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The Revolving Door for Political Elites:

An Empirical Analysis of the Linkages between Government Officials' Professional Background and Financial Regulation

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Abstract

Regulatory capture of public policy by financial entities, especially via the revolving door between government and financial services, has increasingly become a subject of intense public scrutiny. This paper empirically analyses the relation between public-private career crossovers of high-ranking government officials and financial policy. Using information based on curriculum vitae of more than 400 central bank governors and finance ministers from 32 OECD countries between 1973-2005, a new dataset was compiled including details on officials' professional careers before as well as after their tenure and data on financial regulation. Time-series cross-sectional analyses show that central bank governors with past experience in the financial sector deregulate significantly more than governors without a background in finance (career socialisation hypothesis). Using linear probability regressions, the results also indicate that finance ministers, especially from left-wing parties, are more likely to be hired by financial entities in the future if they please their future employers through deregulatory policies during their time in office (career concerns hypothesis). Thus, although the revolving door effects differ between government officials, this study shows that career paths and career concerns of policy-makers should be taken into account when analysing financial policy outcomes.

Keywords: *Revolving door, Financial regulation, Professional background, Government officials.*

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1   Introduction

Regulatory capture of public policy by financial institutions has increasingly become a critical issue in many industrial economies (Baker 2010; Johnson and Kwak 2010). From Matt Taibbi's blistering attack on Goldman Sachs, the 'great vampire squid wrapped around the face of humanity' (Taibbi 2010, para.1), to the assertion of Paul Ryan, vice-president at the watchdog group Common Cause, that ex-bankers take on jobs in government with the primary intention to repeal Dodd-Frank's strict regulations on the financial sector (Sultan 2017), denunciation of the political involvement of the financial industry has gained new highs. Especially following the Great Recession, critics claimed that politicians, bureaucrats and regulators around the globe had ceased to serve the wider public interest and systematically favoured those special interests they were supposed to regulate (OECD 2009). The revolving door – the flow of personnel from government offices to financial entities and vice versa – is often perceived as a major driving force behind such regulatory capture. Well-known examples of influential policy-makers with experience in private finance, such as Alan Greenspan, Tim Geithner or Robert Rubin, seem to support the assumption that earlier and prospective employment in the financial sector influences high-ranking government officials in shaping financial regulation (Johnson and Kwak 2010; Gadinis 2013). Yet, systematic evidence for the relation between such public-private career linkages and public policy remains scare – a surprising fact given the policy relevance of and the public interest in this topic. Are financial sector veterans in senior government posts in fact more likely to deregulate the financial industry? And are policy-makers rewarded with lucrative future industry employment if they embark on deregulatory reforms during their time in office?

To answer these questions, this study focuses on the effects of career paths and career concerns of central bank governors and finance ministers on financial regulation. While many actors and institutions shape policy outcomes in democratic systems, these senior officials

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often dominate the political agenda and play a pivotal role in decisions about economic policy, especially in times of wide-ranging reforms (Johnson and Kwak 2010; Mishra and Reshef 2017). Hence, I expect that policy-makers with past experience in private finance carry out greater deregulatory reforms than officials without such experience because they bring social connections and socialised policy preferences with them that favour the interests of their former employers. Furthermore, I argue that government officials and financial services companies engage in implicit *quid pro quo* exchanges, where pro-industry policies are rewarded with later careers in the financial sector. I therefore expect that the more policy-makers please their prospective employers through deregulatory policies, the more likely they are to gain lucrative post-government employment in the industry.

These hypotheses are tested using a newly created dataset on financial regulation and backgrounds of more than 400 central bank governors and finance ministers from 32 OECD countries between 1973-2005. Similar to related studies on political careers (Moessinger 2014; Hallerberg and Wehner 2016; Hayo and Neumeier 2016), this thesis concentrates on developed countries during democratic periods only. Leader effects are generally expected to be small in developed nations, where the rules of the game of politics are highly formalised and institutional and legal constraints have significant power to define and shape the appropriate form of leaders' behaviour (Putnam 1976). It is therefore interesting to ask whether career effects of economic policy-makers still exist in more developed democracies.

The results show that characteristics of policy-makers in fact matter for policy outcomes in the area of financial regulation, albeit the effects seem to differ between governors and finance ministers. In particular, central bank governors with past experience in the financial sector are more inclined to deregulate the financial industry than central bankers without such background while this effect cannot be demonstrated for finance ministers. Yet, finance ministers, especially from left-leaning parties, are more likely to be hired by financial entities

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following their tenure if they pursue liberalizing reforms during their time in office. In the case of central bankers, in contrast, pushing for deregulatory policy is not found to improve governors' chances of gaining prestigious jobs in the industry.

This thesis contributes to mainly two strands of literature. Firstly, by explicitly addressing the impacts of public-private linkages on policy outcomes, it expands existing research on the revolving door in finance, which mainly concentrates on career effects for regulators of US agencies (Cohen 1986; Lucca et al. 2014; deHaan et al. 2015; Cornaggia et al. 2016; Shive and Forster 2016) or markets' reactions to political appointments of former private sector employees (Luechinger and Moser 2014; Acemoglu et al. 2016). Secondly, this study contributes to the growing literature on political careers and political selection. While related studies document effects of political leaders' careers and backgrounds on economic growth (Jones and Olken 2005; Besley et al. 2011), market-liberalizing reforms (Dreher et al. 2009) and budgetary performance (Jochimsen and Thomasius 2014; Moessinger 2014; Hayo and Neumeier 2016), scholars paid hardly any attention to the impact of policy-makers' characteristics on financial regulation. The only exception is Mishra and Reshef's (2017) treatment of the issue, which, however, focuses on central bank governors only.

The remainder of this study is structured as follows. Section 2 outlines the theoretical concept and derives the two main hypotheses by presenting existing research and illustrating case examples of the revolving door phenomenon in finance. Section 3 then describes the data used in the empirical part of the paper, presents some preliminary descriptive statistics and elaborates on the employed methodology. Section 4 presents the results of the analysis and reviews the robustness of the findings. Finally, section 5 concludes with a discussion of the limitations and the wider implications of these findings.

2   Theoretical Framework

2.1   Regulatory Capture and the Revolving Door in Finance

Traditionally, scholars conceptualised regulatory policy as a process in which public-minded individuals pursue some notion of the public good (Levine and Forrence 1990; Zheng 2015). This perspective, widely known as the 'public interest' theory, accentuates the government's responsibility in correcting market imperfections and views regulatory policy-makers and agencies as benevolent maximizers of social well-being (Laffont and Tirole 1991). Under this conceptualisation, regulatory outcomes that favour the regulated industry can only arise when the industry's interests coincide with the regulators' benign vision of the public interest (Zheng 2015).

Capture theories, in contrast, picture regulation as primarily designed for the benefits of the industry (Stigler 1971; Peltzman 1976). This revisionist approach, whose origins can be traced back to scholars of the public choice school including Downs (1985) and Buchannan and Tullock (1962), describes the regulatory process as a competition between public and special interests, in which the narrow preferences of the regulated industry prevail (Zheng 2015). Strong regulation places a burden on private actors that would otherwise benefit from unregulated booms and light countercyclical restrictions. However, highly concentrated industries, such as the financial sector, have the necessary information and organizational cost advantages to overcome collective action problems of political mobilization and are thus able to minimize such harmful regulation at the expense of the public, which is generally more dispersed and less informed (Olson 1965; Stigler 1971; Baker 2010). Embedded in this view of regulatory capture is the idea that regulators themselves have narrow, self-interested objectives such as job advancements and personal wealth, which can be fostered by granting favours to the regulated industry (Levine and Forrence 1990; Zheng 2015). Hence, regulation

becomes an exchange relationship between the regulated and the regulators, in which the latter are swayed by special interests rather than the public good at large (Dal Bó 2006; Zheng 2015).

Consistent with the predictions of the capture theories, the literature on financial regulation has flagged the financial sector's strong incentives and its different ways to affect regulatory policy (Pagliari 2012; Gadinis 2013). Besides the direct influence through lobbying expenditures and contributions to political campaigns, the revolving door has often been found to be a major way of influence for the financial industry (Baker 2010; Johnson and Kwak 2010; Adolph 2013; Gadinis 2013). Public employees moving from industry to government are said to be friendly to the industry because they have come to share its views and aspirations. Additionally, outgoing 'revolvers' moving from government to industry may have incentives to signal their attractiveness to prospective financial employers by being lenient towards them (Dal Bó 2006; Agrell and Gautier 2012).

Although these revolving door effects have increasingly gained attention in empirical research on financial regulation due to their major implications for public policy, related studies mainly concentrate on the implementation of financial policies at US regulatory agencies, including state insurance and banking regulators (Grace and Phillips 2008; Agarwal et al. 2014) and US federal financial regulators (deHaan et al. 2015; Shive and Forster 2016). However, the extensive movement from the top of the bureaucracy and public offices into big business matters in other countries besides the US. Known as *amakudari* ('descent from heaven') in Japan and *pantouflage* in France, this phenomenon is further prevalent in countries such as Spain, the Netherlands and Denmark (Schneider 1993; Adolph 2013). More importantly, little is known about the revolving door effect for influential economic *policy-makers*, namely central bank governors and finance ministers, in the context of financial regulation. Especially during the creation of reform policy, these political leaders are likely to

have great power to shape it, given that it requires inventive guidance rather than operational routine (Dreher et al. 2009). Furthermore, besides finance ministers, central bank governors are also often instrumental in shaping the legal regulatory environment – even in cases where financial regulation is not the central bank's sole responsibility (Mishra and Reshef 2017). One may, for instance, think of Fed-Chairman Alan Greenspan, a major driver behind financial deregulation in the US (Johnson and Kwak 2010), or Raghuram Rajan, who pushed for a regulatory reform agenda as the head of the Bank of India (Mishra and Reshef 2017). This thesis therefore applies the revolving door hypotheses to these high-level public officials. I argue that central bank governors and finance ministers with past experience in private finance are more likely to deregulate the market as they have absorbed the financial sector's perspective on government policy. Furthermore, I expect that officials can increase their chances of gaining attractive future industry jobs by signalling their suitability to prospective employers through deregulatory reforms. The following sections illustrate both of these arguments to derive testable hypotheses.

2.2   Career Socialisation: Cultural Capture of Government Officials

The first argument rests on the idea that high-level officials with a professional background in the financial services industry are socially conditioned to push for financial deregulation whilst in office because long experience in private banking engenders free-market ideas and strong social ties with the sector (Baker 2010; Gadinis 2013). Having worked in the financial industry may induce policy-makers to continue to see regulation as an unnecessary obstacle for business and to make pro-industry decisions because of having been 'socialised' in the sector's environment (Cohen 1986; Dal Bó 2006). The result, which various scholars have referred to as cultural or cognitive capture (Johnson and Kwak 2010; Acemoglu et al. 2016), is a process of intellectual convergence of individuals in the private and public sector and a

collective cognitive bias, in which different views are not sufficiently acknowledged and properly analysed when shaping regulatory outcomes (Baxter 2011).

