STT-MH 1999). Böckerman and Uusitalo (2006) testify to union power, arguing that no major labor market reforms had been passed in Finland without union consent. Beyond their impact at the negotiating table, Finland's unions promote egalitarian norms more broadly by publishing reports on executive compensation (SAK 2014; Koskela 2020). Further, income data is public information in Finland: newspapers publish annual reports on top earners, including executives, another form of implicit regulation representing the strength of egalitarian norms in society.

As depicted in Fig. 4, directional trends in union density are consistent with the politics-based perspective, with labor power increasing until its mid-1990s peak, then decreasing afterward until the end of the analysis period. Contrary to expectations from the politics-based perspective, however, the average level of union density is similar in both halves of the analysis period.

Further, executive compensation started to increase in the mid-1990s, the same time union density was at its peak. Similar levels of union density were able to hold executive compensation in check despite increasing aggregate firm size in the 1970s and 1980s, but not in the 1990s and beyond. It is necessary to examine additional evidence to determine whether labor power has weakened over time more than union density suggests. Previous research has found capital mobility (Guschanski and Onaran 2020; Hyman 2005; Rodrik 2017), global competition, and conservatism in monetary policy have constrained union strength since 1980 (Bengtsson 2014; Rodrik 2017).

6.2.2 Capital mobility

Capital mobility makes it easier for employers to shift production, increasing their bargaining power vis-à-vis labor (Piketty 2022). It also allows employers to fragment labor across countries, making it more difficult for workers to coordinate actions together. In the 1990s, The Washington Consensus replaced the Bretton Woods system as the dominant institution governing global markets, resulting in increased capital mobility around the world (Rodrik 2011). The globalization of capital has strengthened employers relative to labor worldwide (Guschanski and Onaran 2020; Hyman 2005; Rodrik 2017), with global markets socially disembedded from national political and regulatory institutions (Rodrik 2011, xvi). Similarly, in the European Union, national markets for capital, goods, services, and labor have become increasingly integrated following the establishment of the European Single Market, but industrial relations systems that regulate, “work and employment through some combination of market forces, state intervention and collective bargaining” remain nationally embedded (Hyman 2005, 9–11), also strengthening employers relative to labor. Labor mobility does not remedy this matter.¹³ Researchers (Hacker and Pierson 2002; Piketty 2022) highlight how capital mobility

¹³ On the contrary, labor mobility is likely a greater benefit for the most mobile citizens, i.e., the highly skilled, including executives (Rodrik 2011, 141). Labor mobility has anyway remained limited in Finland despite formal free movement of labor within the European Union (Krause-Pilatus, Rinne, and Zimmermann 2014). As of 2019, more non-EU citizens resided in Finland than non-Finnish EU citizens, and a smaller number of foreign citizens resided in Finland as a percentage of the country's population than in any other EU country with above EU average per capita income (Dorn and Zweimüller 2021). Further, immigration only increased slightly from 1993 to 2005, while executive compensation was increasing rapidly. Immigrants comprised 1.1% of the total population in 1993, and 2.2% of the total population in 2005 (Statistics Finland 2021).

Table 5 Foreign direct investment, 1995 and 2018.
Source: UNCTAD (2019)

Year	Outward FDI Stock as % of GDP	Inward FDI Stock as % of GDP
1995	6.1	10.8
2018	24.5	34.2

**Fig. 5** Internationalization of workforces in the five-firm sample, 1994 to 2000 and 2018. Source: Annual reports retrieved from vuosikertomukset.net. Various years were collected based on data availability. Nokia: 1994 and 2018. Konecranes: 1996, 2019 (global workforce) and 2020 (Finland workforce, retrieved from <https://yle.fi/uutiset/3-11295823>). UPM-Kymmene: 1996 and 2018. Fortum: 1998 and 2018. Nordea: 2000 and 2018

in decentralized systems puts employers, with their control over investment decisions, in a dominant position vis-à-vis labor over policy formulation as decentralized units compete over capital. In these decentralized systems, it is difficult for labor to challenge employers' dominant position without centralized action—i.e., at the supranational level in the European Union case.

Capital mobility also serves as a mechanism for transmission of ideology across borders as firms come under foreign ownership (Heino 2011a), a topic returned to in the Sect. 5.2.8.

