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Abstract
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Keywords
Revolving Doors, Banking Supervision, Conflicts of Interest

JEL Codes
G14, G21, G28

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The Reverse Revolving Door in the Supervision of European Banks*

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Abstract

We show that the presence of executive directors with prior experience in the finance industry is pervasive on the boards of European national banking supervisors. Up to one executive out of three has previously held positions in the industry she supervises (or in closely connected ones). Appointments of such executives impact more favorably bank valuations than those of executives without a finance background. The proximity to supervised banks—rather than superior financial expertise or intrinsic skills—appears to drive the positive differential effect of finance-related executives. Finally, the presence of former finance professionals in the board of banking authorities associates with lower regulatory capital and faster growth of banks, pointing to a more lenient supervisory style.

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1 Introduction

A remarkable flow of workers between banks and their supervisory authorities exists at all hierarchical levels, a phenomenon known as the *revolving door* (e.g., Lucca, Seru, and Trebbi, 2014; Shive and Forster, 2016). Several studies explore, theoretically and empirically, its implications for supervisory activity (e.g., Agarwal, Lucca, Seru, and Trebbi, 2014; Bond and Glode, 2014), but focus almost invariably on regulators seeking employment in the banking sector, possibly because of the media and regulatory attention (through, for instance, so-called *cooling-off periods*) these moves attract. We make one step back and look at the opposite job flow, from supervised banks to their supervisors: the *reverse revolving door*.[1]

This phenomenon, just like the possibility for regulators to secure a position in the banking industry in the future, may alter regulation design and the effectiveness of supervision. On the one hand, former bankers may bring to the table their industry expertise, helping design better rules and enforce them more effectively. On the other, their lingering relationships with former colleagues may be conducive to cronyism and regulatory capture.

The trade-off posed by the reverse revolving door is scarcely scrutinized by the public and relatively underexplored in academic research. It is peculiar, for instance, that in the Federal Reserve System of the United States (US), the presence of bankers at the very top of supervisory institutions is enshrined in bylaws (e.g., Adams, 2017). The phenomenon is even less understood, both in its magnitude and implications, within the European Union (EU), where such a presence is not hardwired in the system. We fill this gap by collecting curriculum vitae (CV) data on executive directors of banking supervisory authorities from selected EU countries, which offer a useful laboratory in which supranational and national institutions interact. After quantifying the pervasiveness of former finance professionals' presence at the top of such institutions, we assess their impact on supervised banks' value by means of an event study, which points to their friendliness towards the industry relative to supervisors with a civil-servant or an academic background. Furthermore, banks supervised by authorities that resort more to executives with a finance background tend to be less capitalized and to grow faster, while exhibiting lower credit spreads on their debt. This is suggestive evidence that former finance professionals are more lenient supervisors and that bank investors, as a result, anticipate

[1] Though uncommon, we are not the first to use this expression (e.g., Fang, 2013; Castellani and Dulitzky, 2018; Alquézar-Yus and Amer-Mestre, 2020).

a higher probability of government support in case of distress.

More specifically, our manually-collected dataset features detailed information on the careers of the 190 executive directors serving on the boards of 14 national supervisors from the ten largest EU economies over the period 2002-2019. Levering such a dataset, we assess the magnitude of the reverse revolving door across Europe. Using a broad definition of what constitutes a significant experience in the finance sector, the phenomenon involves up to 37.2% of the executives. Even restricting the definition to those individuals that previously held a managerial position in finance, the phenomenon appears to be important in most countries' institutions, although with notable cross-country and time variation. This is not the only facet in which national supervisors' executive hires display heterogeneity: we observe a divide between a group of countries (like France and Italy), where civil-servant profiles largely prevail, and others (like the United Kingdom—UK—and Sweden), where a more balanced mix in terms of public and private sector backgrounds is pursued.[2] In addition, we compare hiring choices of supervisory authorities against those of supervised banks. While we find similarities in the profiles selected by these two groups of institutions, supervisory authorities favor a more diverse industry background within their executive boards. The appointment of former finance professionals appears to be part of this broader pattern.

To infer how personal links to the banking industry shape supervisory activity, we carry out an event study on bank stock returns around announcements of executive appointments. The average appointment is met with a significantly negative return in the range of -0.46% to -0.37% on the announcement day. The value-decreasing effect, however, is driven by executives without prior experience in the finance industry. Appointees with a finance background trigger no significant market reaction. Provided that both groups of executives inform supervisory activity with valuable (though different) technical know-how, we argue that proximity to supervised entities of former bankers underlies the result. We corroborate this conjecture by separately examining direct bank-executive links, where the proximity aspect is particularly pronounced. Consistently, appointments of this type are associated with positive stock price responses. In other words, based on investors' expectations, executives' industry proximity matters and leads to a differential valuation effect of finance- and non-finance-related appointments.

We narrow down the role of industry proximity by ruling out two important alternative

[2]Throughout the paper, we indicate as "private" those entities that are neither government-owned nor, more generally, part of the public administration. For simplicity, we instead refer to entities issuing public equity securities as "listed".

explanations for our findings. First, investors may react more positively to finance-related appointments because these executives are intrinsically more skilled than the other ones. Whereas intrinsic skills are unobservable, existing theory and evidence suggests that the quality of the applicant pool of supervisors varies countercyclically, as banking becomes less attractive for talented individuals during downturns (Bond and Glode, 2014; Lucca et al., 2014). Put differently, after controlling for market-wide fluctuations, bank stocks should react more favorably to appointments made in recessions. We find no evidence of such a pattern. To the contrary, reactions are even more negative in bad times, possibly because of the anticipation of new executives' support of tougher enforcement actions during a crisis.

Second, most of the national supervisors in our sample are central banks, which are charged with numerous tasks. Out of the ten EU countries analyzed, only two do not belong to the eurozone, so, upon executive appointments, bank stock prices are unlikely to impound expected changes in monetary policy, which is in the hands of the European Central Bank (ECB). But it is still possible that appointments convey information about tasks other than banking supervision. To verify that we are indeed capturing investors' views about future supervisory activity, we exploit the introduction of the Single Supervisory Mechanism (SSM), which transferred supervisory powers over important banks (such as the ones in our sample) from national supervisors to the ECB. Consistently, the average market reaction to national supervisors' executive appointments turns insignificant in the post-SSM period.

Finally, we study correlation patterns between the overall board structure of banking authorities and the behavior of supervised banks over a longer horizon. Banks that are under the supervision of authorities employing more executives with a finance background exhibit lower regulatory capital, faster growth, and lower spreads on credit default swaps (CDSs) written on their debt. This is consistent with looser supervision and with market participants expecting a higher probability of bailout (or a lower probability of to be bailed in) in case of bank distress.

To sum up, our results suggest that the reverse revolving door in the boards of banking supervisory authorities is prevalent. Moreover, based on investors' expectations and on supervised banks' performance and policies, former finance professionals differ from other executives by introducing a positive bias towards supervised banks. Detecting the presence (or absence) of such a bias in actual supervisory actions, though it exceeds the scope of this paper, is key to substantiate the consequences of the reverse revolving door.

This study contributes to the literature studying the relationship between banking

supervisory authorities and supervised entities through the revolving door.[3] Lucca et al. (2014) characterize the trade-off posed by the flow of workers from the regulatory to the banking sector. This can lead to suboptimal outcomes if regulators soften their standards to enhance their future employability in the private sector ("quid-pro-quo hypothesis"). However, if regulators become more employable in banks by virtue of the expertise they acquire while in supervision, the revolving door may provide benefits for the financial system stability ("regulatory schooling hypothesis"). Lucca et al. (2014) provide evidence supportive of this second view for the US context. Shive and Forster (2016) show that US bank CEOs with a background in supervision are paid more and implement safer policies, also in line with the regulatory schooling hypothesis.

Whereas there is a substantial body of work on the effects of workers flowing from the regulatory to the banking sector, the consequences of the reverse revolving door are much less studied.[4] With regards to the US, the structure of Federal Reserve Banks' boards, in which one-third of the directors are nominated by member banks, is a useful setting to evaluate such consequences. Adams (2017) and Black and Dlugosz (2018) find that the appointment of a connected director benefits banks through supervisory forbearance and information advantage. Lim, Hagendorff, and Armitage (2019) find that, ceteris paribus, connected banks are less capitalized than non-connected ones, in line with a regulatory capture story. Whereas these studies assess the consequences of an institutionally recognized reverse revolving door, we add to the literature by documenting the existence of a similar, informal phenomenon in EU national supervisors and by studying its impact on supervised banks.

[3]The revolving door is a pervasive phenomenon even outside banking, and specifically in any highly regulated industry. For instance, Cornaggia, Cornaggia, and Xia (2016) and Kempf (2020) analyze the revolving door among credit rating agencies, their client firms, and underwriting banks. Blanes i Vidal, Draca, and Fons-Rosen (2012) look at the flow of US federal government employees into lobbying, documenting that they can lever their personal connections in government to generate revenues. Luechinger and Moser (2020) illustrate that firms benefit from hiring former EU commissioners, especially if they recruit them shortly after they left office, in line with the intuition that what matters is their personal connections. Silano (2022) studies the revolving door between government debt management units and financial institutions acting as dealers for government securities.

[4]One prominent exception is the study by Alquézar-Yus and Amer-Mestre (2020), who look at the impact of the reverse revolving door on legislative voting at the European Parliament. Moreover, a large literature investigates the value for financial firms of having personal relationships with the public administration. For instance, Acemoglu, Johnson, Kermani, Kwak, and Mitton (2016) shows that financial firms connected with Timothy Geithner experienced positive abnormal returns around the announcement of his appointment as Treasury Secretary. Lambert (2019) finds that lobbying banks are less likely to become subject to enforcement actions by their supervisors.

2 The reverse revolving door and supervised banks

Our analysis evaluates the consequences for supervised banks of the previous work experience of appointees at the top level of supervisory authorities. More specifically, we study the appointments of finance professionals against those of individuals with no such experience (e.g., academics, civil servants, etc.), where the former contribute to the reverse revolving door. To inform the empirical analysis, here we elaborate on the possible forces driving the impact of the appointment of finance professionals as supervisors on supervised banks' performance and policies.

