

# US Investors as Exporters of the ‘Winner-Take-All-Economy’: Preliminary Evidence and Outline of a Research Agenda

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**ABSTRACT.** The work of Thomas Piketty and his collaborators has drawn public attention on the stark increases in top incomes. A crucial aspect of the phenomenon, which Piketty et al. do not explain, however, are the significant cross-national differences in the remuneration of top executives. In this article, we propose a political economic theory of contingent policy diffusion, which can account for some of the cross-national patterns. We argue that the sharp rise in top incomes since the 1980s are primarily a product of the US political economy, which then, in a second stage, has been exported to other advanced economies through the expansion of US multinational companies and financial investors abroad. Our theoretical argument is thus centered on the notion that US investors abroad can act as conduits for the transmission of a US-style culture of executive remuneration practices. As such, we expect top incomes in other advanced economies to increase as their exposure to US investors grows. At the same time, however, we posit that the size and significance of this effect crucially depends on the configuration of local political institutions. In particular, we argue that the presence of strong corporatist institutions can act as a barrier to US-investment-induced pressures to grant more generous compensation packages. The first part of the article elaborates this argument. The second part provides suggestive preliminary evidence in support of our key claims based on the analysis of the association between foreign direct investment inflows from the USA and the evolution of top income shares among OECD economies. Finally, the last part gives a short overview of the remaining research agenda and the further work we plan to accomplish over the coming months in order to elaborate and corroborate the presented hypotheses.

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## Introduction

Concern at rising inequality in advanced industrial countries has grown in recent years, particularly in the light of the global financial crisis and prolonged recession that has followed it. As much as rising poverty, it is the spectacular growth of top incomes in some countries that has captured public attention. Work by Thomas Piketty and his collaborators has documented the increases in top incomes across a sample of mainly advanced democracies and shown that the top percentile, and even smaller quantiles within it, have grown their share of income at the expenses of the remaining population. Piketty's best-selling book *Capital in the Twenty-First Century* explains this phenomenon in terms of a structural shift in advanced capitalism away from labour in favour of capital, leading to an increasing concentration of income around the groups holding the most capital. Piketty theorizes that capital's growing dominance is a secular trend affecting all the advanced democracies, and indeed is an inescapable feature of capitalism in times of peace and political stability. Yet, his own data shows that the growth in top income shares is far from uniform across these advanced countries, with the top one per cent enjoying as much as 18 per cent of the incomes in the United States, but less than 6 per cent in Denmark. Moreover, capital as a factor of production is neither more dominant, nor is it more unequally distributed, in the United States than in other less unequal societies. Much of the cross-national variation in the income distribution remains unexplained.

This research project therefore focuses on these significant cross-national differences in the remuneration of top executives, and attempts to develop a theory that we contend explains this variation better than Piketty's theory of capital accumulation. We argue that the sharp rise in top incomes since the 1980s are primarily a product of developments in the US, which has become a 'winner-take-all' economy where policy has skewed rewards towards a narrow elite of high earners. But although the US is exceptional in the political and economic clout of its wealthy elite, we suggest that similar

income distribution dynamics have been exported to other advanced economies through the global expansion of US investors abroad. More specifically, we argue that the market entry of US investors abroad has introduced a new US-style culture of executive remuneration in other countries and increased salary competition in local labour markets. In this sense, we here conceptualize US investments as a force driving the spread of ‘winner-take-all’ economics elsewhere.

However, at the same time, we also argue that the effect of US investments is not uniform: more specifically, we suggest that the distributional implications of growing US investments depend on the configuration of local political institutions. In particular, we theorize that strong corporatist institutions can act as an effective barrier to the US-investments-induced pressures to grant more generous compensation packages. We propose, therefore, a model of contingent policy diffusion in which US MNCs’ ability to adopt US-style cultures of executive remuneration in other economies strongly depends on the political institutional environment of host economies.

We proceed as follows. The next section presents a literature review, followed by a section elaborating our argument and the hypothesized causal mechanisms. We then show some preliminary results from a cross-national statistical analysis that assesses our argument for the case of US foreign direct investment flows. The last section briefly outlines the research agenda and planned next steps for the broader project.

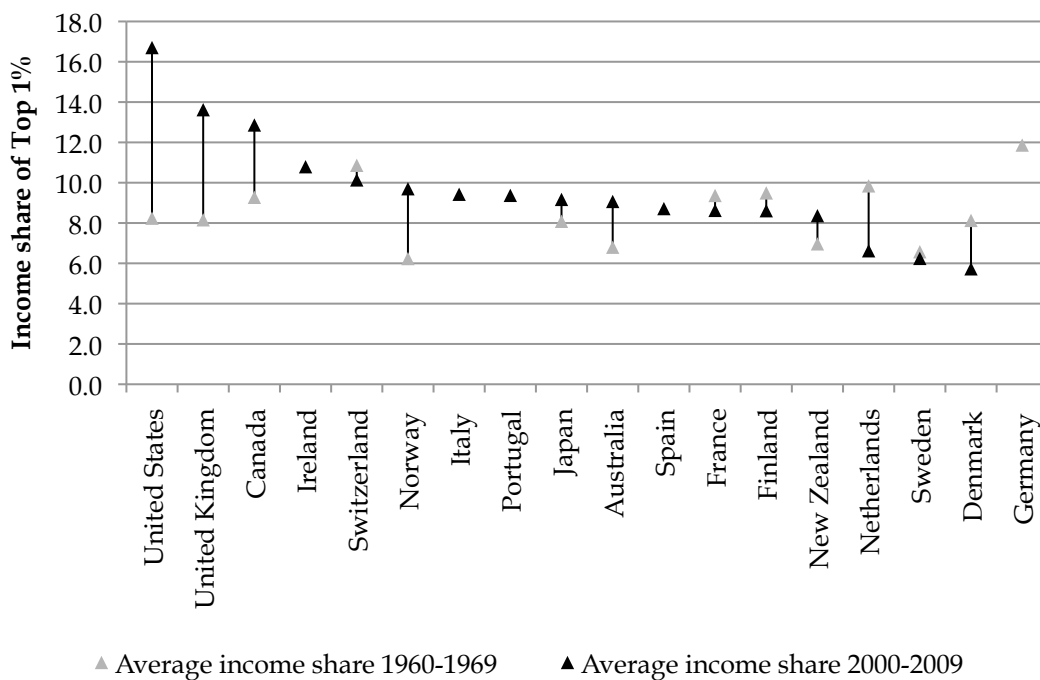
### **The Winner-Take-All Economy: Explaining Top Income Growth in Advanced Democracies**

The study of inequality at the top of the income distribution is a relatively new field driven by the pioneering work of Anthony Atkinson, Thomas Piketty and Emmanuel Saez (2009, 2011), who collected data on top incomes for a sample of mainly advanced democracies over a century. For Atkinson et

al. there was a broadly U-shaped trend in the income distribution over the twentieth century, with top income groups' share of total income very high at the beginning of the period, dropping sharply during the period of the First and Second World Wars, before starting to drift upwards particularly from the 1970s. The best known account of these developments is Piketty's *Capital in the Twenty-First Century* (2014), which develops a general theory of the income distribution in which factor shares, given the unequal distribution of capital, drive the flow of income to the top. However, while Piketty's theory is framed as a general phenomenon that applies more or less everywhere, his data at the same time reveal considerable variations across countries.