At least two mechanisms could produce such socialised pre-existing preferences of political officials for deregulatory policy. Firstly, political elites may show greater sensitivity to the financial sector's concerns due to social connections with the industry. The revolving door between government and industry links actors on both sides of the door in a common policy network, giving the financial sector a direct and privileged access to key policy-makers (Johnson and Kwak 2010; Pagliari and Young 2012). As officials are presumably more likely to take a phone call from someone they know than from a stranger (Acemoglu et al. 2016) and may feel empathy for their former colleagues (Hill and Painter 2011), they are likely to push for deregulatory policies that benefit their career-based peer groups.

In a second and stronger version of the career socialisation argument, central bankers and finance ministers with prior industry employment may possess attitudes favourable to the sector because they have come to share its worldviews. Summed up in the phrase '[w]here you stand depends on where you sit' (Miles 1978, p.399), organization theorists and public administration scholars have long argued that every profession has its own rules and fundamental values, which leave a cultural imprint in an agent's behaviour over time (Meier and Nigro 1976; van Maanen and Schein 1979, cited in Adolph 2013). Similarly, students of political elites have stressed the importance of professional socialisation of policy-makers, asserting that '[v]alue-socialisation is not parental, or even based on early political experience, but apparently takes place from working in a given field or institutional setting' (Barton 1973, p.242; also see Putnam 1976). There is little reason to assume that private banking is an exception, as the financial service industry has long been identified as an intense working environment that forms employees' beliefs and economic ideas (Ho 2009; Adolph 2013).

Several studies indeed show that professional experience in the financial sector has pervasive, enduring effects on the behaviour of policy-makers (Havrilesky and Gildea 1991; Göhlmann and Vaubel 2007; Dreher et al. 2009; Adolph 2013; Jochimsen and Thomasius 2014). Analysing German state-level data, Jochimsen and Thomasius (2014), for example, find that finance ministers who gained experience in the financial business sector achieve significantly lower budget deficits, while their education and individual partisan preferences do not seem to matter. Similarly, the literature on the Federal Reserve as well as cross-country studies indicate that former private bankers are much more hawkish on inflation than other monetary policy-makers (Havrilesky and Gildea 1991; Göhlmann and Vaubel 2007; Adolph 2013). While few studies have examined the link between policy-makers' professional experience in private banking and their preference for financial deregulation, the existing evidence also supports the career socialisation argument. Igan and Mishra (2014), for instance, find that lobbying expenditures by the financial industry are positively associated with the probability of a US-legislator switching in favour of deregulation and that this link is enhanced by a legislator's own experience on Wall Street. Furthermore, in a paper more closely related to this thesis, Mishra and Reshef (2017) study how employment and educational characteristics of central bank governors affect financial regulation in 74 countries between 1973-2005 and find that a central banker with finance background deregulates three times more over his tenure than a governor without such experience.

Apart from this cross-sectional evidence, illustrative case studies highlight the importance of career socialisation for government officials' stance on financial regulation. As numerous Wall Street veterans, such as Secretary of Treasury Henry Paulson and Robert Rubin, gained power and influence in Washington, their preference for complex financial products, sophisticated financial institutions and free financial markets soon became conventional wisdom inside the Beltway and can explain why the federal government showed growing

sensitivity for the interests of Wall Street since the 1990s (Johnson and Kwak 2010). However, the 'Wall Street-Treasury complex' (Bhagwati 1998, p.7) is just one well-known example of cultural capture by the finance industry. It was not before Miguel Mancera Aguayo became governor of *Banco de Mexico* that the country saw a major turn towards far-reaching financial deregulation. Mancera had worked for Mexico's largest bank *Banco de Comercio* for several years before starting his career within the central bank and had strong links to prominent figures of the country's financial circuit, such as Pablo Aveleira, Director of the Research Department at *Banamex* (Santín Quiroz 2001). The former banker not only strongly opposed the imposition of capital controls in the face of the widespread capital flight in the early 1980s, but also openly criticised controls on the domestic banking sector as they would hamper competition and innovation and hence increase market inefficiencies:

> Achieving efficiency in the financial system, as in the rest of the economy, is, or should be, a key objective in every country. [...] In my view, the most effective way is through competition. The degree of competition in the financial system does not only depend on the number of banks but also on how able they are to compete with one another and on the number and capabilities of nonbank institutions, which may also form part of the financial system. Moreover, the degree of competition may also depend on the diversity of financial instruments used by the various financial intermediaries. (Volcker et al. 1991, p.55)

While his predecessor Carlos Tello, a Keynesian economist with an extensive professional experience in the public sector, was known as the 'architect of the nationalization plan' during Portillo's administration (Babb 2005, p.252), Mancera's appointment as governor of the central bank in 1982 marked a major reversal in Mexico's financial regulation policy, resulting in the wide-ranging reprivatisation of commercial banks and state-run enterprises (Santín Quiroz 2001; Babb 2005).

Building on this theoretical and empirical background, I therefore expect the following:

Hypothesis 1a: *Central bank governors with past occupational experience in the financial sector pursue stronger deregulatory reforms whilst in office than governors without such experience.*

Hypothesis 1b: *Finance ministers with past occupational experience in the financial sector pursue stronger deregulatory reforms whilst in office than ministers without such experience.*

One issue with the socialisation mechanism that immediately comes to mind is the self-selection problem of political elites. Some officials might opt for deregulatory policy not because they are socialised by their experience in finance but because they have latent, pre-existing conservative preferences that induce them to both work for the financial industry and deregulate the market while in office. However, research on political elites tends to confirm that political leaders' views are less influenced by their childhood experiences and early socialisation than by their adult roles and affiliations (Putnam 1976). Furthermore, financial sector regulation is likely to be a subject few spare any thought for before adulthood and spending years or decades in an industry strongly affected by regulatory policy might even overwrite preferences stemming from fundamental beliefs (Adolph 2013). Nevertheless, as I cannot completely rule out the possibility of self-selection – besides other methodological issues discussed below –, I will not claim that my results are causally interpretable.

2.3   Career Concerns: Exchanging Future Careers for Policy Influence

Besides the career socialisation effect, the revolving door in finance is often said to encourage public officials to accommodate the strong interests of the industry in order to gain lucrative future careers in the sector (Stigler 1971; Cohen 1986; Dal Bó 2006; Baker 2010). To the extent that central bankers and finance ministers are influenced by future career advancements

in the private sector, they are likely to create lenient financial rules in order to attract attention from the industry and signal their congruence with the sector's views (Agrell and Gautier 2012; Adolph 2013). Such prospects of future career rewards render the financial sector a 'shadow principal' (Adolph 2013, p.17), that despite lacking a formal role in policy-making can exert effective influence on regulatory policy through informal means. One might argue that this mechanism is unlikely to hold for high-ranking administration officials as they have relatively long time horizons and thus may not decide on policies with their next career step in mind. However, the career incentive effect does not require explicit job opportunities with specific financial sector entities but shadow principals can set implicit contracts with public officials to extract desirable policies (Adolph 2013). Furthermore, even if political elites do not actively plan their next career move they may try to curry favour with the regulated industry given the uncertainty about the concrete end of their mandate. Finance ministers and central bankers in my sample, for instance, only have average tenures of about three and six years, respectively. In order to retain lucrative outside options in the medium run, these officials may therefore have an incentive to stay on good terms with their prospective future employers (Johnson and Kwak 2010). Firms in the financial industry, in turn, have an interest in hiring former government officials who have displayed a favourable stance towards the industry. Those former political appointees are especially valuable because they are likely to openly share their institutional and market-related insights and use their connections and clout to continue to influence regulatory policy in accordance with the industry's concerns. In that way, the regulatory process turns into a *quid pro quo* where lenient regulation is rewarded with lucrative future job opportunities in the industry (Dal Bó 2006).

Several pieces of empirical evidence of the revolving door effects tend to confirm those theoretical predictions. In an early study, Cohen (1986) examines whether industry employment affects voting behaviour at the Federal Communications Commission and finds

that commissioners who accept industry employment after leaving the agency increase their support for industry interests by about 11% during their last year in office. With respect to financial regulation, Grace and Phillips (2008) study whether state insurance regulators who subsequently work for the insurance industry favoured the sector when regulating prices. They show that regulators who are hired by the industry upon leaving office permit higher insurance prices during their tenure compared to officials who take employment in other industries after office. Using a difference-in-differences approach, Cornaggia et al. (2016) similarly find that credit analysts, who transition to firms they rate, grant inflated and less informative ratings to their future employers a few months before leaving the agency. Furthermore, in an extensive study more closely related to career concerns of political elites, Adolph (2013) shows that central bankers are most hawkish on inflation when they not only work for the finance industry before joining the monetary policy committee but also take a subsequent job in finance.

While these studies already lend some support to the career concerns mechanism of administration officials, several case examples bolster the idea that finance ministers and central bankers rely on deregulatory policies to increase their prospects for a lucrative future career in the financial sector. Miguel Mancera Aguayo was not the only high-ranking Mexican official who argued that strong controls on the banking sector discouraged savings and caused an inefficient allocation of credit and resources (Santín Quiroz 2001). Another major figure during Mexico's frenetic deregulatory reforms in the 1980s and 1990s was Pedro Aspe, the country's finance minister between 1988-1994. Together with deputy-minister of finance, Guillermo Ortiz, Aspe pushed for significant deregulations of banking operations in 1989, including the elimination of interest rate ceilings and selective credit controls (Santín Quiroz 2001). His motivation seemed to at least partly stem from career concerns and reputational gains in the financial sector. As Santín Quiroz (2001, p.103) puts it: 'Aspe and

Ortiz advocated financial liberalisation because it was consistent with their own beliefs, but also because the reform appealed to international capital and to the domestic financial elite.' Indeed, shortly after leaving the ministry of finance, Aspe became chairman at *Vector Casa de Bolsas*, a major capital markets company. The closest we can get to a smoking gun, however, is the career of Robert Rubin, US Secretary of Treasury from 1995-1999. Rubin's reign was mainly characterised by ample deregulation in the banking sector paired with the rapid development of new financial products, such as collateralized debt obligations and mortgage-backed securities – policies that are widely known as 'Rubinomics' (Johnson and Kwak 2010, p.100; Hill and Painter 2011). One of his most important achievements was the repeal of the Glass-Steagall Act, a Depression-era legislation which separated commercial and investment banking in the US. This law and its 25% revenue limit from underwriting and dealing in securities posed a significant barrier for banks seeking to expand into investment banking territories. More importantly, when Travelers, a major commercial bank, and Citicorp, a major insurance company that owned a leading investment bank, merged in 1998, Glass-Steagall forced the newly created Citigroup to split up within two years (Johnson and Kwak 2010). Ever since his appointment, Rubin pressured President Clinton to back an abolition of the law. In a letter to the president in May 1997, for instance, the secretary tried to spur the repeal of Glass-Steagall by reassuring the president that the issue does not require much of his attention: 'Should you approve our recommendation to move forward, the proposal would be a Treasury initiative, and would not require a significant time commitment from the White House. [...] I and my staff will manage the process of advancing the proposal.' (Robert Rubin, cited in Roberts 2014, para.22-23) Rubin finally succeeded in 1999 when Congress passed the Gramm-Leach-Bliley Act, giving retrospective clearance to the merger of Citigroup. Less than a week after the Clinton Administration and Congress had agreed on the bill, Rubin became board member and later chairman at Citigroup (Kahn 1999).