Before characterizing such forces, it is worth briefly sketching the rules governing the appointment of executive board members of national supervisors in Europe. The 2019 Bank Regulation and Supervision Survey maintained by the World Bank (see, e.g., Cihak, Demirgüç-Kunt, Peria, and Mohseni-Cheraghlou, 2013) provides a useful overview. In most of the cases appointments are made by the head of the government or the minister of finance. However, in some instances appointments involve other legislative bodies, such as the parliament (e.g, in Belgium, Ireland, and Spain). The procedures are invariably highly formalized and aimed at ensuring independence from political contingencies. In some instances (e.g., in Austria, Germany, Ireland, and the UK), appointments are made through a multifaceted process that involves advice, recommendation or consent by external experts in order to reduce the influence of any single political party in the selection process. However, in practice, the involvement of external parties may not fully ensure independence from political contingencies if the confirmation or advice is no more than a formality. Lengthy terms for the board relative to the political cycle, re-appointment rules, power to dismiss and post-employment restrictions help to underpin independence of central banks from external contingencies. Term length (in years) generally ranges between five and seven years (except for Germany, where no maximum duration is defined). To remove the incentive for supervisory board members to seek favors from parties who may decide for their reappointment, only one or two terms are allowed. To further reduce political influence, the power to dismiss executive board members is restricted to particularly severe causes and typically involves more than one authority (e.g., the head of the government and the parliament). Finally, post-employment restrictions are important tools to prevent conflict of interests between board executives and supervised entities. Numerous supervisory authorities prevent their executives from seeking employment in supervised entities after the end of their term through cooling-off periods, which effec-

tively limit the revolving door.[5] By contrast, restrictions on the reverse revolving door, i.e., on the appointment of executives with a banking industry background, are hardly found.

Against this backdrop and abstracting from intrinsic skill differences driven by self-selection into regulation or banking, the effect of the appointment of an individual crucially hinges on her proximity to supervised entities (*bias*, for brevity) as well as on her technical knowledge about the banking sector and its regulation (*competency*, for brevity). The personal and institutional connections established by an individual during her career could interfere with her supervisory "style". Although not necessarily representing cronyism, these connections may be conducive to regulatory capture, i.e., to decisions biased in favor of incumbents institutions (e.g., provision of private information, preferential treatment, etc.).

Supervisors' competency helps effectively design and enforce rules on inherently complex matters. Such knowledge may also translate into more timely detection and sanctioning of bank misbehavior. Put differently, the impact of supervisors' competency cannot be evaluated ex ante in isolation, but it crucially depends on the characteristics of the banking market. If it is highly competitive, one can expect that supervisors' competency will ceteris paribus overall benefit incumbent banks by preserving the efficiency of the system. By contrast, if the incumbent banks enjoy substantial (quasi-)rents, a regulator favoring competition and transparency will impose costs on such institutions (at least in the short-run).

Whereas former bankers are arguably more likely than other supervisors to entertain personal relationships with employees of supervised banks, it is difficult to form a prior on the competency distribution of the two groups of supervisors. Whereas former bankers probably have a better knowledge of supervised entities, regulators without banking experience may better understand regulatory issues if their background is in the public sector. Former academics, for instance, might have a better view of the system as a whole. We thus expect the bias channel to be largely muted for supervisors without a finance background. At the same time, the sign of the difference in average competency (whose effect is ex ante ambiguous, as argued above) across the two groups of supervisors is unclear.

Going back to differences in skills across the candidate pools of banks and regulators, the state of the economy is an important factor (Bond and Glode, 2014; Lucca et al.,

[5]See Frisell, Roszbach, and Spagnolo (2009), who also provide a comprehensive overview on the governance of central banks, which in most countries hold banking supervisory powers.

2014). Very skilled individuals may prefer the higher compensation generally offered by the banking sector, especially during boom periods. Yet, these dynamics are plausibly more relevant for positions below the ones we consider. Executive board seats are highly prestigious roles, for which power considerations may matter just as much as—or even more than—mere monetary rewards. Thus, it is possible that bankers with high-profile careers might even decide to move on to a prestigious executive role at the supervisor. In other words, unlike for entry- or middle-level positions in supervision, "brain drain" towards banks may not be a major force at the very top level. Nonetheless, in the analysis below we inspect the role of the business cycle to insulate the effect of across-group differences in bias and competency from self-selection effects.

The interaction of supervisors' bias and competency determines the *net* effect on supervised banks' performance and policies, whose sign is a priori ambiguous. The mix of bias and competency, on average, is likely to vary with the background of the executives serving on the board of supervisory authorities. We are interested in empirically teasing out such differences with a variety of methods.

3 Data

We collect data on the characteristics and career paths of executive board members of National Central Banks (NCBs) and National Central Authorities (NCAs) in charge of banking supervision in Europe starting from 2002 until 2019. We focus on competent authorities from the ten largest economies that were part of the European Union as of 2002: Austria, Belgium, Germany, Spain, France, Ireland, Italy, Netherlands, Sweden, and the UK. Appendix Table A.1 provides the list of national supervisory institutions included in our sample. For most countries (e.g., Italy and France), only one institution supervises the banking sector, but in others the duty is shared between two institutions (Austria, Germany, and the UK). We construct a comprehensive dataset on all the executive directors serving on the board of the covered supervisory institutions by manually collecting their career paths from CVs. The final sample features 190 directorships at 14 institutions, resulting in 1,255 director-year observations.

For each director, we retrieve information on the appointment by using the Bloomberg Professional Service (BPS) news search function, which includes news from different sources, such as newspapers, official press releases from central banks, and a proprietary news service. In this way, we are able to precisely determine the date (and the time of the day) when each appointment was announced to the market. Importantly, executive

appointments are usually disclosed well in advance relative to the effective starting date, and in some cases on non-trading dates. Therefore, we check if a given announcement took place before or after market closing and/or during non-trading days.

As a result, we are able to identify the announcement dates of 124 appointments. Of these, 29 relate to the head of the executive body and 95 relate to other executive board members. In several instances, supervisory institutions appoint more than one executive at the same time. We exclude such multiple appointments from the analysis, because market reaction to them will reflect the heterogeneity in the background of the new directors, making it impossible to disentangle the impact of a specific type of career path (e.g., if one the same day a former banker and an academic are appointed). After this sample restriction, we are left with 81 announcements: 38 appointments of directors with previous experience in the finance industry, and 43 without such experience. Among the former, we are able to identify 16 announcements in which the director has a direct link to one of the listed banks included in our sample.

We then construct an alternative dataset on directors' career paths from the BoardEx database for the same period and countries as above. Starting from the universe of employment trajectories, we retain spells as executive in listed and non-listed firms, public administration, partnerships, and universities, and for which the starting date is available.[6] The broad sample coverage by BoardEx allows us to conveniently extend the analysis of appointments across all sectors and draw a comparison between the characteristics of appointees in supervision (or banking) relative to the rest of the economy. But the breadth of the sample comes at a cost. Indeed, BoardEx typically collects information on executive directors at *listed* companies (and subsidiaries thereof), for whom it provides also the prior employment history. Because of the last feature, any stint at a supervisory institution—but also at non-listed companies or in academia—only appears "indirectly", introducing a bias in this alternative dataset.[7] Moreover, given the sheer size of the

[6]We use information on non-executive spells (e.g., as non-executive director or outside of the board of directors) to measure job experience prior to an appointment. We instead exclude any spell in clubs, medical institutions, charities, sport clubs, and armed forces; these are relatively infrequent organization types in BoardEx and tangential to the focus of this paper.

[7]The banking supervisory institutions indirectly covered by BoardEx (i.e., those for which we observe at least one job spell) do not perfectly overlap with those in Appendix Table A.1 and comprise only 11 (vs. 14) of them: Osterreichische Nationalbank (Austria), Österreichische Finanzmarktaufsichtsbehörde (Austria), Deutsche Bundesbank (Germany), Bundesanstalt für Finanzdienstleistungsaufsicht (Germany), Banco de España (Spain), Bank of England (UK), Prudential Regulation Authority (UK), Financial Services Authority (UK), Banque de France (France), Banca d'Italia (Italy), and De Nederlandsche Bank (Netherlands). By contrast, BoardEx indirectly covers further national institutions, like those supervising financial markets: Autorité des services et marchés financiers (Belgium), Comisión Nacional del Mercado de Valores (Spain), Financial Conduct Authority (UK), Autorité de Contrôle Pru-

BoardEx database, we use an algorithm levering reported job titles to identify positions at executive level rather checking each spell manually. While obtaining a large sample, we may in turn misclassify some non-executive positions as such, and vice versa. Hence, we use the alternative dataset only to complement the main analysis—which instead builds on the manually-collected dataset—with a study of the determinants of appointments in supervision vs. banking.

Finally, to construct the bank sample, we start from the list of supervised entities under SSM as of year 2019 and the list of other systemically important institutions (O-SIIs) maintained by the European Banking Authority as of year 2019. Because the empirical analysis mainly focuses on an event study on stock returns around the relevant director appointment dates, we then select listed banks among them.[8] We then restrict the sample to those banks for which we could find information on the board of directors in BoardEx, bank accounting data in Bureau van Dijk's Bankscope and Bankfocus, and stock market data in BPS. We also collect bank CDS market data from BPS (complemented with Thomson Reuters Datastream). Country-level data on local sovereign credit spreads and macroeconomic conditions are from BPS and Datastream, respectively. Table 1 reports summary statistics for the final sample of 44 supervised banks. Included banks are listed and generally large. We are able to observe CDS spreads for around 60% of the observations. In around 10% of bank-years at least one executive has prior experience in financial supervision, which can be seen as a proxy of the *direct* revolving door phenomenon in banking.

4 The background of supervisors

Specific rules—as defined in bylaws and laws—and institutional culture govern and inform the operations of each supervisory authority, with ramifications on the selection of executive directors as well as on their activity. Here, we explore their prior experience and demographic traits across institutions and throughout time. For each individual, we observe her prior experience, education background, age, and gender as of the time

dentiel et de Résolution (France), Autorité des Marchés Financiers (France), Commissione Nazionale per le Società e la Borsa (Italy), and Autoriteit Financiële Markten (Netherlands). Furthermore, we observe a number of appointments at EU supervisory authorities: Committee of European Banking Supervisors (CEBS), European Banking Authority (superseding CEBS), ECB, and Committee of European Securities Regulators.