To illustrate these differences, Figure 1 shows the data collected by Piketty and his collaborators (made publically available in through the *World Top Incomes Database*) on the percentage of a nation's total income that goes to a society's one percent of top earners for 18 OECD economies in the 1960s and 2000s. The triangles in grey indicate the average value of the years 1960-69 and the black triangles refer to the average values of the years 2000-2009.

**Figure 1. Cross-national variation in top incomes and inequality in 1960s and 2000s**



SOURCE: World Top Incomes Database

As the graph quite clearly shows, the evolution of top income shares over the past five decades has not been an homogenous process. On the one hand, the degree to which income concentration has increased in the United States – which, it is interesting to note, seems to have been a fairly ‘average’ country in terms of its income distribution in the 1960s<sup>1</sup> - is unparalleled among OECD economies. On the other hand, some of the other developed countries - such as the United Kingdom, Canada, Norway or Australia – seem to have followed a somewhat similar trajectory as the US, while increases in income concentration were much more moderate in others. Notably, in several countries - including Denmark, the Netherlands, Sweden, Finland, France and Switzerland – the relative income shares of top earners even moved into the opposite direction with observed *decreases* from the 1960s to the 2000s.

The principal factor accounting for changes in top income shares in Piketty’s model are variations in the ratios of returns to capital ( $r$ ) compared to GDP growth rates ( $g$ ). But, while it is remarkable to note that Piketty fails to systematically document the evolution of these ratios across countries over time (cf. Acemoglu and Robinson 2015), it also seems rather unlikely that they could possibly be large enough (especially among economically similar countries such as the OECD group) to explain these stark differences in outcomes.

Instead, as Piketty himself notes in other places, it seems more useful to work on the starting assumption that these differences are primarily driven by variations in wage structures as “in most countries, a significant portion of the gains are due to an increase in top labor incomes, and especially wages and salaries” (Atkinson, Piketty and Saez 2011). Therefore our analytical account focuses primarily on potential reasons why high-paid individuals seem to do so much better in some countries than others. Some of the reasons are clearly idiosyncratic, such as the effects of commodity booms on the income distribution in resource-rich countries. Instead, our attention here is

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<sup>1</sup> In fact, its decade-average value for the 1960s is nearly identical to the one of Denmark, today the least unequal country according to Piketty’s measure, and lower than the values observed at the time in renowned ‘welfare states’ such as Germany, the Netherlands, Switzerland, France, Finland or Canada.

focused on the more structural and institutional factors at the nation-state level that affect the way income is allocated to different parts of the workforce. These can in turn be subdivided into political, social and structural-economic factors, which we briefly review in the following paragraphs.

Political explanations of high inequality focus on the effects of partisan control of government and the permeability of the policy-making process to wealthy interests. In terms of partisanship, inequality has been associated with shorter periods of left government in cross-national analysis (Cusack, 1997, Iversen and Soskice 2009), and for the US Bartels (2008) found that inequality increased more under Republican administrations. A related literature emphasised the role of electoral institutions, with 'majoritarian' electoral laws determining the likelihood of redistributive coalitions forming against the wealthy (Lijphart 1999, Iversen and Soskice 2006). A major weakness of these literatures for our purposes is their lack of attention to top incomes specifically, and their limited traction for explaining changes in the distribution over time.

In terms of policy influence, Hacker and Pierson (2010a, b) argue that the growth of top earners' share of income in the US is the result of successful 'organized combat' by wealthy and corporate interests who use their financial clout to skew policy in their favour, leading to a systematic bias in favour of the wealthy (also Gilens 2013). However more comparative studies show that top income growth in other cases is not associated with the kind of intense financial influence over politics that we observe in the US (Hopkin and Lynch 2016, Hopkin and Alexander Shaw 2016). Top income growth can apparently be generated without 'organized combat'.

A more promising avenue of enquiry are the persistent institutional differences in patterns of income redistribution amongst advanced democracies. The welfare states literature identifies clusters of institutions and policies related to inequality, such as the generosity of income substitution policies such as pensions, unemployment benefits and sickness

benefits (Esping-Andersen 1990). A related literature on corporatism and labour market organization stresses the regulation of labour rights, and the strength and coordination of labour representation (and often the corresponding employers' representation) (Hall and Soskice 2001, Moene and Wallerstein 2001, Thelen 2014, Martin and Swank 2012). However this vast literature also pays scant attention to distributional dynamics at the top of the distribution. Although the cross-national evidence suggests that top income shares are associated with high levels of overall inequality, high inequality is a necessary but insufficient condition for income concentration at the top.

The clustering of institutional factors favoring high inequality has been explained in terms of complementarities between discrete institutions that reinforce distinct and coherent models of comparative institutional advantage that constitute high- and low-inequality equilibria (Hall and Soskice 2001). Although top income dynamics have received scant attention in the Varieties of Capitalism literature the institutional dynamics they describe are relevant and useful. Liberal market economies dominate the group of countries with higher top incomes shares, whilst coordinated market economies tend to have lower shares (Germany being the obvious exception, with fairly high top incomes). LMEs' reliance on competitive markets can explain their higher top incomes shares, as an open market for company executives drives up the value of scarce talent, and patterns of corporative governance mitigate against rewards being distributed amongst a wider group of stakeholders, as tends to happen in CMEs.

Another possible explanation for these persistent differences in the income distribution draws on social and cultural characteristics at the national-state level. Alesina and Glaeser (2004) emphasize cross-national differences in tolerance for inequality and ideas of desert, which are potentially useful in understanding the absence of political pressure to contain top income growth. Cultural change has also been proposed as an explanation of rising executive remuneration, with declining social sanctions against excessive compensation packages encouraging a concentration of income amongst top executives who are in a position to extract ever greater

shares of revenues for themselves (Krugman 2007, Bakija, Cole and Heim 2009). Piketty emphasizes how declining tax rates for top incomes have incentivized greater efforts on the part of executives to seek higher compensation (2014:315). It can be hypothesized that differences in social attitudes towards top incomes explain why top earners' shares have grown so much more quickly in some countries than others, even though many of the structural features of the economy driving the income distribution remain broadly constant.

A common thread in the existing explanations for cross-national differences in inequality at the top of the distribution thus is their focus on national-level developments, while giving little consideration to broader transnational processes and the differences in individual countries' exposure to the latter. To address this shortcoming, the theoretical approach that we pursue in this research project therefore, in some sense, aims to bring the international system back into the analysis in order to contribute to a more satisfactory explanation of the observed large and persistent cross-national differences in top income shares. In particular, our approach focuses on the role played by US multinational companies and financial investors as agents of diffusion of executive remuneration practices.