Although these cases hint towards considerable career concerns of government officials in the realm of financial regulation, empirically examining the career concerns concept is inherently difficult as this would require information about political elites' career motivations during their time in office. Most officials, however, are likely to deny such incentives and insist on a high-minded interest for the public good (Adolph 2013). Nevertheless, if finance ministers and central bankers really are able to engage in effective job-for-policy exchanges with the financial sector, career concerns should lead to more post-government jobs in the industry when the shadow principal receives its preferred policy. I therefore expect the following:

Hypothesis 2a: *The more central bank governors deregulate the financial market during their time in office, the more likely they are to gain employment in the industry after their tenure.*

Hypothesis 2b: *The more finance ministers deregulate the financial market during their time in office, the more likely they are to gain employment in the industry after their tenure.*

3   Research Design

3.1   Data on Financial Regulation and Elites' Revolving Door

To test these hypotheses, a new dataset was compiled that covers detailed information on the professional background of 165 central bankers and 392 finance ministers as well as on domestic financial regulation in 32 OECD countries. The data spans the years 1973-2005 although I follow related work (Hallerberg and Wehner 2016) and only incorporate democratic periods that are denoted by a positive Polity IV score. Rent-seeking interest groups, such as the financial sector lobby, are often found to have substantial influence on economic reforms in democratic regimes (Rajan and Zingales 2004). Autocratic governments, in contrast, might be able to shelter institutions against captive efforts of specific interest groups or officials entrenched in crony capitalism may have a bias towards specific businesses

rather than the entire industry (Giuliano et al. 2013). To ensure a better comparability of the background of regulatory reforms and the revolving door concept, I therefore include democratic periods only[1].

Data for the annual degree of financial deregulation in these 32 countries over time is taken from Giuliano et al. (2013). While most other measures of domestic financial regulation cover very few countries or only use binary scores (Bandiera et al. 2000; Laeven 2003), their variable is a graded index that contains various sub-indices summarizing different dimensions of the regulatory framework. It is normalized between 0 and 1 where higher values indicate stronger deregulation. This index of domestic financial liberalization is an average of measures for securities markets regulation and banking regulation. The sub-indicator for securities markets captures policies that restrict or encourage the development of domestic bond and equity markets, such as the auctioning of government securities or permitting access to the domestic stock market by non-residents (Abiad et al. 2008; Giuliano et al. 2013). The banking sub-index, in turn, captures policy measures on capital controls and interest rate controls, entry barriers in the banking market, state ownership in the banking sector as well as the quality of banking supervision and regulation. Following related literature (Dreher et al. 2009; Giuliano et al. 2013; Mishra and Reshef 2017) the financial reform variable is then defined as the annual *change* in the aggregated deregulation index for a given country.

Turning towards elites' occupational background, information on officials' names, dates of duty and their prior work experience is taken from Hallerberg and Wehner (2016). Their dummy variable on private banking indicates whether the professional experience of a country's finance minister or central bank governor prior to occupying the office includes working in a commercial bank or the financial services industry more broadly. Hence, besides

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[1] This implies that Bulgaria, Chile, Estonia, Hungary, Latvia, Lithuania and Romania are only included since 1990, Greece since 1974, Mexico since 1988, Czech Republic and Poland since 1989, Portugal since 1976, Spain since 1977 and Turkey is excluded between 1980-1982.

retail banks, this includes credit unions, consumer finance and capital markets firms, investment funds, credit card companies as well as insurance companies, stock brokerages and some government-sponsored enterprises. Additionally, I hand-collected data on the officials' professional careers in finance following their tenure in government. This information is taken from the biographical databases *BoardEx, Munzinger* and *World Who's Who Online* and is further supplemented by and cross-checked with data from several other encyclopaedias and online sources[2]. The respective dummy variable then indicates whether a central bank governor or finance minister became president, chairman or member of the board of directors, including supervisory boards, of a financial services entity directly after her office. To ensure a good comparability with the data on elites' prior professions, I adopt Hallerberg and Wehner's (2016) broad definition of the financial services industry, except for government-controlled entities. While state-run financial enterprises are likely to have the same potential to socialise their employees according to the sector's values, they induce a very different incentive structure than privately owned and operated firms as presidents and board members are normally appointed by the government (Adolph 2013). Hence, public officials gaining employment in these enterprises may be rewarded for accommodating the government's preferences for financial policy rather than those of the financial sector. I therefore only consider privately owned financial firms in the indicator for post-government industry employment. Supervisory board members are included because they are chosen by the stockholders and employees of a company to advance their interests and they often not only supervise executive directors but also hire them (Agrawal and Knoeber 2001). However, I exclude advisors that were completely external to management.

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[2] For more detailed information on the data sources and description see Table A9.

Table 1: Professional Experience of Central Bank Governors and Finance Ministers

	Central Bank Governors	Finance Ministers		
	Total	Total	Among left	Among right
Finance exp. before office	49 (29.7%)	63 (16.1%)	11 (9.0%)	36 (17.7%)
Finance exp. after office	44 (26.7%)	42 (10.7%)	12 (9.8%)	22 (10.8%)
Finance exp. both before and after office	12 (7.2%)	9 (2.3%)	2 (1.6%)	7 (3.4%)
N	165	392	122	203

Notes: Depicted is the number of central bank governors and finance ministers that have each type of occupational experience, plus the percent of the entire sample that these observations represent (not regarding missings). Note that information on past and future employment is missing for 1 and 19 governors and 3 and 6 ministers, respectively. For a full list of governors and finance ministers with experience in finance see Tables A10-A13.

Table 1 summarizes the occupational background of central bank governors and finance ministers before and after their tenure in office. Officials with work experience in the financial industry are much more common among central bank governors than among finance ministers. While about 30% and 27% of governors worked for the financial sector before and after their time in office, this applies to only 16% and 11% of finance ministers, respectively. Interestingly, the fraction of senior public officials walking back and forth between the public and private sector appears to be rather small. Only about 7% and 2% of central bankers and finance ministers have private banking backgrounds both prior to and directly following their tenure. Another notable fact is that although past financiers are more common among rightist finance ministers, this partisan gap seems to diminish when it comes to post-government employment in the financial sector. With 12 out of the 122 left-leaning and 22 out of the 203 right-wing ministers in the sample, the financial sector appears to be similarly attractive as a future employer for finance ministers with different political backgrounds.

Figure 1: Professional Experience of Governors and Finance Ministers over Time
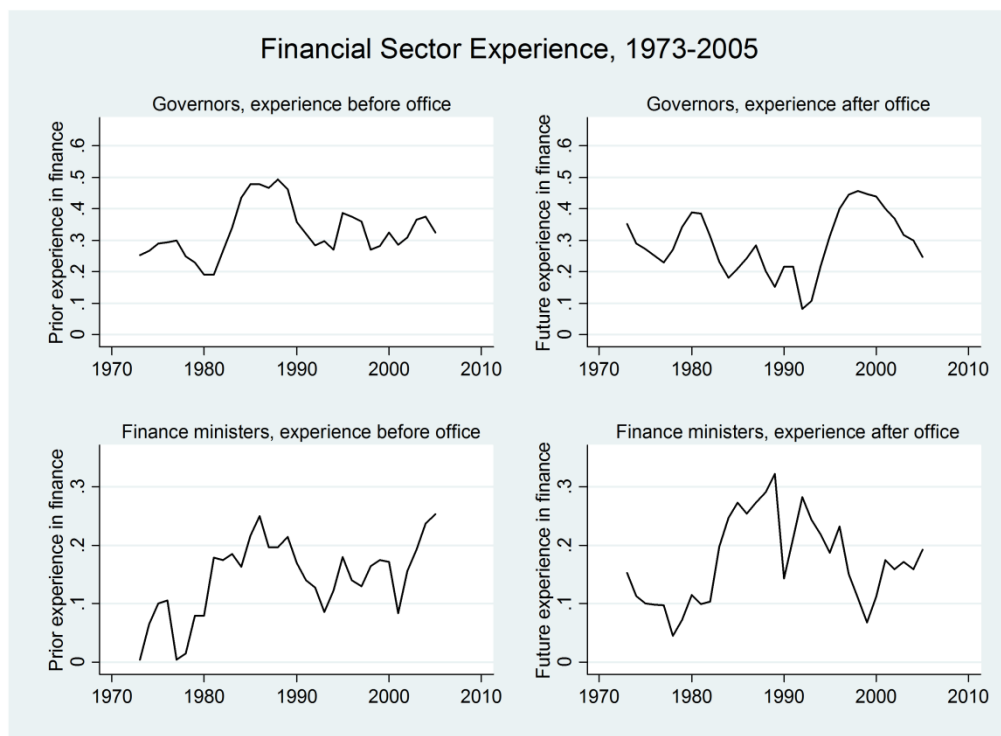
Notes: Depicted is the share of governors and finance ministers with each type of occupational experience over time.

Figure 1 shows the share of central bank governors and finance minister with finance background over time. Overall, past and future financial sector employment appears to have become more prevalent among economic elites across developed countries, except for central bankers who became somewhat less likely to join the financial sector after their tenure. During the 1970s, only few government officials walked through the revolving door. In the 1980s, in contrast, the share of governors who had worked in the finance sector shot up to almost 50% and more than 20% and 25% of finance ministers in the second half of the decade had finance jobs before or after their tenure, respectively. While the financial sector remained an attractive prospective employer for officials during the 1990s, the share of central bankers and ministers with prior financial experience notably diminished after 1990 and since then remained on more stable and moderate levels at around 33% and 17%, respectively. Whether this waining and waxing of financial sector experience among government elites is associated with countries' tendency to deregulate the financial market remains an open question. The following empirical analysis tries to shed light on this issue.

3.2 Methodology and Further Variables

The presented revolving door theory predicts that government officials with prior experience in the financial sector are socially conditioned to pursue deregulatory policy (*H1a*, *H1b*) and that senior bureaucrats can boost their employment prospects in the financial services industry by designing lenient regulation (*H2a*, *H2b*). Given that the financial reforms variable only varies at the country-year level, testing these hypotheses requires that annual reforms are closely matched to the economic policy-makers responsible for them. However, in some years more than one central bank governor and finance minister hold office. I rely on the year's longest serving governor and finance minister in these cases. If an official is replaced in the beginning of a year, this strategy makes sure that her successor, who is responsible for the country's financial policy for most of the year, is retained (Moessinger 2014). This leaves us with a country-year panel dataset with 150 central bank governors and 309 finance ministers[3]. The alternative of assigning the same reform to multiple governors and ministers is not only causally discomforting but also potentially creates serial correlation in the errors when fitting the time-series cross-sectional model below. However, in the robustness section, I keep the first governor and minister in every year to check for the sensitivity of the results.