Finland is no exception to global trends favoring capital mobility since 1990, with the state considerably easing regulations on foreign ownership in the late 1980s and removing them entirely by 1993 (Jakobsson and Korkeamäki 2014). This had a rapid effect: in 1990 and 1991, foreign ownership did not eclipse 10% of market capitalization of the Helsinki Stock Exchange; in 1992, it reached 30–40% of market capitalization, where it has since remained. Joining the European Union increased capital mobility further, with its free movement of capital within the European Single Market. Increased capital mobility can be readily observed in various additional indicators. Table 5 shows foreign direct investment levels in 1995 and 2018.

Finland has experienced a large increase in inward and outward foreign direct investment since 1995.

Increased capital mobility is also apparent in the five workforces of this paper's primary dataset, as shown in Fig. 9 (Fig. 5).

Whereas 50% of the average five-firm dataset workforce was employed in Finland in the mid-to-late 1990s, only 21% was employed in Finland in 2018.

Evidence on capital mobility is in alignment with the politics-based perspective, then, with labor weakened by the 1990s increase in capital mobility despite high union density.

6.2.3 Collective bargaining centralization

Collective bargaining centralization is another measure of labor power, which, like union density, allows more workers to coordinate demands collectively (Huber et al. 2019). Since the 1960s, Finland has generally had a tripartite, three-tier bargaining structure characterized by national-level incomes policy agreements. Employer associations and rightist parties favor a more decentralized two-tier structure, featuring industry-level and firm-level negotiations between labor unions and employer associations (Savolainen 2016). From 2008 to 2018, employer associations refused to participate in national-level tripartite negotiations on numerous occasions¹⁴ (Visser 2019), empowered by rightist government cabinets seeking to "discard the historical tripartite system" (Savolainen 2016). Collective bargaining decentralization is likely still too recent to have had a substantial impact on executive compensation, but the politics-based framework expects it to lead to executive compensation increases in the future.

6.2.4 Political party power

Political parties are a key source of power for labor and employers in PRT, advocating policies that push for their preferred distributional outcomes (Korpi 2018). They complement other representations of power highlighted throughout this paper. Leftist governments and unions tend to align in support of labor (Korpi 2018, 25), generally showing greater enthusiasm for higher top marginal tax rates and social spending (Huber et al. 2019), full employment over price stability (Korpi and Englund 2011), and state ownership. Right-leaning governments generally strengthen employers, typically showing greater enthusiasm for tax and social spending cuts, weakened unions, privatization, capital mobility, and price stability over full employment (Bakker et al. 2015).

We measure political party power in Finland using various right-left government ideology scores (Volkens et al. 2019; Döring and Manow 2019). These scores capture both economic and non-economic ideology, but past international research has found parties on the left and right tend to group together on various policy positions (Budge and Laver 1992). The economic aspect of the scores categorizes parties advocating a more socially embedded market, with a more active role for the state in the economy, as more leftward, and parties emphasizing a reduced role for the state in the form of privatization, tax cuts, deregulation, reduced government spending, and a leaner welfare state, as more rightward (Bakker et al. 2015; Budge and Laver 1992). Scores come from ideological coding of political party manifestos that parties use to lay out their policy preferences (Volkens et al. 2019), as well as expert surveys of political scientists (Döring and Manow 2019). The scores are weighted in various ways depending on the source: according to each political party's percentage of

¹⁴ From 2008 to 2010 under a center-right government, and in 2017 and 2018 under a rightist government.