[8]This admittedly introduces a sample bias, because only few and generally large banks are listed in Europe (with the partial exception of the UK). We thus typically estimate the effect of top regulators' appointments on value from the perspective of dominant players in their economies.

of their first executive appointment at a given institution. Moreover, we examine how these characteristics change with the state of the business cycle. In this way, we obtain a prima facie assessment of the regulatory sector attractiveness relative to banking and get a sense of the across-sector differences in directors' intrinsic skills.

In Table 2, we draw a comparison of executive directors at supervisory authorities (Panel A) as opposed to those at supervised banks (Panel B).[9] Most executive directors at supervisory authorities have prior experience in the public sector (91.2%), but only 40.3% have experience in the private sector, and only 37.2% have prior experience in private or public financial institutions.[10] The opposite holds for bank directors. Conditional on having private sector experience, 92.3% (= 37.2%/40.3%) of supervisors held positions in the finance sector, similarly to bank directors. The average director in regulation has held 3.3 positions in the private sector before being appointed executive director or president of a national supervisor, a number considerably lower than the 15.2 spells of bank directors. The lower number of previous spells of regulators is not only a mechanical consequence of their more limited private sector experience, but it is likely to capture their lower inherent job mobility, which has been already documented by Lucca et al. (2014) in the US context. Indeed, the internal career path is frequent in the regulatory sector: 40.6% of directors in our sample held previous management positions below the board-level in the same institution. This is consistent with the intuition that a career in regulation requires accumulating highly specific human capital, which makes switching occupation particularly costly. A second factor favoring internal progressions (and low mobility) may relate to the risk preferences of professionals choosing to begin their career in regulation: these might be risk-averse individuals who highly value the job and income security offered by supervisory authorities.[11]

These statistics also provide an assessment of the reverse revolving door. Across all national supervisors, as noted above, 37.2% of executives have a background in the finance

[9]The sample of bank directors in Table 2 is from BoardEx and focuses on supervised entities included in the event study below. Note that for bank directors we do not observe several traits (e.g., the subject of university studies, previous management positions below the board-level in the same institution) because they are not provided by BoardEx.

[10]We look at prior experience in the whole finance sector rather than in banking alone because most banks in our sample are part of large financial groups offering also investment banking, asset management, and insurance products. We distinguish between experience in banking and in other areas of finance in tests below based on the BoardEx dataset.

[11]This is not to say that incentives in the form of performance-linked pay or promotions/demotions are absent in regulation and supervision. For instance, Kalmenovitz (2021) demonstrates the relevant role of promotion incentives within a financial regulator like the Securities and Exchange Commission in the US.

industry, which we can interpret as an upper bound for the magnitude of the phenomenon. Indeed, an earlier job in the finance industry could matter little if, for instance, it was an entry-level position held at very beginning of the executive's career. The fraction of executives at supervisory institutions that have prior management experience in the finance industry (23.9%) is a more conservative estimate of the pervasiveness of the reverse revolving door.[12] Managerial positions, indeed, usually come with a dense network of personal connections likely to influence the executive's supervisory conduct. In this respect, Figure 1 displays a prominent degree of heterogeneity across national supervisors. Executives with such an experience are almost invariably present in German, Spanish, British, Dutch, and Swedish institutions, constituting between a fifth and half of those boards. And even for other countries' institutions, executives with managerial experience in the finance industry are observed for relatively long periods, with the exception of the Central Bank of Ireland. Despite its simplicity, this analysis points to the importance of the reverse revolving door at the top of European banking supervision institutions.[13]

Aggregate summary statistics mask substantial variation across supervisory institutions and throughout time. Figure 1 visualizes such heterogeneity for management experience. Rising though the ranks is frequent among boards of supervisors from Austria, Belgium, Germany, Spain, Italy and Netherlands. This is especially striking for Banca d'Italia, where all but one of the executives had prior internal experience before appointment. With regards to prior private sector experience, this is more frequent in Austria, Germany, Spain, the UK, Netherlands and Sweden. In these countries, we observe that at least one executive had prior experience in the private sector. All in all, there appear to be relevant differences in director selection among countries: some—like France and Italy—show a strong bias towards public sector appointments, others—like the UK—exhibit more balanced boards in terms of prior experience. Nontrivial variation in the background of appointees is also present within institutions through time, but no clear pattern emerges in this case.

Among executive directors at supervisory institutions, the most common education background is in economics or related subjects (69.6%), with a sizable minority whose highest degree is in law (29.4%). The highest degree is a Ph.D. for 52.2% of the individuals

[12] In our classification, prior management jobs include executive positions as well as lower level positions coming with managerial duties (e.g., heads of division).

[13] With regards to demographic traits, executive directors are on average older (58.6 vs. 54.1 years) and more likely to be female (18.3% vs. 6.9%) in supervision than banking. As shown in Appendix Figure A.1, executives are oldest at Banca d'Italia and Banco de España, whereas most institutions exhibit an increasing trend in terms of female board representation (see also Hospido, Laeven, and Lamo, 2019).

in supervision, as opposed to 14.5% of bankers. Cross-country differences in terms of education and academic background exist. For each country, Figure 2 visualizes the fraction of executive directors with an academic background (as proxied by holding a Ph.D. title) and of those with a finance background (as proxied by presence at least one spell in the finance industry in the CV) in supervisory institutions. In most countries, the former group exceeds the latter, with France being the notable exception.[14]

4.1 Characteristics of appointees over the business cycle

The state of the economy may influence the inflow of top officers at the institutions in our sample. Table 3 compares the characteristics of newly appointed executives at national supervisors (Panel A) and supervised banks (Panel B), distinguishing between non-recession (columns 1-4) and recession years (columns 5-8). New hires' traits are remarkably stable throughout the cycle in banks. Differences are more marked in the case of national supervisors: recession hires are more likely to be internal (61.3% vs. 32.7%) and less likely to have private sector experience (29.0% vs. 48.7%). This naïve evidence corroborates the conjecture that business cycle dynamics matter less for positions at the very top of supervisory and supervised institutions than for below-executive level positions like those studied by Lucca et al. (2014).

National authorities do not appear to face more severe retention issues during boom periods, as an intake of less experienced directors would signal. If anything, and acknowledging the limits of a comparison based on few observable traits, the quality of the intake seems to worsen in recessions, when banking sector ought to be less appealing. In other words, the supervisors' labor market dynamics theorized by Bond and Glode (2014) do not seem to extend to top executive jobs, whose attractiveness is largely determined by the power and prestige they come with.[15] This reduces concerns that any heterogeneity observed in market reactions to the appointment of executives of national supervisory institutions is purely the byproduct of unobservable time-variation in the skills of the

[14]None of the executives at Banque de France in our sample holds a Ph.D. title, but most of them are from so-called *grandes écoles*, i.e., elite schools (for further details on the French education system in relation with the finance industry, see Célérier and Vallée, 2019). Moving to the subject of university studies, Appendix Figure A.2 documents that executives with an economics background outnumber those that studied law in all covered institutions, except for France (Banque de France) and Germany (Deutsche Bundesbank and Bundesanstalt für Finanzdienstleistungsaufsicht).

[15]While bank executives are paid considerably more—especially after accounting for bonuses (see, e.g., Colonnello, Koetter, and Wagner, 2022), also top EU supervisors command high fixed salaries of up to around EUR 500,000 per year (Banca d'Italia, 2014). Put differently, the combination of power, prestige, and safe and sizable remuneration makes executive jobs in supervision attractive also for bankers.

candidate pool.

4.2 Determinants of appointments in supervision vs. banking

As the next step, we examine appointments of executives using the alternative dataset on career paths from BoardEx. By using this sample, we can consistently measure executives' characteristics both in supervision and banking and thus draw a tighter comparison of appointment patterns across the two sectors. Figure 3 looks at the appointment rates among executives and at their background. Panel A shows that throughout our sample period, newly appointed executives constitute around 20% of boards at financial supervisory authorities, with reappointments playing only a marginal role. In other words, executives' terms in supervision average around five years. Most appointees—around 90%—have no prior executive-level experience in supervision.[16] But a considerable fraction of them—from a minimum of 30% in 2011 to a maximum of roughly 100% in 2013—do have executive experience in other sectors, confirming the attractiveness of supervision for high-ranking professionals from the private sector. Panel B documents similar patterns for executive appointments in banking, but points to an increasingly lower fraction of seasoned executives from outside the sector.

In Panel C, we investigate the industry background of seasoned appointees (i.e., those not at their first executive experience) at financial supervisory authorities. In line with Panel A, slightly less than 10% of them previously held executive-level positions in supervision. Around 7% and 4% held such positions in banking and in other areas of government before, respectively. It is interesting to note that 20% of seasoned appointees in supervision were previously executives in the nonfinancial sector. Insurance and other areas of finance play a more limited but still relevant role.[17] All in all, when not coopting internal candidates, supervisory institutions appear to draw from a pretty diverse pool of experienced professionals. Conversely, Panel D documents that banks attract seasoned appointees disproportionately from other banks and, to a slightly lesser extent, from nonfinancial firms.

Appointments are the result of a two-sided matching process between candidates

[16] BoardEx focuses on boards of directors, not allowing us to credibly measure below-board experience. A substantial share of those "sector-outsiders" will have supervisory experience but below (executive) board-level, as suggested by our manually-collected dataset, in which we observe around 40% of internal career progressions in supervisory institutions (see Table 2).

[17] Starting from the relatively detailed industry classification in BoardEx, we define eight broad groups: financial supervision, nonfinancials, banking, insurance, other finance, government (which does not include financial supervision), and academia. Note that BoardEx reports no information on the sector for a relevant fraction of executive spells. In those cases, we indicate the firm's sector as "unknown".

and hiring institutions. We focus on the labor supply-side of this process and study in a regression framework how executive characteristics associate with appointments decisions in supervisory authorities as opposed to banks. Because the whole pool of candidates from which these institutions hire their executives is not observable, we restrict the analysis to actual appointments (excluding reappointments). Starting from executive appointments across all sectors in BoardEx, we verify to what degree new hires in supervision (or in banking) differ from those in the rest of the economy. To this end, we employ cross-sectional regressions of this form:

$$\text{Appointment in sector } k_j = \boldsymbol{\Gamma} \boldsymbol{X}_j + \eta_e + \eta_n + \eta_t + \epsilon_j, \tag{1}$$

where *Appointment in sector* k_j is an indicator variable equal to 1 if executive j is appointed in sector k, and 0 is she gets appointed in any other sector. We separately estimate regressions for both sectors of interest, i.e., $k = \{\text{Financial supervision; Banking}\}$. The vector $\boldsymbol{X}_j$ comprises a set of executive characteristics measured at the time appointment (age, gender, size of her network, several proxies for professional experience). Each specification includes a set of fixed effects for the executive's level of education γ_e, nationality (γ_n), and for the year in which she is appointed (γ_t). We cluster standard errors by year of appointment.