3.2.1 Testing Career Socialisation: A Time-Series Cross-Sectional Approach

Building on related research (Giuliano et al. 2013; Mishra and Reshef 2017), I use the following conditional change model (CCM) with country-year units of analysis to test the career socialisation mechanism:

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[3] Information on prior professional experience is available for 149 governors and 307 ministers. Data on post-government employment, in turn, is accessible for 133 governors and 304 ministers.

where _____ is the annual financial reform of country c at time t[4]. The variable of interest is the dummy _____ indicating whether a country's economic policy-maker i has prior experience in finance. According to the socialisation hypotheses *H1a* and *H1b* we expect ___ to yield a positive coefficient for both central bank governors and finance ministers. $\sum$ ___ is a vector of country-specific and time-varying controls that are described below and γ and δ represent country and year fixed effects, respectively. These fixed effects control for country-specific unchanged characteristics and common shocks to financial sector deregulation that may be related to characteristics of government officials.

By controlling for the lagged level of the deregulation index $Index_{c,t-1}$, I estimate a CCM rather than an unconditional change-score model for mainly two reasons (Finkel 1995). Firstly, including this variable accounts for the mechanical effect that the deregulation index is bounded between 0 and 1 and hence leaves less room for deregulation if the status quo is already highly deregulated (Mishra and Reshef 2017). Secondly, the past level of regulation can also serve as a measure of a country's impetus for or against the implementation of reforms. Perceived costs of excessive regulation or lax rules leading to market failures may depend on the status quo of the regulatory framework (Giuliano et al. 2013). Such incentives could also determine the 'type' of the current governor or finance minister to be chosen. If, for example, a country's level of regulation is very high, selection effects might arise where political leaders with a preference for more deregulation may strategically appoint policy-makers with a finance background.

I further control for several other sources of government officials' preferences and time-varying country-specific confounders. Firstly, I condition on whether policy-makers have

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[4] Note that this is a simple transformation of a dynamic panel model with _____ as the dependent variable given that the model could also be written as _____

ε . Indeed, fitting this model yields the same estimates for all coefficients, except for ___ . See Finkel (1995) for a discussion of the close relationship of these models and their interpretation.

postgraduate training in economics, i.e. a masters or doctoral degree, because advanced education in economics may provide technical expertise helping policy-makers to resist capture from individual interests and implement more efficient policies for the broader public good (Dreher et al. 2009; Adolph 2013). Additionally, I control for whether governors and finance ministers went to US top graduate schools because those institutions are generally known for their emphasis on market efficiency and rationality and related research found that education at Ivy league universities is strongly related to policy-makers' conservative economic preferences (Havrilesky and Gildea 1991; Chappell et al. 1995). For finance ministers, I also include a standardized measure for the left-right position of their party. At the country level, I further control for the partisanship of government and the existence of banking crises given that these factors have been shown to be related to the selection of policy-makers with finance background (Hallerberg and Wehner 2016) and are likely to impact a country's tendency for deregulatory reforms. Right-wing governments are generally regarded as more inclined to liberalize markets and government intervention and regulation become more likely in the wake of financial distress (Abiad and Mody 2005). To correct for endogeneity and potential post-treatment bias, the measure of banking crises is lagged by one year. Finally, I condition on reforms in neighbouring countries and the existence of IMF programs to control for imitational effects and external pressures leading to domestic financial reforms (Mishra and Reshef 2017). Although other studies further account for highly persistent factors such as the form of government (Mishra and Reshef 2017), these variables are specifically omitted here because their explanatory power is mostly absorbed by the country fixed effects in the model. Table A1 presents summary statistics for the variables of the CCM and Table A9 describes the details and data sources of these controls.

I present results with standard errors clustered by country in order to account for serial correlation that is not generated by time-constant unobserved effects at the country level and

is thus not absorbed by country fixed effects as well as to control for within-panel heteroskedasticity (Wooldrige 2013)[5].

3.2.2   Testing Career Concerns: A Linear Probability Model

To test the hypotheses that the deregulatory measures of central bank governors (*H2a*) and finance ministers (*H2b*) are associated with their prospects of post-government employment in the financial sector, I use the following linear probability model (LPM) in which the propensity that a government official *i* in country *c* at time *t* gains lucrative employment in the industry is a function of their policy during office:

The measure of deregulatory reforms, $Deregulation_{i,c,t}$, is calculated as the sum of the annual reforms undertaken by a central bank governor and finance minister over her tenure, respectively. According to the predictions of the career concerns hypotheses *H2a* and *H2b* we expect β_1 to be positive, indicating that central bank governors and finance ministers can increase their employability in the financial sector through deregulatory policies. I include country fixed effects to absorb country-specific time-invariant confounders and decade fixed effects when the official leaves office to account for common trends to financial sector employment and financial deregulation. I further include a vector of official-specific controls to capture factors that may both affect an individual's tendency to deregulate and her future employment prospects. I condition on a person's full years in office when leaving her position in government given that a longer tenure increases the possibility of policy changes and officials' perceived seniority and expertise. Additionally, I control for a governor's and minister's prior financial and educational background and partisanship (for ministers only) to

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[5] Given the model's close relationship to a dynamic panel model (Finkel 1995) and as I include country fixed effects, one might further be concerned about Nickell bias (Nickell 1981). However, this is less of an issue given that the average number of time periods per country is at least twenty in all models (Beck and Katz 2011).

account for other sources of specialized knowledge and networks that enable post-government employment in the industry. While one may further want to include a measure for financial markets' performance during policy-makers' final years in office (Grace and Phillips 2008), these variables are specifically excluded given that they may also result from deregulatory reforms, leading to potential post-treatment bias (Angrist and Pischke 2009). Table A2 reports summary statistics for the variables used in the model.

I follow related work (Igan and Mishra 2014; Hallerberg and Wehner 2016) and use a LPM instead of a fixed effects logistic regression for mainly two reasons. Firstly, in case of insufficient variance in outcomes for some units, logistic regressions lead to huge losses in efficiency (Hallerberg and Wehner 2016). Furthermore, the interpretation of coefficients has much less intuitive appeal (Wooldridge 2013). However, I consider an analysis with logistic regressions in the robustness section below. The results are estimated using robust standard errors given that LPMs necessarily lead to heteroskedastic errors (Woodridge 2013).

4   Results

Table 2 and 3 report the results of the CCM and the LPM, respectively. Given that data on some of the control variables, especially concerning the partisanship variables, is not always available, I introduce controls subsequently to show the robustness of the results across models. Model 1-3 report results for central bank governors and Model 4-6 show estimates for finance ministers in both tables. In Model 7 of Table 2, I include the characteristics of both central bankers and finance ministers.

4.1   Career Socialisation

The first thing to note when examining the results for the career socialisation mechanism in Table 2 is that the effect of prior experience in the financial sector on financial regulation is positive for central bankers (*H1a*) as expected. The estimated effect is significant in all

models for central bank governors (at least on a 10% confidence interval), while it is more imprecisely measured in the very demanding model in column 7 (p=.151). This lends support to the claim that central bank governors with past experience in the financial services industry are associated with greater financial sector reform than their peers who have been socialised in different work environments. The estimates predict that, on average, annual deregulatory reform is between 0.011 and 0.013 points greater when a governor with financial sector background holds office than when a country's governor has no prior experience in finance.

Table 2: Regression Models for Career Socialisation, Main Results
Conditional Change Model

	H1a: Governors			H1b: Finance ministers			H1a, H1b
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Finance before office CB	0.012* (0.006)	0.013* (0.006)	0.012* (0.007)				0.011 (0.007)
Finance before office FM				0.005 (0.004)	0.003 (0.006)	0.002 (0.006)	-0.000 (0.008)
Reform index (lag)	-0.133*** (0.021)	-0.133*** (0.019)	-0.122*** (0.018)	-0.130*** (0.023)	-0.110*** (0.020)	-0.111*** (0.022)	-0.126*** (0.022)
Econ degree CB		0.008 (0.005)	0.008 (0.006)				0.007 (0.005)
Ivy league CB		0.026* (0.013)	0.027** (0.012)				0.028** (0.012)
Econ degree FM					-0.000 (0.005)	-0.001 (0.005)	-0.001 (0.004)
Ivy league FM					0.005 (0.012)	0.009 (0.011)	0.008 (0.012)
Left-right party FM					-0.000 (0.012)	0.015 (0.010)	0.016 (0.011)
Banking crisis (lag)			-0.016 (0.009)			-0.016 (0.011)	-0.014 (0.010)
Left-right party PM			0.001 (0.012)			-0.021* (0.011)	-0.011 (0.013)
Reform in geogr. neighbours			-0.253 (0.157)			-0.290* (0.169)	-0.286* (0.156)
IMF programme			-0.008 (0.009)			-0.008 (0.009)	-0.014 (0.009)
N	838	755	659	836	701	661	596
Number of countries	32	32	30	32	30	30	29
R^2 (within)	0.20	0.20	0.21	0.19	0.19	0.20	0.22

Notes: Time-series cross-sectional OLS regression with country and year fixed effects (not reported); all models include a constant. Dependent variable: $Reform_{c,t}$ (ΔI). Clustered standard errors by country in parentheses.
* $p<0.1$; ** $p<0.05$; *** $p<0.01$

In order to allow for a more substantial interpretation of the results, Figure 2 depicts the marginal effects of the finance variable in Model 3, keeping all other variables at their means. The effects seem significant from a political economy perspective: While the average yearly reform among governors without finance background only amounts to about 0.015, the estimated annual change in regulation is 0.028 when a country's governor has a professional background in finance. Hence, the estimated coefficient of 0.012 in Model 3 suggests that deregulatory policy changes increase on average by about 80% in years in which a governor has prior financial sector experience. Given that the 150 central bankers in this sample have an average tenure of 6.2 years, a governor who has been socialised in the financial sector can, on average, raise deregulatory reforms by about five times during her time in office[6].

Figure 2: Marginal Effects Plot of *Financeprior* for Central Bank Governors
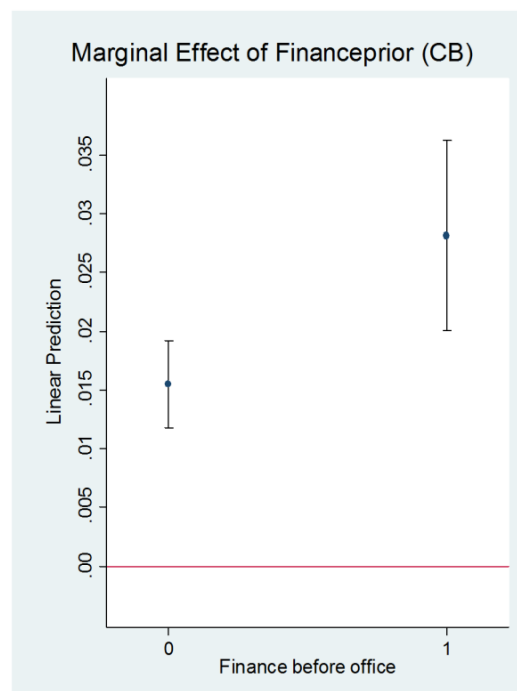
Notes: Depicted are marginal effects of prior financial sector experience for central bank governors, computed from Model 3 of Table 2.