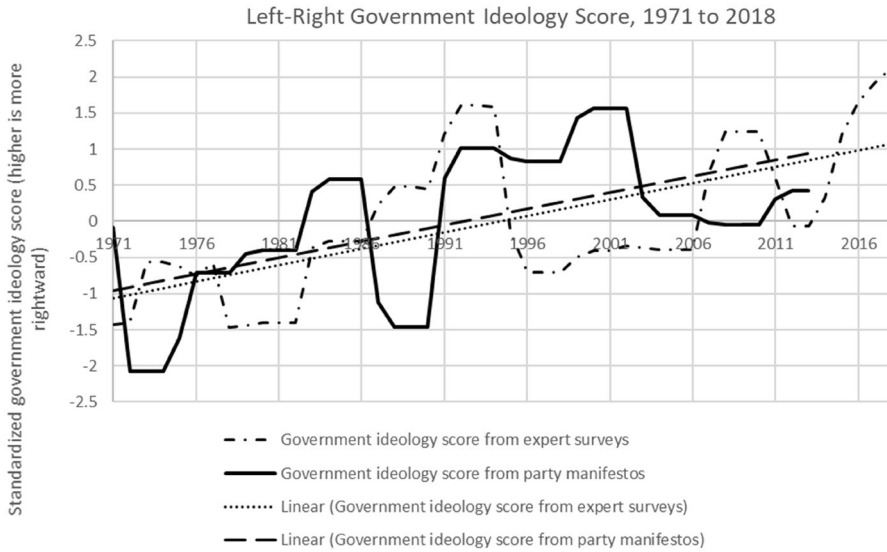


Fig. 6 Left–right government ideology score, 1971 to 2018. *Source:* Government ideology score from expert surveys (Döring and Manow 2019). Government ideology score from party manifestos (Kim and Fording 2002)

seats (share) in the government cabinet (Döring and Manow 2019), or by party share of government cabinet posts (Kim and Fording 2002).

Figure 6 below shows two variations of left–right government ideology scores in Finland: time-invariant scores from expert surveys weighted by party seats in the government cabinet (Döring and Manow 2019); scores based on expert coding of party manifestos, weighted by each party’s number of posts in the government cabinet (Kim and Fording 2002). The ideology scores are standardized, showing how many standard deviations each Finnish government cabinet is above (more rightward) or below (more leftward) the mean Finnish government (the mean score is 0) in the analysis period.

Both government ideology scores show a general rightward drift over time in political center of gravity, more rightward post-1990 compared to pre-1990.¹⁵ The shift rightward is substantial: a linear trend line for each measure shows almost a two standard deviation shift from the beginning to the end of the period analyzed. This evidence is aligned with the politics-based perspective, with more left-leaning government cabinets in the low executive compensation period in the 1970s and 1980s, and more right-leaning government cabinets afterward, in the high executive compensation period.

We now consider historical trends in the National Coalition Party’s share of seats in the government cabinet. Economically, this is the furthest rightward, most pro-free-market party in Finland—for example, by state-market ideology score according to political scientist expert surveys (Bakker et al. 2015). Huber et al. (2019) linked secular-right parties like

¹⁵ We only show general left-right ideology scores in Fig. 6, which capture economic and non-economic ideology, but the general trends are the same for economic ideology scores (not shown) (Döring and Manow 2019; Volkens et al. 2019). The correlation between each general ideology score and its economic-only ideology counterpart is above .90.

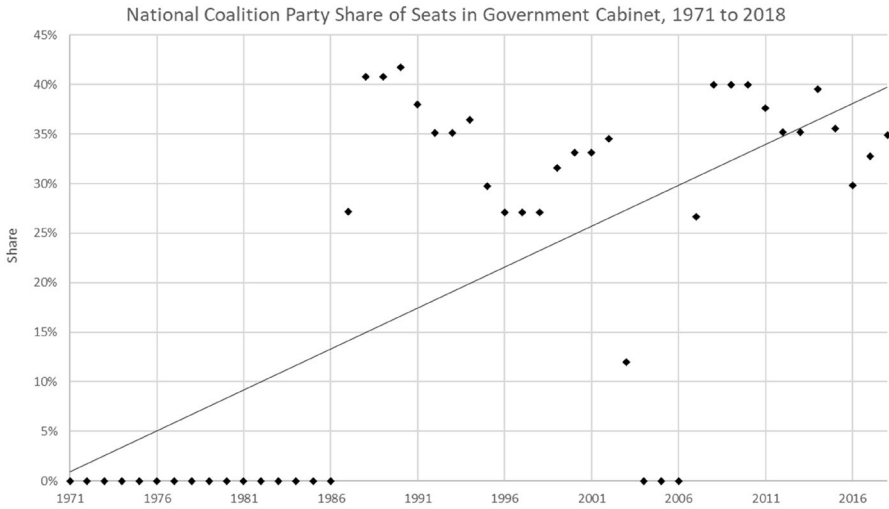


Fig. 7 National Coalition Party share of seats in government cabinet, 1971 to 2018



Fig. 8 Unemployment rate, 1971 to 2018. *Source:* OECD (2021)

the National Coalition Party to income increases for their high-income core constituency. Figure 7 below shows their share of seats in the government cabinet since 1971.