Table 4 shows coefficient estimates from specification (1). In columns 1 to 4, we contrast characteristics of appointees in supervision with those from all other sectors in the economy. Column 1 considers the whole sample of appointments. Supervisors are on average older and more likely to be female, have a larger network and a more diverse industry background, but have previously held a smaller number of different positions than executives in other industries. This findings continue to hold if we limit the sample to inexperienced executives (column 3) or to appointees with prior executive experience (column 3). In the latter case, we augment the specification with a set of binary variables capturing industry-specific experience. Relative to firms in other sectors, financial supervisory authorities are significantly more likely to select professionals with prior executive experience in supervision and in other areas of public administration. Moreover, they hire banking executives at the same rate as firms in the rest of the economy, suggesting that the reverse revolving door may fit in an economy-wide inclination to having banker directors (e.g., Booth and Deli, 1999). In column 4, we confine the sample to appointees with prior executive experience in banking to investigate cross-industry moves. Experienced bankers that switch to supervision have a larger network and previously worked in

more industries than those that seek another position in the banking sector or move to other business areas.

In columns 5 to 8, we repeat the analysis for appointments by banks. Not differently from new hires in supervisory institutions' boards, columns 5 to 7 show that banking executives are older, entertain larger networks, but have previously held fewer positions than in other sectors. Unlike supervisory institutions, banks are as likely as firms in the rest of the economy to hire female executives. The evidence on the role of diversity in prior industry experience is mixed. Focusing on seasoned hires, also banks are biased towards industry insiders. However, they are significantly less likely to hire professionals with executive experience in other sectors than non-banking firms, whereas they do not stand out when it comes to drawing from former supervisors. In column 8, we limit the sample to such a group of professionals. We observe only 56 instances of former executive supervisors finding another executive position among the entities covered by BoardEx. We do not find any statistically significant difference across those of them switching to banking and the others, but statistical power is low due to the small sample size.

To sum up, we document several similarities between hiring choices of European financial supervisory authorities and banks (e.g., a preference for older and more networked professionals relative to firms in other sectors). Appointments in these two sectors, instead, exhibit noticeable differences with respect to prior industry experience. Although in both cases seasoned executives relatively often come from the same sector, financial supervisory authorities appear to select more diverse executive teams with respect to industry background. The reverse revolving door for bankers into supervision is part of this orientation towards industry diversity.

5 Event study around executive appointments by national supervisors

The prevalence of the reverse revolving door calls for an assessment of how bank shareholders value finance experts on the executive board of national supervisors. To this end, we merge our unique, hand-collected sample on announcement dates of executive directors with bank-level data. For simplicity, we assume that an executive appointment event at a national supervisor is relevant only for the banks that it supervises. For example, executive appointments at the Bank of Italy are relevant for Italian banks but not for other countries' banks.[18]

[18]In other words, our empirical approach does not capture cross-border ramifications of supervisory appointments. While such ramifications likely exist—in particular for multinational banking groups—they are arguably of smaller magnitude than those on banks under the direct jurisdiction of the appointed

Equipped with the merged sample, we conduct several event studies around supervisory authorities' executive appointments by estimating pooled regressions of this form:

$$r_{it} = \alpha + \sum_{\tau=-k}^{k} \beta_\tau \cdot \mathbb{1}_{\{\text{Appointment at } t=t^* \text{ in } c, t-\tau\}} + \gamma \cdot r_{ES50,t} + \eta_i + \eta_m + \epsilon_{it}, \tag{2}$$

where r_{it} is the stock market return of bank i on trading day t (calendar time). The indicator variable $\mathbb{1}_{\{\text{Appointment at } t=t^* \text{ in } c, t-\tau\}}$ is equal to 1 on trading day $t-\tau$ if an executive appointment is made at $t = t^*$ by a supervisory authority of country c where the bank is based, and 0 otherwise. k defines the width of the event window over which we estimate abnormal returns (ARs). In our preferred specification we set $k = 5$, but we also assess the sensitivity of estimates to narrower and wider windows. In complementary tests, we define indicators for more specific appointment events by conditioning on the professional background of incoming executives.

To filter out the effect of market-wide fluctuations, we control for $r_{ES50,t}$, the daily return on the Stoxx Europe 600 index. We then progressively saturate specification (2) with bank (η_i) and month-year (η_m) fixed effects, which account for time-invariant, unobservable differences across banks and for time-variation in macroeconomic conditions, respectively. We cluster standard errors at the bank level.

We are interested in estimating the set of parameters β_τ, where $\tau = [-k, k]$. Each parameter estimate $\hat{\beta}_\tau$ measures the average AR across all events for day τ around the executive appointment: $\overline{\text{AR}}[\tau]$. We can compute the average cumulative AR (CAR) between day τ_1 and day τ_2 as $\overline{\text{CAR}}[\tau_1, \tau_2] = \sum_{\tau=\tau_1}^{\tau_2} \beta_\tau$. Note that ARs are defined relative to all periods outside of event windows between 2002 and 2019, which constitute the estimation window. In additional tests, we verify the robustness of our results to using a more restrictive definition of the estimation window.

Table 5 shows coefficient estimates for equation (2), considering the whole sample of executive appointments. In columns 1 to 3, irrespective of the width of the event window, results suggest that executive appointments are met with significant negative event-day ARs averaging at around -0.46%. A similar effect is observed on the subsequent trading day, with an estimated $\overline{\text{AR}}[+1]$ ranging between -0.38% and -0.44%. However, once we control for the Stoxx Europe 600 return in column 4, only the finding on the event-day is confirmed, and with a slightly smaller magnitude of around -0.38%. This result remains robust even after including bank and month-year fixed effects in columns 5 and 6. In

supervisor.

none of the specifications, $\overline{\text{AR}}[-1]$ is statistically or economically significant, pointing to a lack of anticipation effects about the appointments, which corroborates the validity of our empirical setting. Moreover, $\overline{\text{CAR}}[-1,+1]$ is negative and statistically significant in each case, with a magnitude between -0.90% and -0.54%.

The negative value impact of national supervisors' executive appointments—though possibly just reflecting market participants' increased uncertainty about the national supervisor's future course of action—is hard to interpret. Pooling together all appointment events, indeed, is useful to confirm that this is relevant news for the market, but conflates the effects of executives' bias and competency.

5.1 The reverse revolving door

To gain insights about the importance of the economic forces at play, we proceed by distinguishing appointments based on the background of the designated executive. Contrasting market reactions to appointments of individuals with a finance background against the others supplies an indication on the bank valuation effects of the reverse revolving door.

In Table 6, we separately re-estimate specification (2) for specific types of appointment. In columns 1 and 2, we only consider executives without prior experience in the finance sector (41 events). No matter the fixed effects structure included, the average event-day AR is negative and statistically significant at the 1%, and—though mitigated—the effect persists in the subsequent trading day. $\overline{\text{CAR}}[-1,+1]$ ranges between -0.80% and -0.90%, and is statistically significant at the 1% level. Similarly, Adams (2017) documents a negative market reaction to appointments of non-banker directors to the boards of Federal Reserve Banks in the US. In columns 3 and 4 we do not find any significant effect when we concentrate on executives with a finance background (33 events).

We further shed light on the economic magnitude of the revolving door phenomenon by investigating its overall impact on market capitalization with a simple back-of-the-envelope exercise on the French banking sector. For each of the three French banks in our sample—BNP Paribas, Crédit Agricole, and Société Générale— the estimated CARs imply an average total loss in market capitalization of around EUR 1 bln. per event over our sample period.

The different market reaction to the the appointment of former finance professionals likely reflects their different degrees of proximity towards supervised institutions (bias), assuming that also executives without a finance background bring to the table useful technical knowledge (competency). Hence, this is evidence consistent with the intuition

that finance-related executives disgruntle less bank shareholders because they are expected to be more friendly. And it is even more remarkable, because, by looking at all executives with a significant finance background, we have considered a very broad definition of reverse revolving door. Put differently, many of these individuals could be "false positives": for instance, they may have held only a low rank banking position at the very beginning of their career, with limited repercussions on the supervisory style relative to peer executives without such an experience.

To better quantify the role of supervisory bias, in columns 5 and 6 we restrict the analysis to 13 appointments of executives who held a position in at least one the supervised bank in our sample. To ensure that we flesh out bias in the cleanest way, we impose that announcement days of those appointments are an event only for the 15 banks with a direct CV link, i.e., all other banks are assumed not to be affected. We uncover a positive and statistically reaction, with an estimated $\overline{\text{AR}}[0]$ of around 0.47%. $\overline{\text{CAR}}[-1,+1]$ is instead insignificant, suggesting that information is fully impounded into stock prices at disclosure. The reaction we find, while indicative of bias, is weaker than the one observed by Adams (2017) and Black and Dlugosz (2018) for appointments of banker directors to Federal Reserve Banks' boards. This discrepancy in magnitude could relate to the different board structure and appointment rules of European and US supervisory authorities. The presence of bankers is ingrained in Federal Reserve Banks' boards: three out of nine directors (Class A directors) are directly elected by member banks and represent their interest. In Europe, executive directors are usually nominated through a political process and not directly by the supervised banks, which could limit the ability of former bankers to influence supervisory decisions once designated.

5.2 The role of the business cycle

Abstracting from the possible existence of a competency differential between finance-related and other executives,[19] the more negative value effect of the former may be explained by factors other than bias. The most prominent alternative explanation is that executives without a finance background have lower intrinsic skills, over and above their competency and bias. Oftentimes, as seen above, these are individuals that rose through the ranks of the national supervisors, so the skill differential may be traced back to the

[19] Above we conjecture that on average this is probably not the case, because both types of executives contribute useful (yet different) know-how. Executives with a finance background have a better understanding of the inner working of supervised entities, whereas executives with a civil servant profile are more knowledgeable about the intricacies of the supervisory process.

different quality of the candidate pools for junior positions in supervision as opposed to banking.