For finance ministers, in contrast, I do not find any evidence for the hypothesis that prior experience in finance conditions ministers to deregulate the financial market more during

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[6]   96; for a similar analysis see Mishra and Reshef (2016).

their time in office (*H1b*). The coefficient of Model 4 is very small and statistically insignificant, irrespective of the covariates included. These findings raise the question as to why career socialisation effects seem to be non-existent for finance ministers while there is evidence for the claim that ex-financiers are more prone to deregulate the financial services industry in the case of central bank governors. One possible explanation is that most finance ministers pass a substantial career in the public sector before their appointment, while heads of central banks are often directly recruited from the private sector. After his position as investment manager at NM Rotschild & Sons, Norman Lamont, for instance, spent more than 10 years working for several public institutions, such as the Department of Energy and the Ministry of Defence, before becoming UK Chancellor of Exchequer in 1990 (BoardEx 2017). In such cases, earlier professional socialisation in the financial sector and its effects on ministers' preference for deregulation might be dampened by subsequent experiences in the public sector.

With respect to the control variables, only few factors are found to be related to financial reforms. Interestingly, besides the lagged level of financial deregulation, only the graduate institution of central bank governors has a substantial and robust effect on financial reform. The results in Model 3 imply that a country's annual rate of deregulation increases by 0.027 points if a central bank governor studied at an Ivy league university compared to central bankers who went to other graduate schools or did not complete a graduate degree at all[7]. This conforms to existing research that identifies prestige of education as an important explanation for central bankers' policy decisions (Havrilesky and Gildea 1991; Chappell et al. 1995). Hence, the results suggest that governors' policy preferences are not only shaped by prior occupational experiences, but also by the context of their educational training.

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[7] I repeated the analysis with different specifications of the graduate institution variable, where I included 1) all US universities, 2) both US and UK high-ranking schools and 3) all Anglo-American institutions. For all specifications, the effect on deregulation diminished substantially and remained significant only for US universities. The estimated coefficient of the main variable of interest,   , remained largely unchanged.

4.2 Career Concerns

While the evidence points towards career socialisation effects for central bank governors, the data does not support the hypothesis that governors can increase their job prospects in the financial sector through deregulatory policy (*H2a*). In Model 1 and 2 of Table 3, the deregulation variable even yields a negative coefficient, indicating that governors who deregulate more during their time in office are *less* likely to be hired by financial entities following their tenure. However, as the estimated coefficient clearly fails to demonstrate statistical significance and appears to be unstable across models, these results are in line with existing research which similarly does not find a relationship between financial sector reform and governors' future experience in the financial industry (Mishra and Reshef 2017).

Table 3: Regression Models for Career Concerns, Main Results
Linear Probability Model

	H2a: Governors			H2b: Finance Ministers		
	(1)	(2)	(3)	(4)	(5)	(6)
Deregulation ($\sum$reform)	-0.089 (0.327)	-0.145 (0.385)	0.122 (0.391)	0.692** (0.280)	0.594** (0.299)	0.823*** (0.294)
Years in office		0.004 (0.010)	-0.001 (0.011)		0.010 (0.010)	0.003 (0.009)
Finance before office			0.049 (0.103)			0.103 (0.073)
Econ degree			0.104 (0.113)			-0.022 (0.050)
Ivy league			0.077 (0.196)			0.026 (0.105)
Left-right party FM						0.136 (0.115)
N	133	133	121	304	304	249
R^2	0.41	0.41	0.47	0.25	0.25	0.28

Notes: Linear probability OLS regressions with country and decade fixed effects (not reported); all models include a constant. Dependent variable: $Finance after_{i,c,t}$. Robust standard errors in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

In the case of finance ministers, in contrast, the evidence lends clear support to *H2b*, indicating that ministers seem to engage in effective *quid pro quo* exchanges with the

financial sector. Using the results from Model 6, a one-standard deviation increase in deregulatory measures over their term in office (SD=0.09) increases finance ministers' probability of post-government employment in the financial services industry by about 7.4%. Given the scope of this study, one can only speculate about the reasons for these differences between governors and finance ministers with respect to the career concerns effect. One potential explanation could be that most central bankers might be *perceived* to be generally more conservative in their policy preferences than finance ministers whose political background and constituencies vary substantially. After Rogoff's (1985) endorsement of a credibly conservative and independent central banker as a solution to the inflationary bias of monetary policy (Kydland and Prescott 1977; Barro and Gordon 1983), central bank independence and monetary conservatism soon became the conventional wisdom of central banking around the globe (McNamara 1998). Indeed, leading central bankers between the 1980s and mid-2000s, such as Paul Volcker or Alan Greenspan, had a strong image of anti-inflationary conservatism, while their predecessors were widely known for their liberal economic beliefs (Romer and Romer 2004). In the context of this general perception, the signalling effect of deregulatory policy might be smaller in the case of central bankers as preferences between governors and financial entities appear to be already closely aligned. Hence, during most of the sample period, financial markets might not have relied on policy decisions of central bankers to assess their suitability for future leadership positions. The following additional analysis tries to shade some more light on this idea of differences in the credibility of policy signals.

4.3   Further Analysis: Costly Signals and Post-Government Employment

If the explanation for the ineffectiveness of governors' policy signals towards financial markets indeed points in the right direction, we should also expect to find that the credibility of deregulatory policy signals by finance ministers depends on their pre-disposed ideological

preferences. While a strong liberalization of financial markets by a right-leaning finance minister may simply be perceived as partisan, measures such as the abolishment of interest rate ceilings or credit controls coming from leftist ministers are likely to signal strong commitment to pro-market policies. By enacting policies that are costly and stand in contrast to the direct interest of their constituents, left-wing finance ministers may provide more credible information to financial markets about their intentions and career motivations (Cukierman and Tommasi 1998; Tavares 2004). Hence, the linkage between deregulatory reforms and post-government employment in the financial sector should be stronger for finance ministers from left-leaning parties than for conservative policy-makers.

To test this, I repeated the analysis of the linear probability model above, adding an interaction term between the deregulation variable and the measure of a ministers' partisanship. The results are reported in Table 4.

Table 4: Further Analysis, Career Concerns and Partisanship
Linear Probability Model

	(1)	(2)	(3)
Deregulation	1.349	1.282	1.617*
($\sum$reform)	(0.834)	(0.834)	(0.825)
Left-right party FM	0.203	0.202	0.222*
	(0.129)	(0.130)	(0.131)
Deregulation x Left-right party FM	-1.161	-1.159	-1.565
	(1.498)	(1.491)	(1.413)
Years in office		0.006	0.003
		(0.010)	(0.009)
Finance before office			0.096
			(0.071)
Econ degree			-0.026
			(0.050)
Ivy league			0.041
			(0.102)
N	267	267	249
Adjusted R^2	0.27	0.27	0.29

Notes: Linear probability OLS regressions with country and decade fixed effects (not reported); all models include a constant. Dependent variable: $Finance after_{i,c,t}$. Robust standard errors in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

While the interaction effect is indeed negative as expected, it does not reach significance.

Nevertheless, plotting the marginal effect of *Deregulation* conditional on finance ministers'

partisanship from the model in column 3 yields some interesting patterns (see Figure 3). While the effect of deregulation remains ambiguous for right-wing parties, it is clearly positive and significant for finance ministers from a leftist spectrum. This suggests that the signalling effect of deregulatory reforms for all finance ministers – reported in Table 3 – is mainly driven by left-leaning policy-makers whose parties have a historical aversion against such policies[8]. Hence, this provides some tentative evidence for the idea that the credibility of policy signals is conditional on a policy-maker's predisposed preferences. Yet, this can only indicate some general tendencies and more extensive analyses with larger samples would be necessary to thoroughly test these conjectures.

Figure 3: Marginal Effects Plot of *Deregulation* Conditional on Partisanship
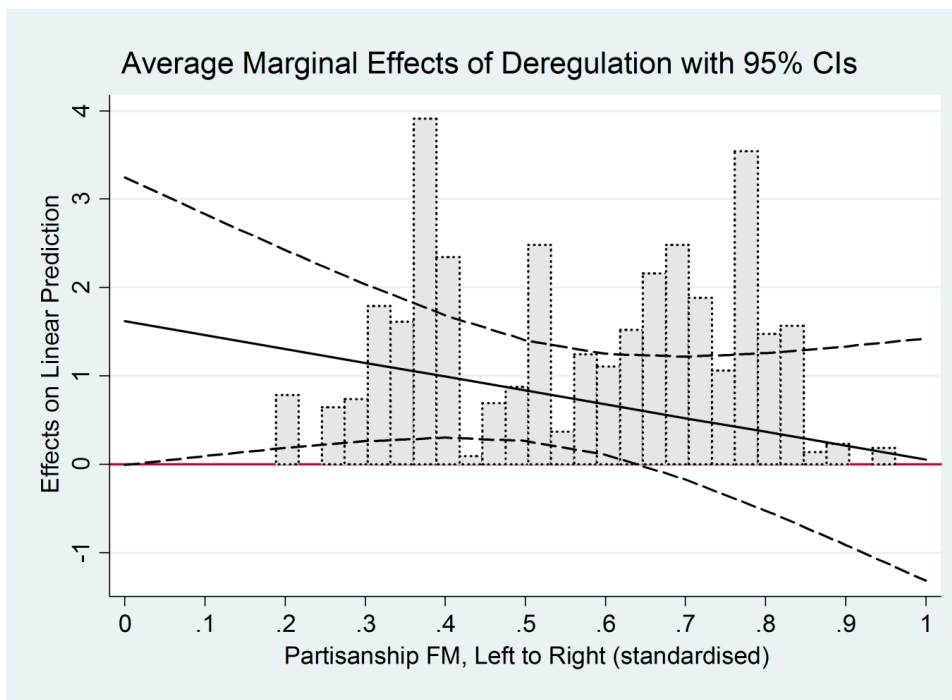
Notes: Depicted are marginal effects of deregulatory reforms for finance ministers conditional on their partisanship together with the density histogram, computed from Model 3 of Table 4.

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[8] Similarly, when the sample is split between left-wing and right-wing finance ministers and the LPM including all controls is fitted to both of these subsamples separately, the effect of deregulation on post-government employment in the financial sector is estimated as 1.101 (p=0.032; N=98) for leftist ministers and 0.202 (p=.602; N=151) for right-leaning individuals.