### **US investors and the contingent diffusion of executive remuneration practices**

Our causal argument consists of three steps. We posit, firstly, that the observed sharp increases in executive compensation in recent years are primarily and foremostly a product of the US political economy and corporate governance system. Secondly, we argue that the effects of this evolution were, however, not constrained to the US economy as US-based investors (multinational companies and financial investors), who play a uniquely powerful role in the global economy, partly exported US executive remuneration practices to other countries as well. Yet, thirdly, we suggest that

the extent to which exposure to US investors resulted in increases in executive compensation in other places critically depends on the configuration of local political institutions in these host economies; in particular, we hypothesize that the presence of strong corporatist institutions can substantively reduce US-investment-induced pressures to change remuneration practices and increase executive salaries.

### *The equity-based pay revolution in the US*

As Frydman and Saks (2010) have documented, levels of executive pay in the USA increased only incrementally from the mid-1940s to the 1970s, started to grow increasingly rapidly in the 1980s and then spiked in the 1990s and early 2000s, when the ratio of the salary of an average large-company CEO compared to the average worker is reported to have grown from 140:1 (in 1991) to 500:1 (in 2003) (Bebchuk and Fried 2004:1). While the evaluation of the determinants of these fairly dramatic developments are beyond the scope of this research project, it is important to note that they were accompanied by fundamental changes not only in how much CEOs are paid, but also *how* they are paid. While the greatest parts of CEO salaries traditionally used to be paid in cash (including the base salary as well as bonuses), from the 1980s onwards an ever increasing share of executive salaries paid out in the US were based on equity-based components (that is, (restricted) stock options)<sup>2</sup>. To an important extent (and somewhat paradoxically), this shift towards equity-based pay was a result of widespread concerns about excessive managerial power in the late 1980s and early 1990s, which led to political efforts on Capitol Hill to further promote the shareholder governance model through a more widespread use of *pay for performance* incentives amongst other initiatives (Dew-Becker 2009). Performance-dependent pay was broadly seen as being a more legitimate form of compensation that, it was argued, was also

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<sup>2</sup> More specifically, according to the estimates of Frydman and Saks (2010), less than 20 percent of CEOs were awarded stock options throughout the 1950s, but over 80 percent did so in the 1990s.

in the interest of shareholders. While more recent research has cast substantial doubts on the latter (see Bebchuk and Fried 2004), it is fairly clear that the rise of equity-based pay facilitated the unprecedented growth of executive salaries in the US in the 1990s. In effect, the results of an econometric study by Bebchuk and Grinstein (2005) suggest that increases in equity-based pay account for nearly all of the total growth in US CEO compensations observed in the 1990s, while cash salaries remained largely constant during the same period.

Based on these previous studies we thus conceptualize the re-emphasis of the shareholder governance model by the US political elites in the early 1990s and the facilitation of equity-based remuneration practices as key developments, which were consequential for the development of executive salaries in the USA, as well as beyond.

#### *US investors as exporters of remuneration practices*

In particular, our study focuses on how US investors abroad have contributed to the dissemination of equity-based remuneration practices and higher levels of overall compensation in other economies. As such, we are particularly interested in the role of US multinational companies (MNCs) and investment funds (IFs). While US MNCs started to expand internationally at a large scale already from the 1960s onwards (cf. Jones 2004), the expansion of IFs is a somewhat more recent phenomenon. But, in either case, both of them are extraordinarily powerful agents in today's global economy, which control a large amount of total assets in the global economy, including very substantial shares outside of the USA (cf. Fichtner 2016).

To illustrate this point, Table 1 shows the approximate decade-average stock of FDI (at book value) held by US MNCs as a share of current GDP for 17 OECD economies other than the US. Although FDI data has many limitations and the indicated ratio has no directly meaningful interpretation in substantive terms, the figures can nonetheless serve as useful indicators to

approximate the sheer size of holdings of US MNCs abroad as well as some of the differences over time and across countries.

**Table 1. The decade-average US FDI stock as a share of current GDP by country (in percentage points)**

	1970s	1980s	1990s	2000s
Australia	6.15	5.17	6.49	9.57
Canada	18.78	13.16	13.63	19.19
Denmark	1.79	1.71	1.41	3.04
Finland	0.48	0.29	0.72	1.03
France	1.64	1.34	2.18	3.01
Germany	1.92	2.03	1.87	3.15
Ireland	6.91	14.46	15.98	41.96
Italy	1.31	1.20	1.30	1.58
Japan	0.67	0.63	0.81	1.66
Netherlands	3.81	6.01	12.68	41.62
New Zealand	2.43	2.25	8.16	5.37
Norway	2.56	4.43	3.65	3.55
Portugal	1.11	0.92	1.25	1.56
Spain	1.56	1.37	1.90	4.32
Sweden	1.50	0.83	1.65	9.19
Switzerland	9.45	12.35	11.44	25.57
UK	6.19	6.59	10.03	16.13
<i>AVERAGE</i>	<i>4.02</i>	<i>4.40</i>	<i>5.60</i>	<i>11.26</i>

NOTE: The shares indicate the FDI stock held by US companies (as indicated by US BEA) divided by current GDP (as indicated by World Bank's WDI database). The numbers shown are the average values of this value over each 10-year period. Note that FDI stock is the accumulated value of reported FDI by US companies at historical cost.

On the one hand, the figures suggest substantial cross-national differences (e.g. the US FDI stock as a share of GDP reached close to twenty percent in Canada in the 1970s, but remained below one percent in Japan and Finland until the 1990s) and, on the other hand, strong increases over time: while the ratio's sample average value was between four and five per cent of GDP from the 1970s to 1990s, it grew to over ten percent in the late 1990s and early 2000s.

It is important to note that these figures only account for the investments abroad held by US MNCs, excluding those of IFs. We are

currently in the process of collecting comparable data for holdings by US IFs abroad. While the latter data is less readily available, there are some indications that they are at least as large as those by US MNCs<sup>3</sup>.

Given the sheer size of these holdings, it does not seem far-fetched to suggest that they have the potential to affect business practices abroad. This being said, it is of course important to distinguish analytically between investments by MNCs and IFs as well as the various pathways through which their actions can lead to increases in executive salaries in other economies.

MNCs usually take a controlling interest in their subsidiaries while IFs generally limit their holdings to minority positions. Accordingly, it seems likely that the ability as well as the willingness to influence the policies of the companies receiving their investments are different for MNCs and IIs. Presumably, MNCs are generally more active investors than IFs and, all else equal, the effect of their investments on executive pay should thus be stronger than the effect from IFs investments. Our sub-hypothesis for MNCs is that their headquarters actively push to introduce US-style remunerative practices in their subsidiaries and that the configuration of national institutions of corporate governance determine to what extent they are able to do so. The sub-hypothesis for IFs, in turn, expects a more passive role of the US investor. Rather than IFs pushing for the introduction of US-style pay, we suggest that the increasing holdings of the latter - and the implied decreases in holdings of traditional investors such as governments, banks and other domestic shareholders - can provide local executives with the opportunity to increase their own pay by introducing US-style remuneration practices, which US IFs are less likely to object to than traditional investors (cf. Hoepner 2003, Oxelheim and Randoy 2005).