This story relates to inherently unobservable traits of executives. Therefore, we test it indirectly by building on the intuition that the candidate pool quality for jobs at national supervisors is countercyclical: in bad times, the attractiveness/availability of supervisory positions relative to banking ones increases. In other words, were our findings driven by lower intrinsic skills of executives with a civil servant career track, we would expect market reactions to appointments to be less negative in recession than in other periods, due to the inflow of more skilled bankers.

In Table 7, we augment specification (2) with interaction terms of *Appointment* (τ) indicators with a recession indicator defined at the country-year level. In each specification both event-day ARs and CARs are significantly lower in recessions, when the human capital flowing into the regulatory sector should be of higher quality. Such a recession effect is robust to controlling for stock market conditions as well as to bank and month-year fixed effects. Hence, this is at odds with the idea that the negative market reaction to non-finance-related executive appointments is driven by their lower intrinsic skills.

However, two caveats about this indirect analysis are in order. First, based on observable traits, we do not find evidence of an increased flow of finance specialists or, more generally, of professionals with diverse job experiences into executive boards of national supervisors during recessions, possibly because we only look at top jobs in supervision (see Table 3). In other words, the countercyclical pattern in hiring quality hypothesized by Bond and Glode (2014) is not clear in our dataset. But this does not necessarily invalidate our business cycle test, because the unobservable skills of new executives may well vary countercyclically. Second, the size of the sample of appointments made during recessions is limited. As a consequence, in Table 7 we do not distinguish directors based on their background, because that would greatly limit the statistical power of our tests and make them highly sensitive to single observations. Hence, we are not directly testing how the value of finance-related directors varies through the business cycle.

Despite these shortcomings, the more negative reaction to executives nominated during recessions provides support to the role of bias as a driver of the value differential between finance-related appointees and the others.

5.3 The role of the SSM

Except for the UK and Sweden, our sample comprises national supervisors from the eurozone between 2002 and 2019. Therefore, even if many of the covered national supervisors are NCBs, these are part of the Eurosystem and not directly in charge of monetary policy, whose responsibility is with the ECB. Bank stocks' reactions to executive board appointments by such NCBs are unlikely to reflect concerns about future interest rate setting (or other levers of monetary policy), providing a credible measure of investors' expectations about supervisory activities.[20] To support this conjecture, we explore how market reactions to new executives change around the introduction of the SSM, which transferred supervisory powers from national supervisors to the ECB.

Specifically, in Fall 2012 the Economic and Financial Affairs Council (ECOFIN) reached a landmark agreement that established the SSM. Under the agreement, banking supervision for significant banks—like all the banks in our sample except for the ones from the UK and Sweden—came under the direct supervision of the ECB, whereas national supervisory authorities maintained direct supervision, in collaboration with the ECB, over the remaining banks. The launch of the SSM provides us with a useful testing ground. A comparison of market reactions to executive appointments before and after the introduction of the SSM is informative about the extent to which our main results actually relate to the supervisory activity of the executives, or to other activities of which the institutions in our sample (mostly NCBs) are in charge. If market participants are concerned about banking supervision, our results should be driven by the pre-SSM period.

Table 8 reports coefficient estimates for specification (2) for the pre- (columns 1 and 2) and the post-SSM period (columns 3 and 4). To discriminate between the pre- and post-SSM period, we use two events: (i) the agreement on June 29, 2012 by Eurozone leaders on the establishment of the SSM (odd columns) or the (ii) the enforcement of the SSM on November 3, 2014 (even columns). We observe significantly negative $\overline{\text{AR}}[0]$ as well as $\overline{\text{CAR}}[-1,+1]$ for appointment made during the pre-SSM period. By contrast, the effect of appointments is generally insignificant in the post-SSM period. This findings corroborate the idea that, upon executive appointments by national supervisors, the market reactions pertain to expectations about about supervisory stance rather than about other areas of

[20] NCBs generally have other functions, besides monetary policy and banking supervision (e.g., operating the payment system, providing banking services to public administration, etc.). However, we argue that bank stocks are most likely to react to information about supervision upon the appointment of a new executive, because other NCBs' powers are either of limited relevance for supervised banks or come with relatively little discretion.

activity of the executive board.

Moreover, the SSM can provide insights into supervisory bias and competency of executives, as it arguably constitutes a negative shock to the former, and a positive shock to the latter. Carletti, Dell'Ariccia, and Marquez (2021) theoretically show that central supervisors (like the ECB) are less reluctant to intervene because of lower intervention cost. There are at least two channels through which intervention costs are reduced and thus supervision would became stricter when shifting from national supervisors to a central supervisor. First, the central supervisor has more resources to allocate to supervision and a higher ability to attract and retain talented regulators. Second, regulatory capture and ability of supervised banks to influence the supervisor is impaired.[21] Extant evidence on banking supervision supports the prediction that switching from local to central supervisors implies stricter supervision. More specifically, Agarwal et al. (2014) uncover differences in supervisory intensity between local and central supervision in the US, illustrating that geographic proximity to the bank is associated with more lenient supervision. With regards to the European context, Fiordelisi, Ricci, and Stentella Lopes (2017) find that, anticipating stricter supervision under the SSM, significant banks shrank their balance sheets through deleveraging and decreased lending to a greater extent than less significant banks. Altavilla, Boucinha, Peydró, and Smets (2020) show that banks under the SSM tilt their loan portfolios away from risky borrowers towards stronger ones.

Executive appointments to the boards of national supervisors are of little use to tease out the value effect of the SSM and disentangle the role of bias and competency in supervision. To this end, we conduct a comprehensive event study of announcements related to SSM implementation. As in any regulatory event study, the major challenge is to insulate the effect of the regulatory shock of interest from that of other news disseminated around the same date (see, e.g., Schäfer, Schnabel, and Weder di Mauro, 2015; Bruno, Onali, and Schaeck, 2018). By means of an in-depth news search on BPS, we identify the 18 most relevant SSM-related announcements, starting from June 29, 2012, when the EU leaders agreed on the establishment of the SSM.[22] The process ended when the SSM

[21] The ECB supervisory board is composed of a Chair, a Vice-Chair and other four ECB representatives, plus one representative for each national supervisor of a member state. Within this board composition, a national supervisor has a limited ability to influence supervisory decisions. Moreover, according to Carletti et al. (2021), the internal governance of a central supervisor that coordinates local supervisors that implement its standards can create frictions in the information collection process. If central supervision is stricter for supervised banks, the local supervisor has less incentives to collect information under centralization because it fears that the information collected can be used to take an action that it dislikes.

[22] We carefully check whether each of these announcements took place before or after the market close, and assign it to the relevant trading day accordingly.

came into force on November 4, 2014.

Table 9 reports estimated bank stock market reactions for the identified events. Because the significance of $\overline{\text{AR}}[-1]$ for several events signals the presence of non-trivial anticipation and post-event effects, we focus on $\overline{\text{CAR}}[-1,+1]$ for the interpretation of the overall reception by investors. We start by looking at announcements related to the institutional architecture and procedures of the SSM. We detect positive and statistically CARs for the Vice President speech on the banking union (September 7, 2012), the landmark agreement on the establishment of the SSM (December 13, 2012), and the disclosure of the criteria adopted to identify significant banks (December 14, 2012). Negative and statistically significant CARs are obtained for the start of the ECB comprehensive assessment (October 23, 2013), the disclosure of the SSM regulatory framework (April 25, 2014), and the start of the SSM (November 4, 2014). The CARs suggest that at the beginning the stock market rewarded the implementation of a common architecture for banking supervision. The sentiment turned negative when the market perceived that regulation and supervision was going to be more intrusive under the ECB, thus entailing a cost for supervised banks. Such a shift in sentiment is broadly consistent with the intuition that a central supervisor tends to be less friendly towards banks.

With regards to the three events related to director appointments at the SSM (December 16, 2013; January 9, 2014; January 22, 2014), we find a positive and statistically significant $\overline{\text{CAR}}[-1,+1]$ only for the appointment of four directors in the new Directorates General for supervision (January 9, 2014). Of these four directors, two had prior experience in the finance industry, which again is suggestive of a positive valuation effect of the reverse revolving door.

5.4 The consequences for debtholders

Bank debtholders are likely to be affected by composition of the national supervisor's board, especially when that has an impact on bailout probabilities. To verify debtholders' reaction to executive appointments, we look at bank-level credit risk, as measured by spreads on CDS spreads on senior unsecured debt (available for 34 banks). Provided that these CDS contracts are written on arm's length, unsecured debt claims not protected by deposit insurance schemes, we expect to observe similar effects as those observed for bank stock returns.

Table 10 re-estimates equation (2) using daily change in CDS spreads as the dependent variable. To filter out market-wide fluctuations, besides including the Stoxx Europe 600

return in the specification, we also control for the credit spread paid by the sovereign issuer of the country where the bank is based. Anticipation and post-announcement effects in CDS spreads appear to be present, therefore we concentrate on the $\overline{\text{CAR}}[-1,+1]$ to interpret market reactions. Columns 1 and 2 consider the whole sample of events. In line with the results of Table 5, $\overline{\text{CAR}}[-1,+1]$ is statistically significant and ranges between 1.20% and 1.29%, i.e., a negative shock to bank debt valuations.

We then distinguish appointment events by the background of the executive. Evidence is supportive of the baseline findings in Table 6: $\overline{\text{CAR}}[-1,+1]$ is significantly positive for appointments of executives without finance industry experience (columns 3 and 4), but marginally significant (or insignificant after the inclusion of month-year fixed effects) and economically small for finance-related executives (columns 5 and 6). The results on the appointments of executives that previously held a position in at least one of our supervised banks are also overall consistent with the stock return analysis (columns 7 and 8).

5.5 Further tests

To further verify the robustness of our main results, we repeat the baseline analysis using two alternative approaches. First, we carry out the analysis of Tables 5 and 6 by performing an event study in event—rather than calendar—time. More specifically, we restrict the estimation window to 50 trading days before and after each announcement, which significantly reduces the number of no-news trading days in the sample. Results in Appendix Table A.3 are supportive of the main findings. The only relevant difference with respect to the baseline is that $\overline{\text{CAR}}[-1,+1]$ turns insignificant when considering the whole sample of appointment announcements.