4.4   Robustness Checks

I carried out various tests to examine the robustness of the main results. First of all, I reran the models assigning the first governor and finance minister to every country-year observation. This yields a panel dataset of 153 central bank governors and 321 finance ministers for the sample period. Overall, there are 61 country-year observations and 145 observations in which the selected governor and finance minister differ, respectively. Concerning the results for the career socialisation mechanism, the effect sizes of *Financeprior* shrink by about 0.03 points for central bank governors and no longer reach statistical significance at conventional levels (p=.110 in Model 3, Table A3). For finance ministers, the respective coefficients turn negative in several models but are still far from being statistically significant. Similarly, the coefficients of *Deregulation* in the LPM diminish slightly (Table A4). In light of these results, I further excluded years in which the governor and finance minister differ between the two samples (for a similar approach, see Moessinger 2014). Reassuringly, the effects again approximate the main results presented above[9], which suggests that selecting the first governor and finance minister in each year adds considerable noise to the data.

Secondly, I repeated the analysis of the career concerns mechanism using conditional logistic regressions. As indicated above, fixed effects logistic regressions exclude a significant amount of data if variation in the dependent variable is clustered among specific units and the fixed effects perfectly predict failure or success in the binary outcome. Nevertheless, despite the smaller sample, the results remain robust to this alternative specification: While no statistically significant effect can be shown for central bankers, there is clear evidence for the assumption that finance ministers increase their chances of gaining lucrative financial sector employment following their tenure by pursuing deregulatory policies (Table A5).

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[9] The estimated coefficients for *Financeprior* in Model 1-6 of the CCM then are 0.011 (p=.070), 0.013 (p=.065), 0.013 (p=.079), 0.001 (p=.805), 0.000 (p=.978) and -0.001 (p=.854), respectively.

Finally, I checked whether the results presented above fail to capture more dynamic aspects of the revolving door mechanisms. Since the development and implementation of regulatory reforms generally require a considerable amount of time, the influence of governors' and ministers' background on financial policy might only appear with a significant delay. To test this, I used up to five leads of a country's financial sector reform rather than the contemporaneous changes in financial deregulation as the dependent variable in the CCM. The lead of the dependent variable rather than the lag of the characteristics of governors and finance ministers was taken in order to avoid post-treatment bias that occurs if individuals' earlier policies, which are correlated with their background, influence control variables, such as banking crises or reforms in neighbouring countries. As shown in Tables A6 and A7, I do not find any delayed impact of officials' finance background on financial reforms. The estimated effects are not only far from being significant – which might also be due to the reduced sample sizes in lead regressions – but also much smaller in size. Although it is more difficult to effectively control for contemporaneous confounders such as macro-economic conditions and political environment at the time of reform in these lead regressions, this analysis still indicates that the immediate association of officials' characteristics and financial regulation is most important. Similarly, *quid pro quo* exchanges between officials and financial markets might not be based on governors' and ministers' overall deregulatory reforms but could be driven by their behaviour during specific years of their tenure. I therefore also examined whether markets pay greater attention to deregulatory reforms in an incumbent's first and last year[10]. Yet, I do not find that governors and finance ministers can boost their employment prospects in the financial sector if they deregulate more during their first or last year in office (Table A8).

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[10] Note that the observations for the regression for first year is smaller for both governors and finance ministers because the beginning of each country panel does not coincide with the first year of the acting governor and finance minister in that country in most cases.

Overall, these robustness checks lend further support to the specification used in this study and the inferences about the revolving door mechanisms in financial regulation that are derived from the models.

5   Conclusion and Discussion

President Donald Trump's recent nomination of Randal Quarles, a Wall Street veteran and former Treasury official, for Federal Reserve Vice Chair of Regulation spurred strong criticism among Democrats and progressives in Washington, with Senator Elizabeth Warren leading the way. In a hearing following the nomination, she openly attacked Quarles: '[T]he number one thing we need from the Fed's vice chair for supervision is a demonstrated willingness to stand up to the interests of the big banks that threaten the financial institutions. But when I look at your 30 year career spinning through the revolving door in the private sector Mr. Quarles, I just don't see it.' (Elizabeth Warren, cited in Nicolaci da Costa 2017, para.5)

This thesis empirically addressed this revolving door between government officials and financial business interests and explored whether career paths and career concerns of senior government insiders indeed affect financial market policy. While several findings are consistent with the theoretical concept of the revolving door, there are notable differences between administration officials. Deregulatory reforms are found to be significantly higher when central bank governors have a professional background in the financial services industry (*H1a*). In contrast, the results do not show that prior financial sector experience of finance ministers is associated with countries' reforms in financial regulation (*H1b*). Yet, while governors' financial policy is not demonstrated to have an impact on their post-government employability in the financial sector (*H2a*), the results suggest that finance ministers are much more likely to gain lucrative positions in the industry if they are known for strong

deregulatory reforms during their tenure (*H2b*). The latter effect is mostly sustained by left-leaning ministers whose partisan preferences are perceived to stand in contrast to such policies. Hence, whereas the revolving door from private banking towards government offices seems to have a stronger impact for central bank governors, the 'outbound' version of the phenomenon appears to be more important for finance ministers.

Overall, these findings help reconcile and expand two growing branches in the political economy literature. Firstly, this study shows that revolving door mechanisms are relevant for policy-makers and public policy – above and beyond their impact on employees of regulatory agencies (Cohen 1986; Grace and Phillips 2008; Cornaggia et al. 2016). Additionally, the results contribute to existing studies showing that political leaders have a considerable impact on countries' economic policies and performance (Dreher et al. 2009; Besley et al. 2011; Adolph 2013; Moessinger 2014; Hayo and Neumeier 2016; Mishra and Reshef 2017). To be sure, political institutions and interests of other political actors, especially in developed countries, certainly matter for policy outcomes in the area of financial regulation. Yet, any muting impact of other actors in the political system on regulatory reforms should make it more difficult to find my results. On the contrary, the analysis suggests that simply 'deducing officials' preferences from the attributes of their agencies, without considering how preferences develop informally and over time' (Schneider 1993, p.333) bears the risk of neglecting the power of shadow principals, such as the financial sector, to shape political agents' ideas and incentives.

Nevertheless, several limitations of the analysis deserve some closer attention. Due to data restrictions concerning policy-makers' motivations and preferences, this study could only examine indirect implications of the revolving door concept, especially for the career concerns mechanism. This not only impedes causal interpretation of the results but also gives rise to potential problems of simultaneity bias. The theoretical framework indeed suggests that

policy-makers shape regulatory policy with their next career step in mind. Hence, the prospects of being rewarded for lenient policy by the financial sector may induce policy-makers to deregulate in the first place. Nevertheless, the concern might be somewhat dampened by the fact that reverse causality in the LPM would imply that policy-makers can perfectly anticipate their employment by the sector in several years time. Yet, while the results of this study should be interpreted with these caveats in mind, future research might aim at further teasing out the direct intent of policy-makers. Additionally, the analysis was restricted to periods before the Great Recession. Based on the results of this study, it might be of interest to investigate whether distinct 'types' of politicians reacted differently to the shock of the financial crisis and how their professional backgrounds shaped the controversial policy responses in its aftermath, such as bank bailouts and reinforcements of financial regulation. I leave these questions for future research.

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7 Appendix

7.1 Analysis Appendix

Table A1: Summary statistics, Estimation Sample
Conditional Change Model

Variables	N	Mean	Std. Dev.	Min	Max
Reform (ΔIndex)	840	0.0215	0.0494	-0.167	0.333
Financeprior CB	838	0.333	0.472	0	1
Financeprior FM	836	0.152	0.359	0	1
Index (lag)	840	0.669	0.261	0	1
Econ degree CB	839	0.652	0.477	0	1
Ivy league CB	756	0.0648	0.246	0	1
Econ degree FM	837	0.389	0.488	0	1
Ivy league FM	778	0.0656	0.248	0	1
Left-right party FM	759	0.565	0.185	0.188	0.962
Left-right party PM	769	0.558	0.177	0.179	0.962
Banking crisis (lag)	837	0.0681	0.252	0	1
Reform in geogr. neighbours	804	0.0179	0.0170	-0.0740	0.136
IMF Programme	840	0.143	0.350	0	1

Notes: Statistics include democratic periods only (indicated by a positive Polity IV score).

Table A2: Summary statistics, Estimation Sample
Linear Probability Model

Variables	N	Mean	Std. Dev.	Min	Max
Central Bank Governors					
Financeafter CB	133	0.286	0.453	0	1
Deregulation CB	133	0.124	0.151	-0.0556	0.611
Years in office CB	133	6.338	4.183	1	30
Finance before office CB	133	0.308	0.464	0	1
Econ degree CB	133	0.632	0.484	0	1
Ivy league CB	121	0.0661	0.250	0	1
Finance ministers					
Financeafter FM	304	0.125	0.331	0	1
Deregulation FM	304	0.0581	0.0916	-0.111	0.500
Years in office FM	304	2.816	2.328	1	21
Finance before office FM	304	0.164	0.371	0	1
Econ degree FM	303	0.406	0.492	0	1
Ivy league FM	285	0.0596	0.237	0	1
Left-right party FM	267	0.568	0.183	0.188	0.962

Notes: Statistics include democratic periods only (indicated by a positive Polity IV score).

Table A3: Regression Models for Career Socialisation, First Policy-Maker
Conditional Change Model

	H1a: Governors			H1b: Finance ministers			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Finance before office CB	0.009 (0.006)	0.010 (0.007)	0.011 (0.007)				0.010 (0.007)
Finance before office FM				0.002 (0.005)	-0.003 (0.006)	-0.003 (0.006)	-0.005 (0.006)
Reform index (lag)	-0.132*** (0.021)	-0.142*** (0.021)	-0.135*** (0.021)	-0.129*** (0.022)	-0.111*** (0.021)	-0.106*** (0.022)	-0.131*** (0.025)
Econ degree CB		0.006 (0.005)	0.005 (0.005)				0.004 (0.005)
Ivy league CB		0.027** (0.011)	0.029*** (0.010)				0.028** (0.010)
Econ degree FM					0.001 (0.005)	0.001 (0.005)	0.000 (0.005)
Ivy league FM					-0.002 (0.011)	0.002 (0.011)	0.002 (0.012)
Left-right party FM					0.003 (0.012)	0.020 (0.013)	0.026* (0.013)
Banking crisis (lag)			-0.014 (0.009)			-0.025* (0.013)	-0.023* (0.012)
Left-right party PM			0.003 (0.011)			-0.023* (0.012)	-0.016 (0.013)
Reform in geogr. neighbours			-0.220 (0.165)			-0.269 (0.161)	-0.215 (0.165)
IMF programme			-0.011 (0.009)			-0.006 (0.010)	-0.019* (0.009)
N	834	752	658	836	696	662	597
Number of countries	32	32	30	32	30	30	29
R^2 (within)	0.19	0.21	0.22	0.19	0.18	0.19	0.23

Notes: Time-series cross-sectional OLS regression with country and year fixed effects (not reported); all models
include a constant. Dependent variable: $Reform_{c,t}$ (ΔI). Clustered standard errors by country in parentheses.
* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table A4: Regression Models for Career Concerns, First Policy-Maker
Linear Probability Model