From 1966 to 1986, during the low executive compensation period, the National Coalition Party was excluded from the government cabinet entirely, in part because of sensitivity to relations with the Soviet Union, which also made it easier for leftist parties to be a part of the government cabinet (Korpi 2006). Pre-1966, they were frequently a part of the government cabinet throughout Finland’s history. In 1987, they returned to power, and have been a consistent player in government cabinets since—their share of government cabinet

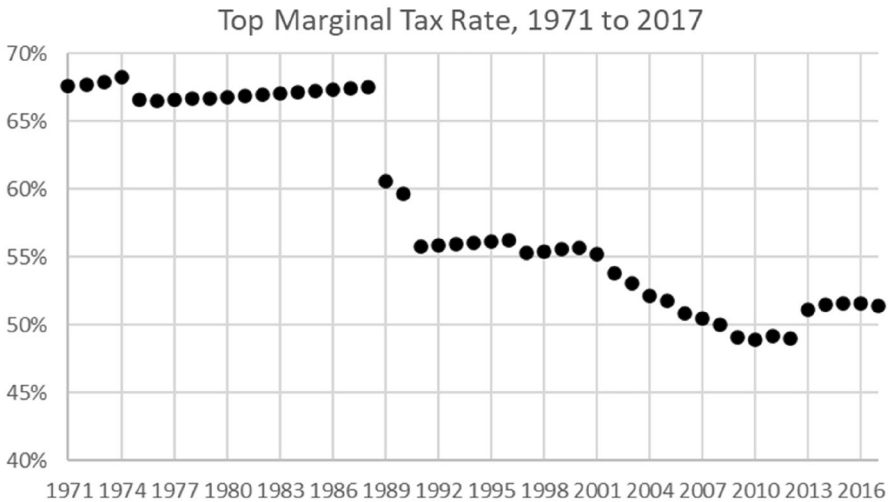


Fig. 9 Top marginal tax rate, 1971 to 2017. *Note:* combined national and subnational representative rate (Piketty et al. 2014; OECD 2018)

seats has been substantially higher during the high executive compensation period, aligned with the politics-based perspective.

6.2.5 Unemployment rate

Unemployment reduces the bargaining power of workers, weakening labor (Korpi and Englund 2011). While unemployment is complex, with many causes, government policy has a substantial impact on it: all else equal, full employment is a more dominant goal for leftist parties and price stability is a more dominant goal for rightist parties. In western countries, the rise of the political left in the decades following World War II led to a period of relative “full employment.” In the 1970s, the oil crises provided rightist parties with an opportunity for blame avoidance while transitioning to focus on their preferred goal of price stability.

Figure 8 shows the unemployment rate in Finland over the analysis period.

In the decades following World War II, Finland experienced relatively “full” employment, supported by governments prioritizing full employment over price stability (Korpi and Englund 2011). Unemployment rates rose during the deep recession of the 1990s and never fully recovered to their pre-recession levels. Previous literature highlights multiple reasons for the recession: the collapse in trade resulting from the fall of the Soviet Union, deregulation of financial markets in Finland and internationally, international recession, excessive debt levels, and high labor costs paired with the increasing availability of labor-saving technology (Eloranta and Kauppila 2006, 226–228; Garcia-Iglesias and Kilponen 2006, 206–207; Kettunen 2006, 310). The fact that unemployment has not returned to pre-recession levels is in part a result of joining the European Union, which institutionalized price stability– and not full employment– as a dominant policy goal (Korpi and Englund 2011). As detailed in the Sect. 5.2.4, government ideological center has drifted rightward post-1990, shifting ideological focus away from maintaining full employment. Even the left has de-emphasized full employment in favor

of neoliberal ideas (Outinen 2017). Regardless of its complex and multidimensional causes, evidence on unemployment is in alignment with the politics-based perspective, with higher unemployment rates after 1990 weakening labor's bargaining power.

6.2.6 Top marginal tax rate

Top marginal income tax rates are another important reflection of labor power in society, reducing the incentive for executives to pursue high compensation and for boards to grant these increases. Piketty et al. (2014) found a large negative association between top tax rates and executive compensation in an international sample.

Figure 9 shows the top marginal tax rate in Finland over the analysis period.