Second, we perform tests akin to those of Table 6, but including in the same specification two sets of appointment indicators: (i) for finance-related appointments, and (ii) for all other appointments. In this way, we can conveniently evaluate if the effects differ in a statistically significant way between the two types of appointments. Appendix Table A.4 reports the estimation results, which confirm that a negative and significant $\overline{\text{AR}}[0]$ is exclusively related to the designation of executives without a background in the finance industry. The average difference in CARs between finance-related and other appointments ($\overline{\Delta\text{CAR}}[-1,+1]$) is statistically significant and ranges between 0.53% to 0.79%.

6 Bank-level outcomes and the background of supervisors

Supervisors with a finance background appear to be more welcome by supervised banks' investors than those with different professional profiles. Our evidence is suggestive that proximity to banks, rather than superior expertise or intrinsic skills, drives this result. Whereas the event studies implemented above capture investors' short-term reactions to single executive appointments, here we examine how the composition of supervisory authorities' boards correlates with bank capitalization, risk, and policies over a longer horizon.

Specifically, we estimate panel regressions of supervised banks' outcomes on measures of the executive board structure of national supervisory authorities:

$$y_{it} = \beta \cdot z_{ct} + \mathbf{\Gamma} \boldsymbol{X}_{it} + \eta_t + \epsilon_{it}. \tag{3}$$

The unit of observation is bank i in year t. y_{it} is a bank-level outcome variable (Tier 1 capital ratio, the logarithm of the CDS spread, loan growth, asset growth, ecc.). z_{ct} denotes the share of executives with a finance background serving on the board of national banking authorities of country c where the bank is based. We separately consider two measures of finance background: one based on prior management experience in finance alone, the other on any experience in the finance industry. By focusing on board structure rather than on the flow of individuals with a finance background, we aim to investigate the role for supervised banks of the overall expertise mix—and the resulting voting power balance—within supervisory institutions. $\boldsymbol{X}_{it}$ is a vector of control variables, such as the costs-to-income ratio, the logarithm of total assets, the loans-to-assets ratio, the deposits-to-assets ratio, and an indicator for the presence of at least one executive at the bank (even in a subsidiary company) with prior experience in financial supervision. The latter captures the "direct" revolving door phenomenon. We account for variation in macroeconomic conditions by means of year fixed effects (γ_t). Standard errors are clustered by bank home country.

Table 11 reports coefficient estimates for equation (3). In columns 1 and 2, the dependent variable is the Tier 1 capital ratio, one of the key measures of bank financial soundness at the core of regulatory and supervisory activity. Finance experience—whether at management level or below—associates with lower bank capitalization, but the estimated coefficients are not statistically significant. Nevertheless, bank credit risk—as measured by the CDS spread—is lower in the presence of more former finance professionals among

supervisors, and significantly so if they held management positions (columns 3 and 4). At the same time, both loan growth (columns 5 and 6) and asset growth (7 and 8) are higher for banks supervised by a higher fraction of former finance professionals, but the coefficient estimate is statistically significant only for the latter measure. In none of the specifications, the indicator for the presence of executives with supervisory experience in the board of the bank loads significantly.

In Figure 4, we examine how the relation between these bank-level outcome variables and the board structure of supervisory authorities evolves over time, focusing on the role of executives' prior experience as managers in the finance sector. The presence of such supervisors is almost invariably linked to lower regulatory capital, with the effect being statistically significant in several years, especially during the Global Financial Crisis and the European debt crisis. Over this periods, the presence of financial experts on supervisory authorities' boards coincides also with significantly lower CDS spreads and higher loan and asset growth of supervised banks.[23]

All in all, these finding point to a certain degree of leniency in supervision by former finance professionals, especially when they previously held managerial position in the industry. When the share of supervisors with this kind of background is higher, banks appear to have lower capital buffers, which in turn comes with faster asset growth, especially outside of traditional loan-making. But this pattern does not correlate with higher credit risk. To the contrary, investors price bank CDSs at lower spreads, possibly anticipating a higher probability of bailout. At the same time, the presence of former supervisors in the executive board of banks does not associate significantly with any of these margins. Put differently, the reverse revolving door seem to trump the direct one.

7 Conclusion

The flow of workers between banks and their supervisory authorities has ramifications on the effectiveness of regulation design and enforcement, posing a trade-off between the cross-sector transfer of knowledge it favors, and the risk of regulatory capture personal connections may create. Available evidence is mostly US-based and focused on the (adverse) incentives induced by individuals moving from the supervisory sector to supervised banks. We contribute by shedding light on the opposite flow in Europe, namely that of former finance professionals securing positions in supervisory institutions.

[23] In Appendix Figure A.3, we look at our broader measure of finance experience, which also accounts for prior positions below management level. We still find similar patterns.

We assemble a comprehensive dataset on the careers of executive directors of national banking supervisory authorities from selected EU countries. We show that the reverse revolving door is prevalent for such top positions: around one executive out of three has prior experience in the finance industry, and many of them at managerial level.

We go on to infer the consequences of such a phenomenon for supervisory activity. To this end, we perform an event study on bank stock returns around appointments of executives to the board of the competent supervisory agency. The average market response is negative, but significantly more favorable when the selected executive has a finance background. Further tests confirm that the force driving the positive differential effect of an industry connection is the proximity to supervised banks of those executives, rather than their financial know-how or intrinsic skills. In line with this interpretation, authorities with a more pervasive presence of executives with a finance background appear to be more lenient towards the banks they supervise, which exhibit lower regulatory capital and faster loan and asset growth.

To sum up, former finance professionals are present across the board at the top of EU national banking supervisors. And their presence (and background) comes out as a non-negligible determinant of supervisory activity. This evidence calls for further research on the impact of the reverse revolving door on *actual* supervisory actions and financial stability.

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Figure 1: Management experience in the boards of national banking supervisors
This figure shows what fraction of executive directors of national banking supervisors from selected EU countries has prior management experience between 2002 and 2019. The positive domain of the y-axis visualizes a decomposition of prior management experience into internal positions below board level (light blue), public sector positions (dark blue), and any other position (grey). The positive domain of the y-axis visualizes a decomposition of prior management experience into finance sector positions (light red), private sector positions (light green), and any other position (grey). Both in the positive and negative domain of the y-axis positions are grouped in progressively more restrictive sets, so that, for instance, finance sector background is a subset of private sector experience, which in turn is a subset of management experience. The covered countries are Austria (AT), Belgium (BE), Germany (DE), Spain (ES), France (FR), Ireland (IE), Italy (IT), Netherlands (NL), Sweden (SE), and United Kingdom (UK).