	H2a: Governors			H2b: Finance Ministers		
	(1)	(2)	(3)	(4)	(5)	(6)
Deregulation (∑reform)	-0.408 (0.317)	-0.412 (0.373)	-0.167 (0.548)	0.638** (0.250)	0.582** (0.266)	0.676** (0.286)
Years in office		0.000 (0.010)	-0.000 (0.012)		0.005 (0.010)	0.001 (0.010)
Finance before office			0.126 (0.137)			0.105 (0.078)
Econ degree			0.128 (0.120)			-0.015 (0.046)
Ivy league			0.142 (0.256)			0.014 (0.104)
Left-right party FM						0.135 (0.116)
N	136	136	106	316	316	255
R^2	0.40	0.40	0.48	0.25	0.25	0.26

Notes: Linear probability OLS regressions with country and decade fixed effects (not reported); all models include a constant. Dependent variable: $Finance\ after_{i,c,t}$. Robust standard errors in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table A5: Regression Models for Career Concerns
Conditional Logistic Regression

	H2a: Governors			H2b: Finance Ministers		
	(1)	(2)	(3)	(4)	(5)	(6)
Deregulation (∑reform)	-1.250 (2.138)	-2.171 (2.530)	-0.997 (3.654)	5.933*** (2.146)	4.785** (2.388)	10.318*** (3.935)
Years in office		0.063 (0.091)	0.048 (0.106)		0.103 (0.097)	0.034 (0.155)
Finance before office			0.144 (0.855)			0.946 (0.699)
Econ degree			0.904 (0.914)			-0.584 (0.819)
Ivy league			1.416 (1.737)			-0.930 (1.311)
Left-Right party FM						4.003** (2.008)
N	80	80	69	181	181	104
$Pseudo\ R^2$	0.17	0.18	0.20	0.20	0.20	0.28

Notes: Conditional fixed effects logistic regression with country and decade fixed effects (not reported); all models include a constant. Dependent variable: $Finance\ after_{i,c,t}$. Standard errors in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table A6: Regression Models for Career Socialisation, Leaded Reforms (CB)
Conditional Change Model

	t	t+1	t+2	t+3	t+4	t+5
Finance before office CB	0.012*	0.007	0.005	0.004	0.002	0.002
	(0.007)	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)
Reform index (lag)	-0.122***	-0.129***	-0.128***	-0.107***	-0.102***	-0.080***
	(0.018)	(0.023)	(0.023)	(0.019)	(0.016)	(0.018)
Econ degree CB	0.008	0.001	0.002	-0.003	-0.002	-0.008
	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.006)
Ivyleague CB	0.027**	0.017*	0.008	0.004	-0.009	-0.008
	(0.012)	(0.009)	(0.008)	(0.003)	(0.013)	(0.016)
Banking crisis (lag)	-0.016	0.006	0.010	0.002	0.005	-0.004
	(0.009)	(0.008)	(0.008)	(0.006)	(0.007)	(0.007)
Left-right party PM	0.001	-0.011	-0.012	0.004	0.008	0.016
	(0.012)	(0.013)	(0.011)	(0.009)	(0.011)	(0.011)
Reform in geogr. neighbours	-0.253	-0.062	0.288**	-0.186	0.204	0.060
	(0.157)	(0.174)	(0.114)	(0.202)	(0.151)	(0.117)
IMF Programme	-0.008	-0.004	0.004	0.000	0.007	0.016*
	(0.009)	(0.010)	(0.010)	(0.012)	(0.013)	(0.009)
N	659	659	630	601	572	543
Number of countries	30	30	30	30	30	29
R^2 (within)	0.21	0.21	0.22	0.19	0.19	0.17

Notes: Time-series cross-sectional OLS regression with country and year fixed effects (not reported); all models include a constant. Dependent variable: $Reform_{c,t}$ (ΔI). Clustered standard errors by country in parentheses.
* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table A7: Regression Models for Career Socialisation, Leaded Reforms (FM)
Conditional Change Model

	t	t+1	t+2	t+3	t+4	t+5
Finance before office FM	0.002 (0.006)	0.004 (0.005)	-0.003 (0.004)	-0.006 (0.006)	-0.008 (0.006)	-0.004 (0.007)
Reform index (lag)	-0.111*** (0.022)	-0.112*** (0.023)	-0.114*** (0.024)	-0.095*** (0.018)	-0.095*** (0.015)	-0.086*** (0.014)
Econ degree FM	-0.001 (0.005)	0.003 (0.004)	0.003 (0.005)	0.004 (0.006)	0.004 (0.004)	0.002 (0.004)
Ivyleague FM	0.009 (0.011)	-0.007 (0.011)	0.006 (0.009)	0.008 (0.008)	-0.008 (0.005)	-0.007 (0.011)
Left-right party FM	0.015 (0.010)	0.015 (0.009)	0.005 (0.013)	-0.009 (0.018)	0.014 (0.010)	0.012 (0.014)
Banking crisis (lag)	-0.016 (0.011)	-0.001 (0.007)	0.003 (0.008)	-0.005 (0.006)	0.011 (0.008)	-0.004 (0.008)
Left-right party PM	-0.021* (0.011)	-0.032** (0.015)	-0.025** (0.011)	0.003 (0.015)	-0.003 (0.007)	0.017 (0.012)
Reform in geogr. neighbours	-0.290* (0.169)	-0.006 (0.172)	0.352*** (0.104)	-0.225 (0.192)	0.162 (0.172)	0.138 (0.120)
IMF Programme	-0.008 (0.009)	0.006 (0.007)	0.007 (0.007)	0.004 (0.011)	0.003 (0.012)	0.010 (0.007)
N	661	661	634	609	582	555
Number of countries	30	30	30	30	29	29
R^2 *(within)*	0.20	0.20	0.20	0.19	0.20	0.17

Notes: Time-series cross-sectional OLS regression with country and year fixed effects (not reported); all models include a constant. Dependent variable: $Reform_{c,t}$ (ΔI). Clustered standard errors by country in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table A8: Regression Models for Career Concerns, First/Last Year
Linear Probability Model

	Governors		Finance Ministers	
	First Year	Last Year	First Year	Last Year
Deregulation (Yearly)	0.686 (0.844)	0.245 (0.762)	0.575 (0.403)	0.261 (0.379)
Finance before office	0.106 (0.122)	0.051 (0.105)	0.105 (0.077)	0.116 (0.078)
Econ degree	0.106 (0.125)	0.104 (0.112)	-0.049 (0.049)	-0.030 (0.051)
Ivy league	-0.027 (0.283)	0.079 (0.196)	0.024 (0.106)	0.035 (0.101)
Left-right party FM			0.165 (0.123)	0.123 (0.120)
N	104	121	241	249
R^2	0.47	0.47	0.27	0.24

Notes: Linear probability OLS regressions with country and decade fixed effects (not reported); all models include a constant. Dependent variable: $Financeafter_{i,c,t}$. Robust standard errors in parentheses. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

7.2   Data Appendix

Table A9: Description of Data Sources and Coding of Variables

Variable	Variable Name in the Data Set	Description	Source
Main variables			
Reform	*reform*	Annual change in the index of financial deregulation ($\Delta Index_{c,t}$); $Index_{c,t}$ captures a country's level of deregulation (0=very low deregulation, 1=very high deregulation)	Guiliano et al. (2013); variable: *reform_index* in the dataset finaldata_regressions.dta in their online appendix
Deregulation	*overallreformcb/ overallreformfm*	Sum of the variable *Reform* over a central bank governor's/finance minister's term in office (for democratic periods only)	Guiliano et al. (2013); variable: sum of Δ *reform_index* over a governor's/minister's tenure
Finance before office CB/ Finance before office FM	*financeprecb/ financeprefm*	Dummy variable for whether the central bank governor's/finance minister's past professional experiences include working in a commercial bank or the financial sector more broadly	Hallerberg and Wehner (2016); variable: *privatefinancecb/ privatefinancefm*
Finance after office CB/ Finance after office FM	*directfinancepostcb/ directfinancepostfm*	Dummy variable for whether the central bank governor/finance minister gained employment in the private sector within 2 years after leaving office	Various sources (see below)
Controls			
Years in office	*yearscb/yearsfm*	Number of a central bank governor's/finance minister's years in office at the time of leaving office	Own calculations
Econ degree	*econdegree2cb/ econdegree2fm*	Dummy variable indicating whether a central bank governor/finance minister has a masters and/or PhD in economics	Hallerberg and Wehner (2016); variable: *econdegreecb2/econdegreefm2*
Ivy league	*ivyleaguecb/ivyleaguefm*	Dummy variable indicating whether a central bank governor/finance minister has a masters and/or PhD degree from an ivy league university	Hallerberg and Wehner (2016); variable: *graduateinstitutioncb/ graduateinstitutionfm*

Left-right party FM	*lrpartyfm_s*	Standardised score of ideological position of the political party of the finance minister; theoretical range from 0 = left to 1 = right	Hallerberg and Wehner (2016); variable: *lrpartyfm_s,* adapted from Benoit and Laver (2006)
Banking crisis	*crisisyearly*	Dummy variable for whether a country experiences a banking crisis, yearly information	Hallerberg and Wehner (2016); variable: *lvbankingall* (aggregated on yearly basis)*,* adapted from Laeven and Valencia (2012)
Left-right party PM	*lrpartypmfirst_s*	Standardised score of ideological position of the political party of the prime minister or president; theoretical range from 0 = left to 1 = right; to aggregate information on a yearly basis, the first party in every year was taken	Hallerberg and Wehner (2016); variable: *lrpartypm_s*, adapted from Benoit and Laver (2006)
Reform in geogr. neighbours	*geoneighbor*	Average of reforms in neighbouring countries, weighted by geographical distance	Giuliano et al. (2013); variable: $\Delta geo\_neighbor$
IMF programme	*IMF_Program*	Dummy variable of whether country is subject to an IMF programme or not	Giuliano et al. (2013); variable: *IMF_Program*

Data collection and coding procedure for *Financeafter*

The primary sources for the data on each policy-maker's post-government employment were

- BoardEx (https://www.boardex.com/),
- World Who's Who Online (www.worldwhoswho.com.gate2.library.lse.ac.uk/) and
- Munzinger (https://www.munzinger.de/search/start.jsp).

These biographical databases were supplemented by various online sources including Bloomberg (https://www.bloomberg.com/europe), Britannica (https://www.britannica.com/) as well as central bank and finance ministry websites, personal websites of policy-makers, websites of official institutions such as national parliaments and the European Parliament, national encyclopedias and newspaper reports.