Top marginal tax rates increased from 1960 until their 1974 peak, 68%. They held steady from 1974 to 1988, then decreased until the end of the analysis period. In alignment with the politics-based perspective, top marginal tax rates have been significantly lower after 1990, strengthening executive incentives to pursue higher compensation at the bargaining table.

6.2.7 State ownership

State ownership is an additional representation of labor power, increasing the social embeddedness of the market. Unlike private owners, the state uses the firm to pursue political goals (La Porta et al. 1999) and is in a position to constrain executive compensation if public deliberation deems it excessive.

The state continues to play an important ownership role in Finland, though less so than in the past after a series of divestitures in the 1990s (Willner 2003). Its ownership share, as a percentage of the market capitalization of listed firms, held steady from 1995 to 2013 at around 10%, but the overall size of the stock market shrunk substantially, as did the value of the state's holdings over the same period (Jakobsson and Korkeamäki 2014). Total revenue generated by state-owned enterprises also shrunk by about 25% from 1993 to 2018 (Statistics Finland 2020c).

In the five-firm sample, the state has held majority ownership of Fortum over its entire history, and never more than negligible holdings in the other firms. This has allowed the state to influence executive compensation levels directly at Fortum. In the 2000s, Fortum's executive compensation skyrocketed, leading to public criticism. The government responded by banning stock option pay and capping other forms of pay at state-owned firms (Liljebloom and Löflund 2006). This regulation was successful at limiting executive compensation: from 2004 to 2008, average annual pay was a bit over £7 million annually; from 2009 to 2018, with stock options banned, annual pay never eclipsed £3.5 million.

Despite the potential for state ownership to constrain executive compensation as demonstrated by the Fortum case, it is not likely to be a key part of the explanation for increased executive compensation starting in the mid-1990s, as state ownership remained constant in our sample, and constant among listed firms more broadly.

6.2.8 Corporate governance and ideology

Thus far we have focused on the labor-employer class cleavage, however, an intra-class cleavage is also relevant for considering corporate governance. The employer class can be divided into subgroups with particular interests: executives and owners¹⁶—with further distinctions between large “blockholder” owners and small “dispersed” owners (Gourevitch and Shinn 2005). Blockholder owners—typically controlling at least 10% of voting rights in a firm—are in a stronger position to monitor executives than dispersed shareholders (Roe 2006). There is little incentive for dispersed shareholders, typically owning a diverse portfolio with only a small stake in any one firm, to put in the effort to monitor pay when the gains are widely shared, and the effort required to monitor pay is high. Thus, firms owned by dispersed shareholders are characterized by a separation of ownership and control, with dispersed shareholders largely giving up control in exchange for their ownership share and a claim on profits, leaving control with firm executives (Berle and Means 1932). Blockholder shareholders, on the other hand, make a large investment in the firm so they have more incentive to exercise control and monitor its managers. Blockholder shareholders have been linked to lower executive compensation internationally (Fernandes et al. 2013) as well as in Finland (Mäkinen 2008). The politics-based framework expects weaker owner control relative to executive control to be associated with higher executive compensation, while stronger owner control relative to executive control, typically in the form of blockholder shareholders, will be associated with lower executive compensation.

Ownership dispersion in Finland has only increased slightly since the 1970s, though, suggesting blockholder owners have largely maintained their power: the proportion of listed firms with a majority shareholder dropped from 25% in 1970 to 18% in 2005, while the proportion of listed firms with a minimum 25% shareholder held steady at about 50% (Jakobsson and Korkeamäki 2014). Similarly, the available evidence (Kock 2020) shows largely constant blockholder ownership in the five-firm sample over the analysis period. Aside from state-owned Fortum, none has had a minimum 25% shareholder.

A slight increase in ownership dispersion obfuscates the decreased influence of banks in corporate governance, however. Until the late 1980s, corporate governance was bank-led, similar to Germany, with banks providing both equity and credit financing to firms (Jakobsson and Korkeamäki 2014). Banks owned substantial portions of, financed, and controlled the largest firms. Banks also owned substantial holdings of each other and often exerted even more control over firms than their share ownership implied, given their ability to provide scarce credit. The state played an active role in corporate governance as well, allocating credit to desired firms and regulating interest rates to provide banks with sufficient profit. This gave the state an additional avenue to impact executive compensation levels. The state ceased these forms of intervention in the second half of the 1980s (Tainio et al. 1997).