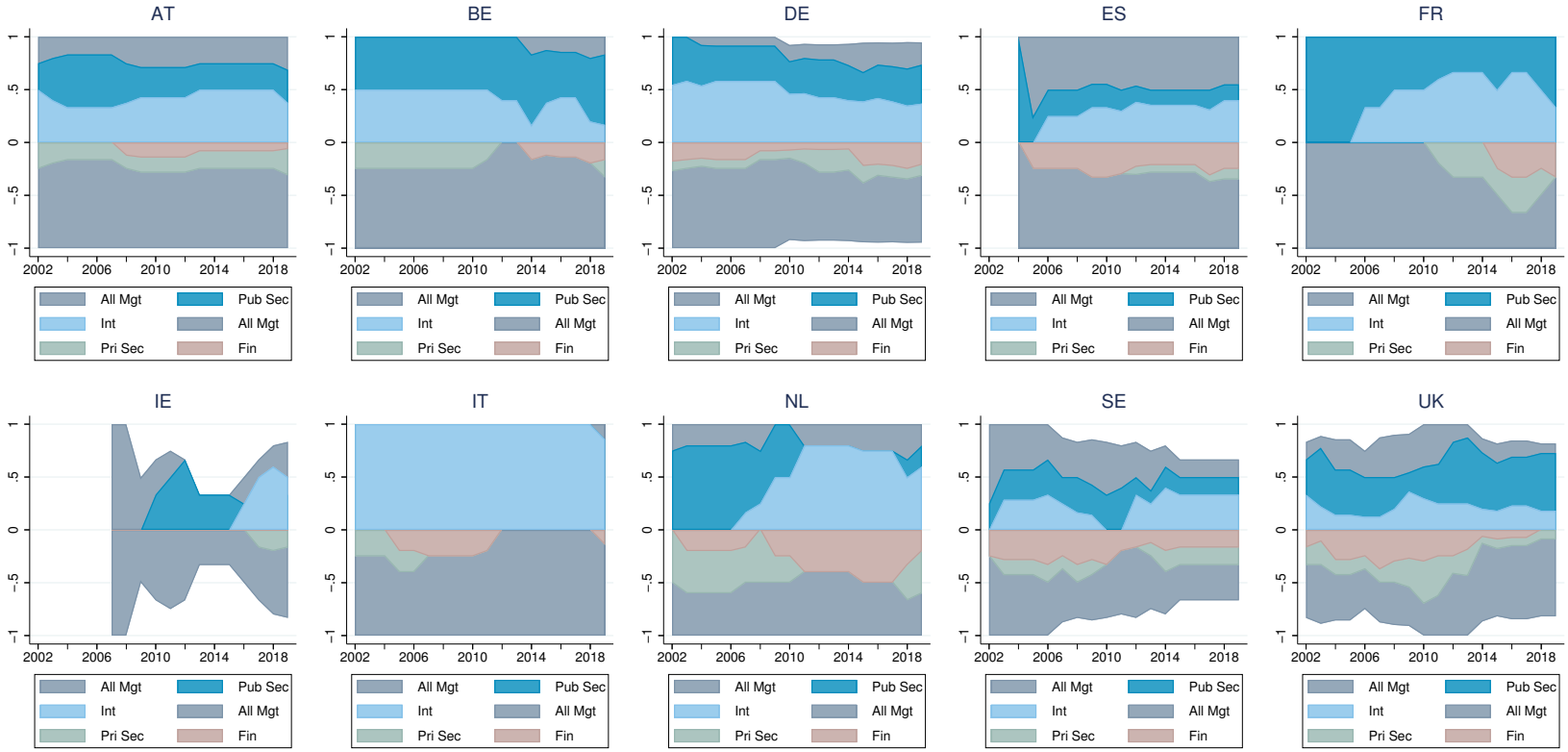
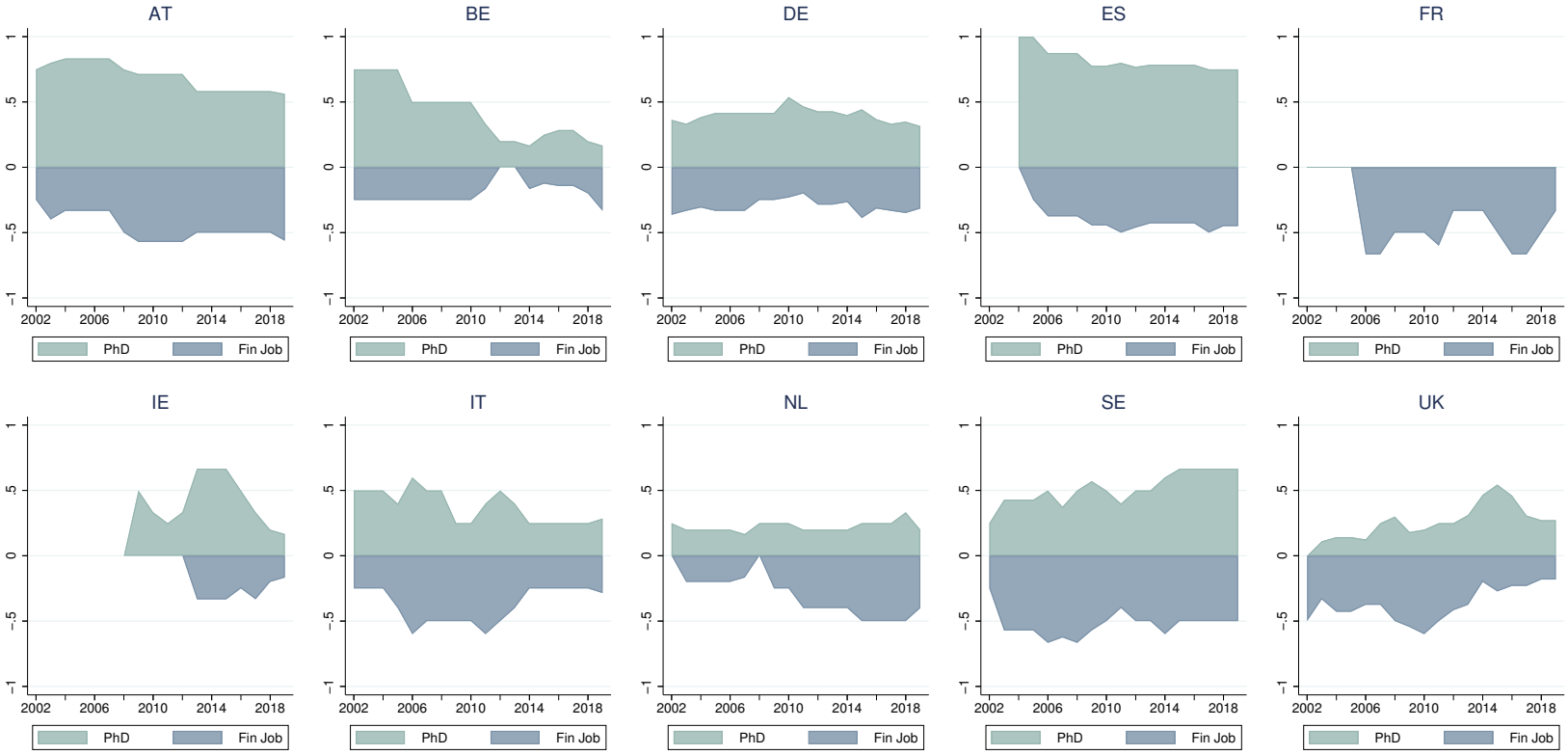


Figure 2: Academic background and finance industry background in executive boards of national banking supervisors
This figure shows what fraction of executive directors of national banking supervisors from selected EU countries has an academic (positive domain of the y-axis, in green) or a finance sector background (negative domain of the y-axis, in grey) between 2002 and 2019. A board member is categorized as having an academic background if she holds at least a Ph.D. title, whereas she is categorized as having a finance sector background if she had at least a position in a financial institution (also below management level). The covered countries are Austria (AT), Belgium (BE), Germany (DE), Spain (ES), France (FR), Ireland (IE), Italy (IT), Netherlands (NL), Sweden (SE), and United Kingdom (UK).



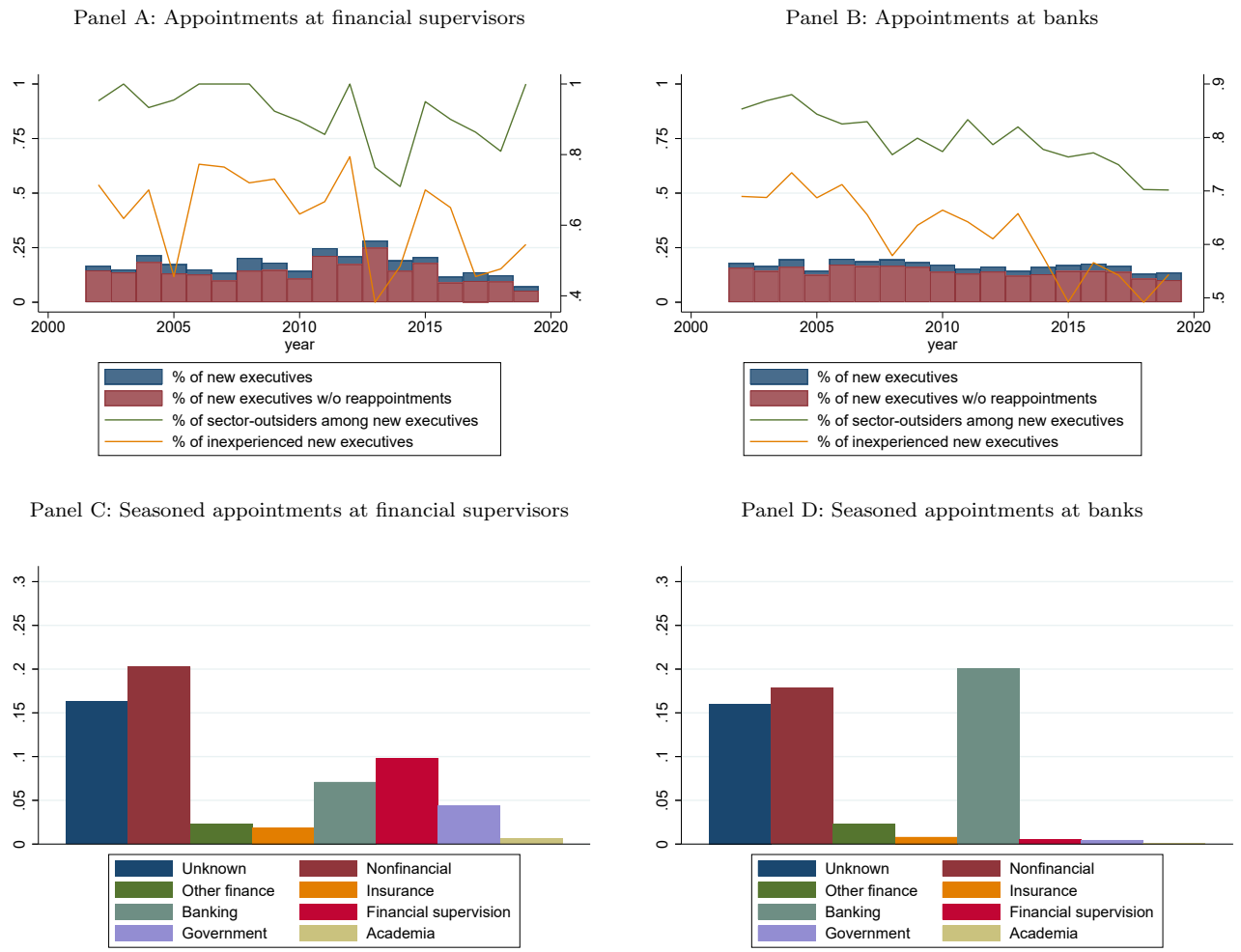


Figure 3: Executive appointments by financial supervisory institutions and banks
This figure visualizes patterns in executive appointments by financial regulatory institutions (left graphs) and bank (right graphs) from the ten largest European economies between 2002 and 2019. Panels A and B break down the appointments by distinguishing between new executives and reappointed ones (left axis), and by distinguishing them based on their prior executive experience (right axis). Panels C and D focus on appointments of directors that have prior executive experience, distinguishing them by their sector background (computed as a fraction of total new appointments, net of reappointments). Note that sector categories are not mutually exclusive, so they do not add up to 1 (a seasoned director can have experience in more than one sector).

Figure 4: Bank-level outcomes and supervisors' management experience in the finance industry
This figure plots the average marginal effects (AMEs) of prior management experience in the finance industry of banking supervisors on selected bank-level outcomes over time, estimated from regressions of the following form:

$$y_{it} = \sum_t \beta_t \cdot z_{ct} \times \mathbf{1}_{\{\text{Year}=t\}} + \Gamma \boldsymbol{X}_{it} + \eta_t + \epsilon_{it},$$

where y_{it} is an outcome variable (Tier 1 capital ratio, the logarithm of the CDS spread, loan growth, and asset growth) for bank i in year t. The variable z_{ct} is the fraction of executives with management experience in finance in the banking authorities of country c (where the bank is based) for year t. $\mathbf{1}_{\{\text{Year}=t\}}$ is an indicator variable equal to 1 in year t, and 0 otherwise. The specification includes year fixed effects (η_t) as well as the following control variables ($\boldsymbol{X}_{it}$): an indicator for the presence of at least one executive at the bank with prior experience in financial supervision, the costs-to-income ratio, the logarithm of total assets, the loans-to-assets ratio, and the deposits-to-assets ratio. The vertical bars denote 95% confidence intervals, based on standard errors clustered by bank home country.