Table A10: List of Central Bank Governors with Prior Experience in Finance

No.	Country	Name	Start Year	End Year
1	Australia	Robert Alan Johnston	1982	1989
2	Austria	Hans Kloss	1973	1978
3	Austria	Hellmuth Klauhs	1988	1990
4	Austria	Maria Schaumayer	1990	1995
5	Austria	Klaus Liebscher	1995	2008
6	Belgium	Jean Godeaux	1982	1989
7	Bulgaria	Ivan Dragnevski	1990	1991
8	Chile	Vittorio Corbo	2003	2007
9	Czech Rep	Josef Tošovský	1990	1997 (Dez)
10	Czech Rep	Josef Tošovský	1998 (July)	2000
11	Czech Rep	Zdenek Tuma	2000	2010
12	Denmark	Bodil Nyboe Andersen	1995	2005
13	Estonia	Vahur Kraft	1995	2005
14	Finland	Mauno Koivisto	1973	1982
15	Finland	Rolf Kullberg	1983	1992
16	Germany	Karl Klasen	1973	1977
17	Greece	Efthymios Christodoulou	1992	1993
18	Greece	Nikolaos Garganas	2002	2008
19	Hungary	Surányi György	1995	2001
20	Hungary	Zsigmond Járai	2001	2007
21	Italy	Guido Carli	1973	1975
22	Japan	Teiichiro Morinaga	1975	1980
23	Japan	Satoshi Sumita	1985	1989
24	Japan	Yasuo Matsushita	1994	1998
25	Latvia	Ilmars Rimsevics	2002	.
26	Lithuania	Romualdas Visokavičius	1993	1993
27	Lithuania	Kazys Ratkevičius	1993	1996
28	Mexico	Miguel Mancera Aguayo	1983	1998
29	Netherlands	Wim Duisenberg	1982	1997
30	New Zealand	Spencer T. Russell	1984	1988
31	New Zealand	Donald Thomas Brash	1988	2002
32	Portugal	José da Silva Lopes	1975	1980
33	Portugal	Manuel Jacinto Nunes	1980	1985
34	Portugal	José Alberto Tavares Moreira	1986	1992
35	Portugal	António José Fernandes de Sousa	1994	2000
36	Portugal	Vítor Manuel Ribeiro Constâncio	2000	2010
37	Romania	Emil Ghizari	2000	2001
38	Spain	Jaime Caruana Lacorte	2000	2006
39	Sweden	Carl Henrik Nordlander	1976	1979
40	Sweden	Bengt Dennis	1982	1994
41	Sweden	Lars Heikensten	2003	2005
42	Turkey	Yavuz Canevi	1984	1987
43	Turkey	Nihat Bülent Gültekin	1993	1994
44	Turkey	Şakir Yaman Törüner	1994	1996
45	Turkey	Süleyman Gazi Erçel	1996	2001
46	UK	Gordon Richardson	1973	1983

47	UK	Robin Leigh-Pemberton	1983	1993
48	US	Paul Volcker	1979	1987
49	US	Alan Greenspan	1987	2006

Table A11: List of Finance Ministers with Prior Experience in Finance

No.	Country	Name	Start Year	End Year
1	Austria	Franz Vranitzky	1984	1986
2	Austria	Andreas Staribacher	1995	1996
3	Belgium	Andre Vlerick	1973	1973
4	Bulgaria	Milen Velchev	2001	2005
5	Canada	Michael Wilson	1984	1991
6	Denmark	Thor Pedersen	2001	2007
7	Estonia	Heiki Kranich	1994	1994
8	Estonia	Opmann Mart	1995	1999
9	Estonia	Harri Õunapuu	2002	2003
10	Estonia	Aivar Sõerd	2005	2007
11	Finland	Ahti Pekkala	1979	1986
12	Finland	Esko Ollila	1986	1987
13	France	Jean-Pierre Fourcade	1974	1976
14	France	Edmond Alphandéry	1993	1995
15	France	Thierry Breton	2005	2007
16	Greece	Miltiadis Evert	1980	1981
17	Greece	Dimitrios Koulourianos	1982	1983
18	Greece	Ioannis Palaiokrassas	1990	1992
19	Hungary	László Békesi	1994	1995
20	Hungary	Lajos András Bokros	1995	1996
21	Hungary	Péter Medgyessy	1996	1998
22	Hungary	Zsigmond Járai	1998	2001
23	Hungary	Csaba László	2002	2004
24	Hungary	Tibor Draskovics	2004	2005
25	Italy	Gaetano Stammati	1976	1976
26	Italy	Augusto Fantozzi	1995	1996
27	Latvia	Edmunds Krastiņš	1999	2000
28	Latvia	Oskars Spurdziņš	2004	2007
29	Lithuania	Rolandas Matiliauskas	1996	1997
30	Lithuania	Jonas Lionginas	1999	1999
31	Lithuania	Vytautas Dudėnas	1999	2000
32	Lithuania	Jonas Lionginas	2000	2001
33	Mexico	José Ángel Gurría	1998	2001
34	Netherlands	Onno Ruding	1982	1989
35	Netherlands	Hans Hoogervorst	2002	2003
36	Poland	Andrzej Olechowsk	1992	1992
37	Poland	Jarosław Bauc	2000	2001
38	Poland	Andrzej Raczko	2003	2004
39	Poland	Mirosław Gronicki	2004	2005
40	Poland	Teresa Lubińska	2005	2006
41	Portugal	José da Silva Lopes	1978	1978

42	Portugal	Manuel Jacinto Nunes	1978	1979
43	Portugal	Antonio Sousa Franco	1979	1980
44	Portugal	João Morais Leitão	1981	1981
45	Portugal	João Salgueiro	1981	1983
46	Portugal	Miguel Cadilhe	1985	1990
47	Portugal	Eduardo de Almeida Catroga	1993	1995
48	Portugal	António Luciano Pacheco de Sousa Franco	1995	1999
49	Portugal	António José de Castro Felix Bagão	2004	2005
50	Romania	Decebal Traian Remes	1998	2001
51	Romania	Sebastian Gheorghe Teodor Vladescu	2005	2007
52	Spain	Carlos Solchaga	1985	1993
53	Spain	Cristóbal Montoro	2000	2004
54	Switzerland	Hans-Rudolf Merz	2004	2010
55	Turkey	Ismet Sezgin	1979	1980
56	Turkey	Kemal Unakitan	2002	2009
57	UK	John Major	1989	1990
58	UK	Norman Lamont	1990	1993
59	US	William E. Simon	1974	1977
60	US	Donald Regan	1981	1985
61	US	Nicholas F. Brady	1988	1993
62	US	Lloyd Bentsen	1993	1995
63	US	Robert Rubin	1995	1999

Table A12: List of Central Bank Governors with Future Experience in Finance

No.	Country	Name	Start Year	End Year
1	Australia	Harold Murray Knight	1975	1982
2	Australia	Ian Macfarlane	1996	2006
3	Belgium	Jean Godeaux	1982	1989
4	Belgium	Guy Quaden	1999	2011
5	Bulgaria	Lyubomir Filipov	1996	1997
6	Canada	John Crow	1987	1994
7	Canada	Gordon Thiessen	1994	2001
8	Canada	David Dodge	2001	2008
9	Chile	Andrés Bianchi	1989	1991
10	Chile	Carlos Massad	1996	2003
11	Chile	Vittorio Corbo	2003	2007
12	Czech Rep	Pavel Kysilka	1998	1998
13	Denmark	Bodil Nyboe Andersen	1995	2005
14	Estonia	Rein Otsason	1990	1991
15	Estonia	Vahur Kraft	1995	2005
16	Germany	Karl Klasen	1973	1977
17	Germany	Otmar Emminger	1977	1980
18	Germany	Karl Otto Pöhl	1980	1991
19	Germany	Hans Tietmeyer	1993	1999
20	Germany	Ernst Welteke	1999	2004

21	Germany	Axel A. Weber	2004	2011
22	Hungary	Surányi György	1990	1991
23	Hungary	Surányi György	1995	2001
24	Ireland	Thomas Kenneth Whitaker	1973	1976
25	Ireland	Maurice O'Connell	1994	2002
26	Lithuania	Vilius Baldišis	1990	1993
27	Netherlands	Jelle Zijlstra	1973	1982
28	Netherlands	Nout Wellink	1997	2012
29	Poland	Andrzey Topinski	1991	1992
30	Portugal	José Alberto Tavares Moreira	1986	1992
31	Spain	José Ramón Álvarez Rendueles	1978	1984
32	Spain	Luis Ángel Rojo Duque	1992	2000
33	Sweden	Lars Wohlin	1979	1982
34	Sweden	Urban Bäckström	1994	2003
35	Switzerland	Edwin Stopper	1973	1974
36	Switzerland	Pierre Languetin	1985	1988
37	Switzerland	Jean-Pierre Roth	2001	2009
38	Turkey	Nihat Bülent Gültekin	1993	1994
39	Turkey	Şakir Yaman Törüner	1994	1996
40	Turkey	Süleyman Gazi Erçel	1996	2001
41	UK	Leslie O'Brien	1973	1973
42	UK	Gordon Richardson	1973	1983
43	UK	Edward George	1993	2003
44	US	Paul Volcker	1979	1987

Table A13: List of Finance Ministers with Future Experience in Finance

No.	Country	Name	Start Year	End Year
1	Australia	John Dawkins	1992	1994
2	Austria	Hannes Androsch	1973	1981
3	Austria	Ferdinand Lacina	1986	1995
4	Austria	Karl-Heinz Grasser	2000	2007
5	Bulgaria	Stoyan Aleksandrov	1993	1994
6	Bulgaria	Dimitar Kostov	1995	1997
7	Canada	Donald Frank Mazankowski	1991	1993
8	Canada	John Paul Manley	2002	2003
9	Czech Rep	Ivan Kocárník	1992	1997
10	Czech Rep	Pavel Mertlík	1999	2001
11	Czech Rep	Jiri Rusnok	2001	2002
12	Denmark	Palle Simonsen	1984	1989
13	Estonia	Rein Miller	1990	1992
14	Finland	Ahti Pekkala	1979	1986
15	Finland	Iiro Tahvo Juhani Viinanen	1991	1996
16	Hungary	Péter Medgyessy	1996	1998
17	Italy	Domenico Siniscalco	2004	2005
18	Lithuania	Algimantas Križinauskas	1996	1996
19	Mexico	Pedro Aspe	1988	1994
20	Mexico	Francisco Gil Díaz	2000	2006

21	Netherlands	Roelof Nelissen	1973	1973
22	Netherlands	Wim Duisenberg	1973	1978
23	Netherlands	Onno Ruding	1982	1989
24	Netherlands	Gerrit Zalm	2003	2007
25	Poland	Henryk Chmielak	1994	1994
26	Poland	Jarosław Bauc	2000	2001
27	Portugal	Ernani Lopes	1983	1985
28	Portugal	Miguel Cadilhe	1985	1990
29	Portugal	Eduardo de Almeida Catroga	1993	1995
30	Portugal	Luís Campos e Cunha	2005	2005
31	Spain	Pedro Solbes Mira	2004	2009
32	Sweden	Rolf Wirten	1980	1982
33	Sweden	Kjell-Olof Feldt	1982	1990
34	Sweden	Erik Åsbrink	1996	1999
35	Switzerland	Kaspar Villiger	1996	2004
36	UK	Anthony Barber	1973	1974
37	UK	Nigel Lawson	1983	1989
38	UK	Norman Lamont	1990	1993
39	UK	Kenneth Clarke	1993	1997
40	US	Nicholas F. Brady	1988	1993
41	US	Robert Rubin	1995	1999
42	US	John W. Snow	2001	2006