Furthermore, we suggest that US investors can affect local remuneration practices through two distinct types of mechanisms, which we dub, respectively, as their *direct* and *indirect* effects. The former refers to the

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<sup>3</sup> For example, a recent study for the case of Switzerland found that over 80 percent of equities trade on the Swiss stock market are held by foreign investors and over 40 percent by US investors alone. Michael Rasch, "Wem gehoert der Schweizer Aktienmarkt?", Neue Zuercher Zeitung, 21 August 2015. See also Fichtner, Heemskerk, Garcia-Bernardo (2016).

introduction of US-style pay practices within the specific target companies receiving the US investments, which, following the theoretical argument, will lead to increases in the salaries of top managers in these specific companies. In contrast, the second mechanism refers to the potential *spillover* effect of these developments to other (non-US-owned) companies operating in the same economy. Presumably, spillovers can result from the competition in the labour markets for top managers as well as the associated cultural legitimization of higher salaries in host economies. On the one hand, if partly or wholly US-owned companies abroad start paying US-style salaries to their local executives, supposedly this will increase pressures for domestic companies to follow suit if they want to retain their top management talent (poaching dynamics). On the other hand, the adoption of US-style remuneration practices in some firms can also trigger another simultaneous spillover effect, which is 'cultural' in the sense that the observation of the introduction of US-style salary packages among peers can break previously existing cultural inhibitions of other local top managers to ask for higher levels of pay.

As a result of these hypothesized dynamics, our general expectation thus is that levels of executive pay in an economy increase as the size of investments by US MNCs and IFs grows. At the same time, however, we expect the size and significance of this effect to be contingent on the configuration of local political institutions.

#### *Local mediation of pressures to increase pay*

Only little previous research has been undertaken to study systematically how local political-economic arrangements influence foreign investors' strategic behavior in host economies. Accordingly, the identification of the precise causal mechanisms through which local institutions can restrain the ability of US investors to adapt their preferred compensation practices will

certainly require further careful qualitative investigations, which we plan to undertake at a later stage of this project (cf. below).

Nonetheless, we have some general prior expectations, which largely build on the Varieties of Capitalism literature. Our main intuition is that US investors' ability to pursue their preferred compensation policies abroad is relatively strong in liberal market economies, but much weaker in economies that have strong corporatist institutions. More specifically, we expect two variables to be particularly important in influencing the behavior of US investors when they enter markets abroad: traditional ownership structures and the preferences of domestic businesses.

Firstly, as previous studies have shown (most prominently, Hall and Soskice 2001), company ownership structures in corporatist market economies have been built more on long-term relationships between businesses, governments and banks, as well as among businesses (cross-shareholding arrangements) than it is normally the case in economies with liberal market institutions, where ownership is typically more dispersed. And although ownership structures in corporatist economies have tended to become more diluted in recent years (cf. Hoepner 2003, Heemskerk 2007)<sup>4</sup>, the degree and extent of insider ownership patterns is still more salient in corporatist economies today than it is the case for liberal economies.

Secondly, as the studies by Cathie Martin and Duane Swank (2001, 2004, 2008, 2011, 2012) have shown, the institutional structures of corporatist economies can have an important influence on how the policy preferences of domestic businesses are formed and, as a result, how they behave. In particular, Martin and Swank emphasize the role of business associations in shaping firm preferences through the sharing of information, the building of trust and social partnership norms as well as the establishment of behavioral constraints (Martin and Swank 2001:894-896). As a result, compared to liberal market economies, corporatist economies are characterized by patterns of closer cooperation between businesses, between businesses and the state as well as between managers and workers.

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<sup>4</sup> Which is in some sense the very process that is being studied in this project.

From the viewpoint of incoming US investors, corporatist economies thus represent fairly different settings than liberal market economies, which are overall more similar to institutional structure dominant in their home economy. In particular, we expect US investors to be more constrained to introduce their preferred compensation policies in corporatist economies because they are more likely to be perceived as disruptive by local business associations, more strongly resisted by state institutions as well as by trade unions and workers' associations<sup>5</sup> who typically enjoy a greater say in these systems than they do in liberal economies. At the same time, the more cooperative business relations characterizing corporatist economies may also imply that these systems are less conducive to the playing out of the theorized indirect effects of US-investment-induced pressures to increase pay, if local firms are somewhat less willing to engage in competitive CEO-poaching strategies, which could otherwise quickly lead to an upward bidding of managerial salaries.

The aims of this research project are thus to better understand whether and, if so, how executive remuneration practices in advanced economies other than the USA are influenced by the behavior of US investors and how the impact of the latter interacts with local political institutions. To do so, we propose a multiple methods research design that is described in the remainder of this paper.

### **Research strategy**

The empirical research design that we plan to follow in order to study this theorized process of contingent diffusion of executive remuneration practices via US investors consists of three stages: The first stage aims to assess the consistency of our argument with broad patterns of the long-term evolution of key variables in encompassing cross-national samples. In particular, the goal is to assess the strength of the association between levels of investments by US MNCs and IFs and the concentration of income at the top of the

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<sup>5</sup> Trade unions, but also other institutions such as work council systems or centralized wage bargaining institutions, etc. (see Wallerstein 1999, Rueda and Pontusson 2000, Scheve and Stasavage 2009).

distribution in settings with various degrees of strength of corporatist institutions. This part of the research will consist of two statistical analyses, focusing, respectively, on US FDI flows and US PEI flows to other OECD economies from the 1960s to the 2000s. The subsequent section of this paper summarizes the preliminary findings of this analysis for the case of FDI flows<sup>6</sup>. The second stage of the research will then move to investigate these relationships at the firm-level through four quantitative country case studies (the preliminary country case selection consists of the United Kingdom, Canada, the Netherlands/Switzerland and Denmark/Sweden). As it is described in some more detail in the last section of this paper, the primary aim of this part of the research is to build a detailed dataset on executive salaries and US ownership for all major publically listed companies in the four country case studies for the period from 2000 to 2015<sup>7</sup> at the firm-level, which will allow us to study the theorized conditional relationship between exposure to US ownership and executive salaries in a much more fine-grained manner. Lastly, the third stage of the research will consist of in-depth qualitative case studies of the same four country cases, which will investigate the causal mechanisms underlying the relationships between US ownership and executive salaries in empirical depth through extensive analyses of secondary and primary source materials, as well as interviews with representatives of US MNCs and IFs, business associations and trade unions.

The following section presents the preliminary results of the first cross-national statistical analysis and the following section will outline the next steps and conclude.

### **Preliminary statistical analysis 1**

To assess the consistency of our theoretical argument with broad cross-national patterns of associations of key variables, the first part of this research project analyzes the relationship between inflows of US FDI and the

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<sup>6</sup> The parallel study on PEI flows has not yet been completed.