During the banking crisis of the early 1990s, in a less favorable regulatory environment, banks began to divest their major shareholdings in corporate Finland, giving up corporate control. Their ownership share decreased from almost 30% in 1987 to a bit less than 5% in 2011. Equity-based financing replaced credit-based financing (Jakobsson and Korkeamäki 2014).

¹⁶ ‘Owner’ and ‘shareholder’ are used interchangeably throughout this paper.

By the mid-1990s, the reduced role of banks in corporate governance had created a “power vacuum” for executives to fill (Jakobsson and Korkeamäki 2014). Ownership had separated from control, which now laid with executives (Moen and Lilja 2004).

PRT views ideology as a power resource for labor and employers (Korpi 1985), theorized to impact executive compensation by justifying (or failing to justify) high levels of pay. Two dominant business ideologies are prominent in the international literature. The first, stakeholder value, focuses on balancing the interests of multiple stakeholders, including shareholders, labor, consumers, and the greater community, to maximize long-term sustainable value shared among stakeholders (Gourevitch and Shinn 2005, 9–10). Shareholder value, alternatively, focuses on maximizing value for shareholders, weakening labor relative to a stakeholder value ideology (Kenworthy 2020, 88). Shareholder value argues for equity compensation, justifying higher executive compensation to better align executive interests with shareholder interests (Hall and Liebman 1998; Jensen and Murphy 1990).

In response to international ideological pressures resulting from increased foreign ownership, as well as domestic ideological pressures, shareholder value maximization norms grew in importance throughout the 1990s relative to the previously more dominant stakeholder value norms (Tainio and Lilja 2003), pressuring widespread adoption of equity compensation in executive compensation packages (Heino 2011a; Mäkinen 2001; Pastermack 2002).

In turn, equity compensation has been highlighted as a key mechanism underlying increased executive compensation in countries around the world (Huber et al. 2019; Frydman and Saks 2010), including in Finland (Heino 2011a), despite objections from labor (Jones et al. 2006, 7; STT-MH 1999) and most shareholders (Heino 2011a).

In line with the politics-based perspective, then, various corporate governance and ideology changes from the late 1980s to the mid-1990s appear to have empowered executives, making it easier for them to link their compensation to firm size through equity compensation, enabling them to receive higher pay: the separation of ownership and control, reduced state intervention in the economy, and the growth of foreign ownership and shareholder value ideology.

7 Conclusion

The congruence analysis found the market-based theoretical perspective to be aligned with executive compensation developments during the inegalitarian era that started in the mid-1990s, with both executive compensation and firm size increasing rapidly in tandem. In the egalitarian era spanning the 1970s and 1980s, however, the market-based perspective failed to explain the development of executive compensation, with compensation remaining modest and stable despite substantial increases in firm size. On the other hand, the expectations of the politics-based theoretical perspective, with employers strengthening relative to labor in the period starting in the mid-1990s, were strongly supported with the empirical evidence of the case. Although the prevalence of state ownership, union density levels, and the degree of collective bargaining centralization remained similar in both eras, the weight of indicators of the distribution of power showed evidence of a significant pro-employer shift, including reduced state intervention in the economy, the growth of shareholder value ideology, a rightward shift in political party power, increased capital mobility, increased unemployment rate, decreased top marginal tax rate, and a shift from increasing

to decreasing union density. The reduced role of banks in corporate governance emboldened executives further.

The findings of the congruence analysis contribute to the debate between competing theoretical perspectives in the executive compensation and income inequality literature. This paper also drew a link between Heino's (2011a) explanation—centered around the role of ideological change and foreign ownership in popularizing equity compensation—and the PRT framework, contributing to a more complete understanding of the historical development of executive compensation and income inequality in Finland that fits in with the PRT tradition. In particular, the congruence of the expectations of the politics-based framework with the empirical evidence on the development of executive compensation helps to build an enhanced understanding of increased disparities in earned income in Finland—one of the key mechanisms underlying increased income inequality in Finland highlighted by previous research (Riihelä and Tuomala 2020). Finally, an explicit congruence analysis approach was demonstrated for the first time in the executive compensation and income inequality literature.