<sup>7</sup> Unfortunately, earlier data on executive remuneration is difficult to obtain.

concentration of incomes at the top, using cross-sectional panel data from 17 OECD economies<sup>8</sup> covering the period from 1975<sup>9</sup> to 2003<sup>10</sup>.

Based on our argumentation above, we aim to assess the following interactive hypothesis: Increasing levels of FDI from the USA are positively associated with the income share of the Top 1 per cent in host economies in which the levels of corporatist coordination are low. This association declines in magnitude as the strength of corporatist institutions increase.

It is important to point out that the three variables of interest - the concentration of wealth, US FDI inflows and the levels of corporatist institutional arrangements - are plausibly endogenous to each other. For this reason, we are unable to neatly isolate the effect of US FDI and corporatist institutions on wealth concentration and, in consequence, our ability to make strong causally inferential claims based on the following results are limited.

Nonetheless, the available data does allow us to test the robustness of the predicted patterns of association among the three variables in a sample of 17 countries over a period of 28 years.

### *Dependent variable*

As the dependent variable we use the data on the share of national income that goes to a society's top 1 per cent of wealthiest individuals that is provided for by the *World Top Incomes Database*. Atkinson and Piketty (2007) describe some of the methodological challenges involved in the collection of this data and their efforts to make it comparable across countries in more detail<sup>11</sup>. It is important to note that the data is based on individual gross

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<sup>8</sup> The following countries are in our sample: Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland and the UK.

<sup>9</sup> From when the disaggregated US FDI data is available for most countries in the sample

<sup>10</sup> Which is the most recent year for which Martin and Swank's (2012) macrocorporatism index is available

<sup>11</sup> Atkinson and Piketty note (2007:v): "The series were constructed by using the same raw data sources for all countries and applying the same methodology to derive the final series. Although fully homogenous, cross-country data sets do not exist, we have done our best to make our database as homogenous as possible ..."

income *before* taxes and the unit of measurement are percentage points. For our sample, there are some missing observations for Germany, Switzerland, Portugal and the Netherlands. But overall the coverage is good and fairly balanced.

### *Explanatory variables*

The explanatory variable of interest is an interaction term constituted by the aggregate FDI stock of US multinational companies in other advanced economies and an index measuring the degree of corporatism of national-level political institutions. Our data on US FDI is from the *US Bureau of Economic Analysis*, which provides unparalleled longitudinal data and a detailed breakdown by host country and sector. The data is based on the outward FDI flows reported by US MNCs to the US Department of Commerce. Because we are interested to proxy for the total presence of US companies in other economies that has built up over years, we use the FDI *stock* data, which measures the accumulated value of FDI flows at historical cost, rather than annual flows. Further, because our theoretical argument focuses on the salience of US investments relative to the size of the economy (rather than absolute values), we normalize the stock data by the current value of GDP and multiply it by one hundred so that the unit of measurement is also in percentage points.

In further analyses below (see results in Table 3), we contrast the relationship between a country's wealth concentration and the stock of FDI held by US MNCs with the relationship of the former with investments from European and Japanese MNCs. To measure the inward FDI stock from European and Japanese MNCs we use the estimates provided by the OECD, which covers a shorter time-period (starting between 1985 and 1992).

Moreover, we also assess the relationship of top income shares with the US FDI stock in different industrial sectors. This data is provided by US

BEA. Due to a substantial change in the classification of industrial sectors in 1999, we only use the data up to 1998<sup>12</sup>.

To measure the level of corporatism of political institutions, we use the 'Macrocorporatism' index provided by Martin and Swank (2012). The index is available annually from the 1960s until 2003 and aims to measure the degree of presence of institutionalized mechanisms of nonmarket coordination between employers and labour (f.e. collective bargaining institutions), between businesses and governments (f.e. tripartite commissions) and among firms (f.e. through employers' associations). Accordingly, the index is an aggregate of indicators of employer organization, labour organization and the centralization of collective bargaining; the specific data sources are describe in more detail in the online appendix to Martin and Swank (2011)<sup>13</sup>.

The original index is scaled on a continuous three point scale ranging from -1.5 (least corporatist) to +1.5 (most corporatist). To facilitate the interpretation of the interaction term in our case, we reverse this scaling so that -1.5 stands for a highly corporatist economy and +1.5 for a highly liberal/pluralist economy. Figure 3 in the appendix illustrates the variation of this variable both across countries and within countries over time.

### *Controls*

Moreover, in our analyses, we include country- and time-fixed effects as well as a set of control variables to take alternative determinants of the share of national incomes of the Top 1 per cent into account. Country-fixed effects absorb any variation that is specific to one country and constant over time

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<sup>12</sup> In Table x, FDI in manufacturing corresponds to the category 'total manufacturing' provided by US BEA; FDI in services aggregates the values in the categories of 'wholesale trade', 'depository institutions', 'finance and insurance' and 'other services'; FDI in finance aggregates the values in the categories of 'depository institutions' and 'finance and insurance'.

<sup>13</sup> Available here...:

<http://www.marquette.edu/polisci/documents/MartinSwankhistoricalmaterial-codebook.pdf>

...and here:

<http://www.marquette.edu/polisci/documents/MartinSwankcontemporarydatacode.pdf>

and year-fixed effects absorb any variation that is common to all countries in one specific year.

To control for the possibility that economic development affects wealth concentration negatively (as suggested by the Kuznets curve) or positively (as suggested by Piketty), we include GDP per capita (as indicated in the World Bank's World Development Indicators Database (WDI)) in thousand constant 2005 US dollars. To control for the possibility that periods of high economic growth lead to greater wealth concentration (as well as crises and ensuing periods of low growth rates may lead to decreases in wealth concentration), we include the annual economic growth rate (also from WDI). To take a possible partisan effect into account, we include a dummy variable 'Left party government' (based on Keefer et al.'s Database of Political Institutions). To control for the hypothesis of skill-biased technological change, we also include the value added by the service sector as a share of GDP as well as the enrollment rates in tertiary education (both variables are from WDI). Further, we include the variable Financialization, which measures the amount of money (M2) as a share of GDP (as indicated by WDI), to control for the possibility that inequality is related to the development of financial markets and the size of the financial sector in an economy. Lastly, the variable Trade openness, which measures the sum of exports and imports as a share of GDP (from WDI), is included to account for the possibility that greater economic integration per se, independently from FDI inflows, may affect wealth concentration.

### *Empirical model*

To assess the association of US FDI inflows with national wealth concentration at different values of the macrocorporatism index, we employ a fixed effects time-series cross-sectional ordinary least square estimator of the following form:

$$Income\ share\ Top\ 1\%_{it} = \beta_0 + \beta_{xy} US\ FDI * Macrocorporatism + \beta_x US\ FDI_{it} + \beta_y Macrocorporatism + \beta_z Controls_{it} + \gamma_i + \tau_t + \epsilon_{it}$$

where *Income share Top 1%* is the outcome variable and the coefficient of the interaction term  $\beta_{xy} US\ FDI * Macrocorporatism$ , in association with its lower-ordered terms  $\beta_x US\ FDI$  and  $\beta_y Macrocorporatism$ , is the variable of principal interest;  $\beta_z Controls_{it}$  denotes the vector of control variables described above;  $\gamma_i$  are the country-fixed effects;  $\tau_t$  are the time-fixed effects;  $\beta_0$  is the constant and  $\epsilon_{it}$  are the error terms.

We calculate robust standard errors that are clustered at the country-level.

Following Angrist and Pischke (2007:245), we refrain from including the lagged dependent variable because the simultaneous inclusion of fixed effects and the lagged dependent variable has been shown to lead to inconsistent estimates.

Because we understand wealth concentration (and its 'declaration' in tax returns) as a relatively slow-moving process, we lag all independent variables by one year.

## Results

The main results are shown in Table 2. GDP per capita and economic growth rates are generally positively associated with the income share of the Top 1 per cent. A left party government is negatively associated with wealth concentration. Levels of financialization are positively related to income concentration, while economic openness is negatively related. The association with the size of the service sector and tertiary education enrollment rates is weak and because these variables at the same time have a fair amount of missing observations, we exclude them from Model 3.

The main variable of interest is the interaction term of the US inward FDI stock with the level of corporatism. On their own, the relationship of each of these variables with the income share of the Top 1 one per cent is not statistically significantly different from zero. However, as predicted by our theory, the interactive effect is positive and statistically significant at conventional levels of significance.

**Table 2** *Estimation results of the association of US FDI with the share of national income of the Top 1% for a sample of 17 OECD economies, 1975-2003*

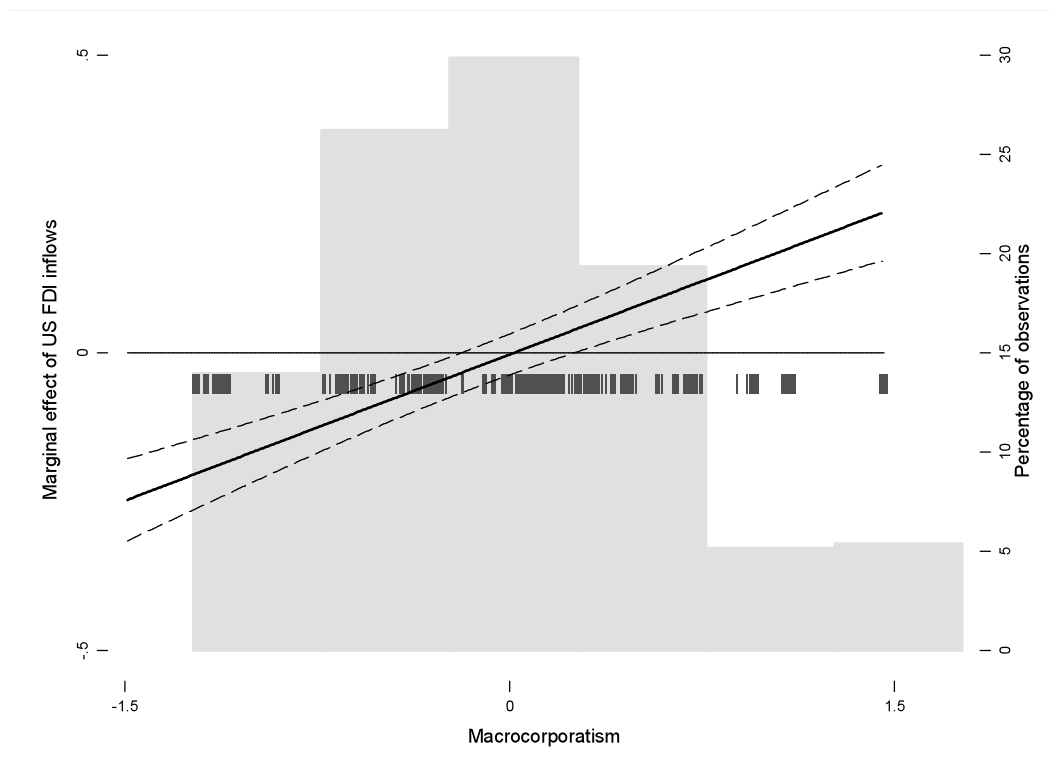
<i>DV: Top 1 percent's share of national income (in percentage points)</i>	(1)	(2)	(3)
Interaction: US FDI stock <sub>t-1</sub> * Macrocorporatism <sub>t-1</sub>		0.135** (0.047)	0.125*** (0.024)
US inward FDI stock (% GDP) <sub>t-1</sub>	0.043 (0.056)	0.025 (0.050)	-0.054 (0.034)
Macrocorporatism <sub>t-1</sub>	-0.167 (0.482)	-0.871 (0.560)	-0.133 (0.251)
GDP per capita (thousands) <sub>t-1</sub>	0.033 (0.054)	0.049 (0.051)	-0.026 (0.059)
Economic growth <sub>t-1</sub>	0.080* (0.042)	0.061 (0.046)	0.058* (0.031)
Left party	-0.276	-0.331*	-0.178

government <sub>t-1</sub>	(0.176)	(0.183)	(0.140)
Service sector (% GDP) <sub>t-1</sub>	0.024 (0.047)	0.000 (0.047)	
Enrollment in tertiary education <sub>t-1</sub>	-0.001 (0.014)	-0.001 (0.014)	
Financialization <sub>t-1</sub>	0.014* (0.007)	0.011 (0.006)	0.003 (0.004)
Trade openness <sub>t-1</sub>	-0.030 (0.028)	0.002 (0.030)	-0.010 (0.010)
Year-fixed effects	Yes	Yes	Yes
Country-fixed effects	Yes	Yes	Yes
<i>Observations</i>	170	170	276
<i>Countries</i>	14	14	15
<i>Years covered</i>	1977-2003	1977-2003	1977-2003
<i>Overall-R<sup>2</sup></i>	0.50	0.41	0.79

NOTE: \* p-value <0.1, \*\*<0.05, \*\*\*<0.01. Robust standard errors clustered at country-level in parentheses.

To further explore and substantively interpret the nature of this interactive relationship, we graphically plot the marginal effect of US FDI inflows at different values of the macrocorporatism index. These results are shown in **Figure 2**. Consistent with our theoretical argument we find that in economies in which corporatist institutions are weak (that is the macrocorporatism index is bigger than 0), a one-percentage point increase in US FDI is associated with a 0-0.3 percentage points increase in top income concentration. In contrast, the relationship seems to be absent or even negative in countries with strong corporatist institutions. The suggested negative association (which disappears when New Zealand is excluded from the sample) is somewhat surprising and difficult to explain. One possible explanation that is consistent with this finding would be that US FDI inflows are perceived as a threat in highly corporatist economies, encouraging key actors to undertake pre-emptive actions. However, given the limitations of the research design and the data we rely on for this analysis, we are careful not to over-interpret this finding at this stage.