A key theoretical implication of these results is that longitudinal and cross-country executive compensation research ought to take both the market-based and politics-based theoretical frameworks into account. While the market-based framework may explain executive compensation developments in one country in one period, e.g., in Finland since the mid-1990s, as this paper found, or in the US after 1980 (Frydman and Saks 2010; Gabaix and Landier 2008), it cannot account for executive compensation developments across different contexts, where the relationship between executive compensation and firm size is likely to differ depending on the distribution of power in society. Further, previous research on increased income inequality in Finland has highlighted multiple causes, including increased capital incomes, reduced tax progressivity, reduced redistributive government spending, weakened unions, increased unemployment, increased firm profitability, and increased disparities in earned income (Mäki-Fränti et al. 2022; Heino 2021; Riihelä et al. 2010; Roikonen 2021; Riihelä and Tuomala 2020). Each of these changes is aligned with the pro-employer shift observed in the congruence analysis. PRT offers an appropriate theoretical framework for analyzing these shifts as a whole. Finally, this paper found PRT to be a powerful theoretical framework for explaining executive compensation developments over time in Finland, just as a politics-based framework has been able to offer a convincing explanation for the development of longitudinal, cross-country executive compensation and income inequality in previous international research (e.g., Huber et al. 2019). This analysis expands the generalizability of PRT to the Finnish, coordinated market economy, social democratic welfare regime context. While case studies cannot prove generalizability beyond the case at hand, they can suggest generalizability by drawing conclusions that contribute to the theoretical discourse (Blatter and Haverland 2012, 197; Punch 2016, 122–125). In other similar social democratic capitalist contexts, PRT may also prove to be a powerful theoretical framework for explaining developments in income inequality.

If Finland and other societies decide to address increased income inequality after increases in recent decades (World Inequality Lab 2018), addressing increased executive compensation would be a sensible piece of the remedy. This paper offers practical implications in that regard. High union density, even over 90%, was not on its own sufficient to prevent executive compensation increases, mostly in the form of equity compensation, in the mid-1990s. A cap on equity compensation, which was effective in the state-owned Fortum case, or, better yet, a cap on compensation more generally—capping total compensation while preserving the ability of firms to determine the composition of compensation—offers the most straightforward solution. Reversing declines in labor power is no less

important for combatting income inequality, to ensure excessive executive compensation is redistributed to labor rather than owners, but it would be more complicated, requiring, for instance, limits on capital mobility (Piketty 2022; Rodrik 2017), and a move toward regulating economic and industrial relations systems the same way markets are already regulated, at the European Union level (Hennette et al. 2019; Hyman 2005).

This analysis also offers several methodological implications. First, congruence analysis was shown to be an appropriate tool for adjudicating between competing theories to contribute to the theoretical discourse in a hotly contested area, such as in the executive compensation and income inequality literature. Second, congruence analysis is compatible with a mixed methods approach, combining the benefits of quantitative analysis, to demonstrate the internal validity of the quantitative evidence, with the benefits of a case study, which allows for a broader accounting of empirical observations and an in-depth reflection on the fit of empirical observations with abstract theories (Blatter and Haverland 2012).

The main limitation of this research is that it is unable to determine the precise effect size of each indicator of the distribution of power on executive compensation levels. Large-N statistical analysis is a more appropriate tool for addressing this limitation. Process tracing could also be used to bolster the validity of particular indicators by looking more closely at causal chains, ensuring cause and effect are linked in the expected manner—for instance, by observing collective bargaining negotiations or executive compensation negotiations directly, or by interviewing labor leaders, and corporate executives and board members. Further, while a shift in the distribution of power away from labor and toward employers was clear, the underlying reasons for this shift remain an open question for future research. In any case, various key historical phenomena are likely to have played a role: post-World War II stability gradually reducing business' appreciation for stakeholder value ideology, the weakening of the communist threat internationally, the early 1990s economic crisis in Finland, and the global influence of neoliberal ideology more broadly, particularly within the European Union.

Additionally, while this paper focused on executive compensation as a driver of income inequality, another fruitful line of research would be to apply PRT to the development of wealth inequality, which has important implications for one's opportunities in life, and for democracy (Zucman 2019). Wealth is distributed much more unequally than income and wealth inequality has also been on the rise in Finland in recent decades (Statistics Finland 2019; World Inequality Lab 2018).

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Declarations

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