**Figure 2. Main results: marginal effect**



NOTE: The main line with 95% confidence intervals predicts the effect of a one percentage point increase in US FDI as a share of GDP on the income share of the Top 1% at different values of the macrocorporatism index. The macrocorporatism index is from Martin and Swank (2012). To facilitate interpretation of the interaction term, their scaling has been reversed, so that it ranges from -1.5=most corporatist to + 1.5=least corporatist/most liberal or pluralist. The histogram shows the rough distribution of the Macrocorporatism values; the rug plots indicate the precise actually observed values in our analysis. The estimations are based on Model 3 in Table 2

### *Further analyses*

To assess some more specific predictions that derive from our theoretical argument, we further break down the FDI stock figures into different types according to their country of origin and their target industry. This exercise is useful to further specify some of the nuances of our argument as well as to address, at least indirectly, some of the concerns that our results are driven by endogenous relationships.

First we replicate the baseline model 3 in Table 2 and compare the interactive relationship of the US inward FDI stock and macrocorporatist institutions on income concentration with the same relationship of the FDI stock originating from other European and Japanese MNCs (the sample is

restricted to those observations for which all three values are available). We have argued above that the positive association of US FDI with higher levels of income concentration results from the spread of remuneration practices via US MNCs. If it is correct that these remuneration practices are specific to US companies, there is *a priori* no reason to assume that higher FDI inflows from European or Japanese MNCs would show the same association.

**Table 3** *The impact of FDI from different source countries*

<i>Origin of FDI stock</i>	<b>USA</b>	<b>Europe</b>	<b>Japan</b>
Interaction: FDI stock from $X_{t-1}$ * Macrocorporatism $_{t-1}$	0.156*** (0.046)	0.033 (0.036)	-0.374 (0.227)
Inward FDI stock from $X$ (% GDP) $_{t-1}$ Macrocorporatism $_{t-1}$	0.023 (0.056)	0.019 (0.056)	-0.608*** (0.193)
Control variables and fixed effects as in Model 3 Table 1	-1.18* (0.346)	-0.687 (0.729)	0.436 (0.814)
Yes	Yes	Yes	Yes
<i>Observations</i>	118	118	118
<i>Countries</i>	12	12	12
<i>Years covered</i>	1987-2003	1987-2003	1987-2003
<i>Overall-'R<sup>2</sup>'</i>	0.00	0.02	0.00

NOTE: \* p-value <0.1, \*\*<0.05, \*\*\*<0.01. Robust standard errors clustered at the country-level in parentheses.

This is indeed what we find. Table 3 shows that only the interaction term of macrocorporatism and US FDI is positive and significant, while the interaction terms with European and Japanese FDI are insignificant.

Finally, we compare the interactive positive association of US FDI and macrocorporatism by breaking US FDI down into FDI in manufacturing, the service sector and finance only (again, we restrict our sample to only those observations that are available for all three types). Manufacturing FDI primarily creates employment for factory workers whose salaries are typically far below a nation's Top 1 per cent<sup>14</sup>. In contrast, services FDI is generally

<sup>14</sup> Of course manufacturing FDI also creates high-paying jobs for a few top managers; but we assume that they typically create a much smaller number of high-paying jobs than FDI in finance, for example; accordingly, we expect the aggregate effect to be much smaller for manufacturing FDI.

associated with the creation of larger numbers of managerial-level jobs. In particular, FDI in finance typically creates a large number of high-paying positions and, moreover, US banks have been at the forefront of the innovations in remuneration practices that we place at the heart of our argument. Therefore, if our argument is correct, we would expect the relationship to be weak for manufacturing FDI, stronger for services FDI and strongest for US finance FDI. Again, these expectations are corroborated by our results, which are presented in Table 4.

We find no relationship between US FDI in manufacturing, but a significant and notably larger effect than the one of our baseline estimates if we isolate the relationship of US services and US finance FDI in our models. As predicted, the association is strongest for finance alone.

**Table 4. The impact of US inward FDI in different industrial sectors**

<i>Sector of inward FDI stock</i>	<b>Total</b>	<b>Manufacturing</b>	<b>Services (incl. finance)</b>	<b>Finance</b>
Interaction: US FDI stock in sector $X_{t-1}$ * Macrocorporatism <sub>t-1</sub>	0.161*** (0.029)	-0.026 (0.072)	0.364*** (0.024)	0.424*** (0.046)
US FDI stock in sector $X$ (% GDP) <sub>t-1</sub>	0.076 (0.070)	-0.000 (0.135)	0.048 (0.047)	-0.050 (0.049)
Macrocorporatism <sub>t-1</sub>	-0.199 (0.320)	1.058** (0.498)	0.501** (0.227)	0.477* (0.262)
Control variables and fixed effects as in Model 3 Table 1	Yes	Yes	Yes	Yes
<i>Observations</i>	176	176	176	176
<i>Countries</i>	12	12	12	12
<i>Years covered</i>	1984-1998	1984-1998	1984-1998	1984-1998
<i>Overall-'R<sup>2</sup>'</i>	0.76	0.68	0.71	0.73

NOTE: \* p-value <0.1, \*\*<0.05, \*\*\*<0.01. Robust standard errors clustered at the country-level in parentheses.

### *Robustness checks*

To further assess the robustness of this association, we perform other checks. First, we drop one country at the time and find that our results are not sensitive to the exclusion of any one country. We find that the main drivers of the observed relationship are Sweden and the United Kingdom, followed by Australia, Japan and New Zealand. Second, we drop one five-year period at the time. Again we find that our results are not sensitive to the exclusion of any specific five-year period. Instead, we find that the relationship detected in our models is strongest in the late 1990s and early 2000s.

### **Next steps**

These preliminary statistical results thus provide fairly strong suggestive evidence in support of our argument that a growing influence of US investors in an economy can lead to the introduction of US-style remuneration practices and greater income concentration at the top in relatively liberal political economic settings, while strong corporatist institutions can be an effective moderator that can inhibit these trends. While the presented analysis has focused on investments by US MNCs only, the next step in the project will compare these results to the relationship between income concentration and levels of investments by US IFs, using data from the US Department of the Treasury on historical portfolio equity flows.

The strength of these analyses is that they allow us to assess the predicted correlation at relatively encompassing cross-national samples over longer periods of time. The main disadvantage, however, is that we rely on proxies that track the trends we are interested in at a rather high level of aggregation. Therefore, the following step of the project will consist of building a much more detailed dataset that will allow us to investigate these dynamics at the

firm- and individual manager-levels. Given the significant efforts that are required to assemble the necessary datasets, we plan to focus these analyses on only four country cases. In addition to considerations about data availability, our criteria are to select four advanced economies that all experienced relatively high levels of inflows of investments from US MNCs and IFs in recent decades (i.e. the IV has to be clearly present), with two of them being liberal political economies and the other two having more corporatist arrangements. Accordingly, our preliminary country case selection consists of the United Kingdom, Canada, the Netherlands (or Switzerland) and Denmark (or Sweden). For these four economies, we plan to collect a consistent sample covering all major publically listed companies (which have to account for at least 75 percent of total stock market valuation) that includes detailed information on the annual salaries of its top executives (data mostly from BoardEx, complemented by manual collection from annual reports), the proportion of publically disclosed ownership shares that are held by US investors (data from Bureau van Dijk and manual collection from annual reports), and a range of control variables covering various dimensions of the structure and performance of the firm. Table 5 in the appendix provides a draft list of all variables that we intend to collect. Although this kind of data is only available for more recent years (starting roughly in the year 2000), it will enable us to investigate the processes in much more detail and to identify the size of the effect of US investments on executive compensation with more precision. Furthermore, these four quantitative case studies will be accompanied by simultaneous qualitative investigations, involving the analysis of secondary and primary written documents as well as interviews with key stakeholders, that will aim to reconstruct the history of the role of US MNCs and IFs in these economies and uncover the processes through which they affected local executive remuneration practices.

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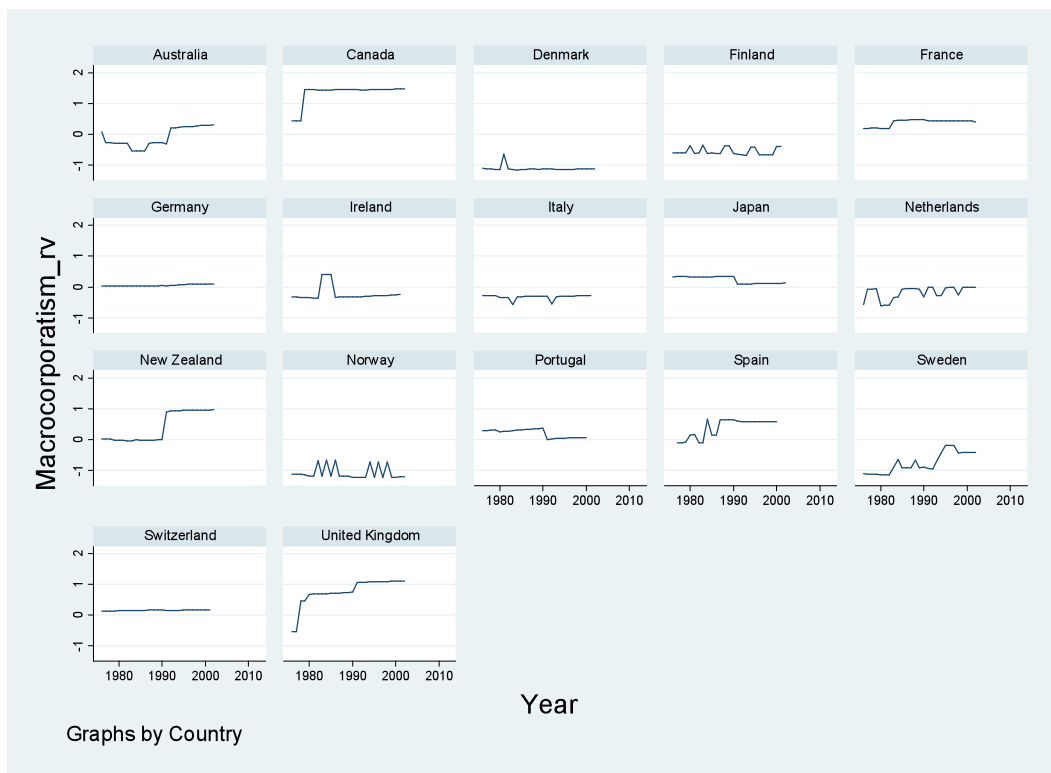
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## Appendix

**Figure 3. Graphical description of the Reversed Macrocopratism Index**



NOTE: This index is derived from the Macrocopratism Index provided by Martin and Swank (2012) but multiplied by -1 in order to facilitate the interpretation of the interaction term. Accordingly +1.5 stands for the most pluralist/liberal system and -1.5 for the most corporatist.

**Table 5. Provisional variables list for Stage-2 data collection**

CATEGORY	VARIABLE	SOURCE/NOTES
COMPENSATION	Total annual compensation	BoardEx
	Base salary	BoardEx
	Other pay and pensions	BoardEx
	Bonuses	BoardEx
	Equity pay	BoardEx
	Share base salary	Calculated from BoardEx
	Share bonus	Calculated from BoardEx
	Share equity	Calculated from BoardEx
CEO CHARACTERISTICS	Position	BoardEx
	Dummy variable for highest-level executive (CEO/managing director, etc.)	BoardEx
	Dummy variable for executive positions	BoardEx
	Dummy variable for non-executive board members	BoardEx
	CEO age	BoardEx
	CEO external hire	BoardEx
	CEO tenure	BoardEx
	CEO other industry experience	BoardEx
	CEO current board position	BoardEx
	CEO college degree	BoardEx
FIRM CHARACTERISTICS	Market capitalization	Worldscope, Bloomberg
	Total annual sales	Worldscope item 01001, Bloomberg
	Annual revenues	Worldscope, Bloomberg
	Number employees	Worldscope, Bloomberg
	GICS Industrial Sector	Worldscope, Bloomberg
	Leverage: total debt divided by total assets	Worldscope item 03255/item 02999
	Tobin's q	Total assets (Worldscope item 02999) plus market value of equity (item 08001) minus book value of equity (item 03501) divided by total assets
	Stock-return volatility: annualized standard deviation of daily stock returns	?
	Stock return	Bloomberg?
	BOARD CHARACTERISTICS/ CORPORATE GOVERNANCE	Insider ownership
Institutional ownership		Lionshares
Board size		BoardEx
Fraction of independent directors		BoardEx
Dummy if CEO is also chairman		BoardEx
Average number of other board positions: ratio of the number of current board		BoardEx

	positions in other publicly listed firms by board members of the firm divided by board size	
INTERNATIONALIZATION	Fraction of shares held by foreign investors	BvD, Bloomberg
	Dummy for inclusion in MSCI All Country World Index	MSCI
	Domestic institutional ownership	Lionshares
	Foreign institutional ownership	Lionshares
	Dummy for firms holding assets abroad	
	Revenues from sales outside home economy	Worldscope item 07101
	Revenues from sales abroad as share of total revenues	Worldscope item 07101/01001
	Number of employees outside of home economy	
	Number of employees abroad as share of total number of employees	
	Dummy for cross-listing on exchange abroad	
	Nationalities on board/board size	BoardEx
EXPOSURE TO US	Revenues from sales in US	
	Revenues from sales in US as share of total revenues	
	Number of employees in the US	
	Fraction of shares held by US investors	BvD?
	Non-U.S. institutional ownership	Lionshares?
	U.S. institutional ownership	Lionshares
	Dummy for cross-listing on US stock exchange	
	Non-U.S. institutional ownership	Lionshares
	U.S. institutional ownership	Lionshares
	U.S. acquisitions: Total acquisitions of US companies between 1986 and 2016 as a fraction of a firm's market capitalization	SDC Platinum
	% of directors on US boards: fraction of directors that	BoardEx

	also sit on a U.S. firm board of directors	