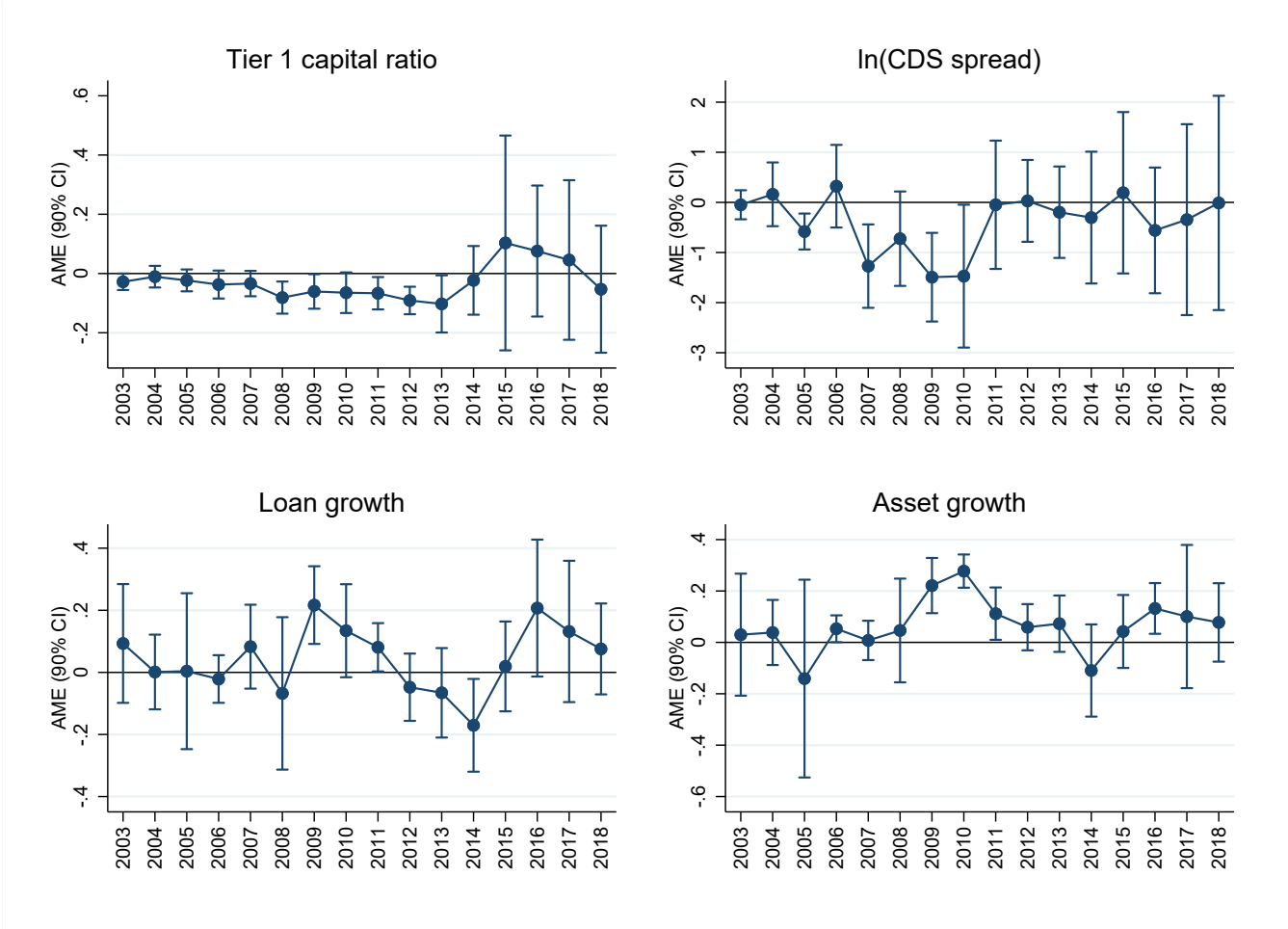


Table 1: Characteristics of supervised banks
This table reports summary statistics for a sample of listed banks from selected EU countries between 2002 and 2019. Refer to Appendix Table A.2 for variable definitions.

	Obs. (1)	Mean (2)	SD (3)	P25 (4)	Median (5)	P75 (6)
Bank-level market information						
Stock return (in %)	132,784	0.008	2.256	-1.107	0.003	1.090
CDS spread	83,724	124.553	115.903	54.450	93.497	161.243
Bank-level accounting information						
Tier 1 capital ratio	1,094	0.134	0.100	0.085	0.115	0.147
Loan growth (in %)	1,099	4.096	11.978	-2.111	2.861	9.298
Asset growth (in %)	1,153	2.887	11.794	-3.781	2.006	8.352
Costs-to-income ratio	1,256	0.637	0.165	0.546	0.633	0.712
Total assets (bln. EUR)	1,312	338.862	457.038	46.224	166.116	386.745
Loans-to-assets ratio	1,257	0.513	0.195	0.391	0.541	0.654
Deposits-to-assets ratio	1,246	0.410	0.195	0.273	0.400	0.547
At least one executive with financial supervision experience	1,150	0.105	0.307	0.000	0.000	0.000
Aggregate market information						
Stoxx Europe 600 return (in %)	4,603	0.027	1.292	-0.561	0.054	0.656
Sovereign credit spread	35,669	1.464	1.228	0.601	1.249	2.119

Table 2: Characteristics of executive directors
This table reports summary statistics on work experience, education, and demographic traits for a sample of executive directors serving on the board of national banking supervisors (Panel A) or supervised banks (Panel B) from selected EU countries between 2002 and 2019. Information on career paths refers to the positions held by each individual as of the time of her first appointment to the executive board of a given supervisory institution. Refer to Appendix Table A.2 for variable definitions.

Panel A: National supervisors

	Obs. (1)	Mean (2)	SD (3)	P25 (4)	Median (5)	P75 (6)
Management experience						
Prior management position	1,255	0.947	0.223	1.000	1.000	1.000
Prior management position in finance industry	1,255	0.239	0.427	0.000	0.000	0.000
Prior below-board position in the same institution	1,255	0.406	0.491	0.000	0.000	1.000
Public sector experience						
Prior employment in the public sector	1,255	0.912	0.284	1.000	1.000	1.000
Prior management position in the public sector	1,255	0.722	0.448	0.000	1.000	1.000
Private sector experience						
Prior employment in the private sector	1,255	0.403	0.491	0.000	0.000	1.000
No. prior spells in the private sector	1,255	3.253	5.678	0.000	0.000	5.000
Prior employment in the finance industry	1,255	0.372	0.484	0.000	0.000	1.000
No. prior spells in the finance industry	1,255	0.917	1.565	0.000	0.000	1.000
Education						
Economics	1,162	0.696	0.460	0.000	1.000	1.000
Law	1,162	0.294	0.456	0.000	0.000	1.000
Holds a Ph.D.	1,255	0.522	0.500	0.000	1.000	1.000
Demographics						
Age	1,170	58.563	7.679	53.000	59.000	64.000
Female	1,255	0.183	0.387	0.000	0.000	0.000

Panel B: Banks

	Obs. (1)	Mean (2)	SD (3)	P25 (4)	Median (5)	P75 (6)
Management experience						
Prior management position	4,861	0.985	0.120	1.000	1.000	1.000
Prior management position in finance industry	4,861	0.983	0.131	1.000	1.000	1.000
Prior management position in the same institution	.	.	.	.	.	.
Public sector experience						
Prior employment in the public sector	4,861	0.215	0.411	0.000	0.000	0.000
Prior management position in the public sector	4,861	0.011	0.104	0.000	0.000	0.000
Private sector experience						
Prior employment in the private sector	4,861	1.000	0.000	1.000	1.000	1.000
No. prior spells in the private sector	4,861	15.295	9.777	8.000	13.000	20.000
Prior employment in the finance industry	4,861	0.997	0.054	1.000	1.000	1.000
No. prior spells in the finance industry	4,861	13.283	8.383	7.000	12.000	18.000
Education						
Economics	.	.	.	.	.	.
Law	.	.	.	.	.	.
Holds a Ph.D.	4,861	0.144	0.352	0.000	0.000	0.000
Demographics						
Age	4,713	54.110	8.149	48.000	53.000	59.000
Female	4,855	0.069	0.254	0.000	0.000	0.000

Table 3: Characteristics of newly appointed executive directors across the business cycle
This table reports summary statistics on work experience, education, and demographic traits for newly appointed executive directors (i.e., in the first year of their mandate) to the board of national banking supervisors (Panel A) or supervised banks (Panel B) from selected EU countries between 2002 and 2019, distinguishing appointments made in recession and non-recession times. Information on career paths refers to the positions held by each individual as of the time of appointment to the executive board. Recession times are identified at the country-year level, where a given country-year is classified as in recession if at least two quarters over the year displayed a negative growth of real GDP. Refer to Appendix Table A.2 for variable definitions.

Panel A: National supervisors

	Non-recession years				Recession years			
	Obs. (1)	Mean (2)	SD (3)	Median (4)	Obs. (5)	Mean (6)	SD (7)	Median (8)
Management experience								
Prior manag. pos.	113	0.929	0.258	1.000	31	0.968	0.180	1.000
Prior manag. pos. in fin. industry	113	0.292	0.457	0.000	31	0.161	0.374	0.000
Prior manag. pos. in same institution	113	0.327	0.471	0.000	31	0.613	0.495	1.000
Public sector experience								
Prior employment in the public sector	113	0.903	0.298	1.000	31	0.903	0.301	1.000
Prior manag. pos. in the public sector	113	0.664	0.475	1.000	31	0.710	0.461	1.000
Private sector experience								
Prior employment in the private sector	113	0.487	0.502	0.000	31	0.290	0.461	0.000
No. prior spells in the private sector	113	3.743	5.907	0.000	31	2.581	4.911	0.000
Prior employment in the finance industry	113	0.425	0.497	0.000	31	0.387	0.495	0.000
No. prior spells in the finance industry	113	1.150	1.764	0.000	31	0.677	1.045	0.000
Education								
Economics	104	0.702	0.460	1.000	25	0.800	0.408	1.000
Law	104	0.317	0.468	0.000	25	0.160	0.374	0.000
Holds a Ph.D.	113	0.487	0.502	0.000	31	0.355	0.486	0.000
Demographics								
Age	100	54.110	6.831	55.000	27	55.037	7.684	54.000
Female	113	0.265	0.444	0.000	31	0.226	0.425	0.000

Panel B: Banks

	Non-recession years				Recession years			
	Obs. (1)	Mean (2)	SD (3)	Median (4)	Obs. (5)	Mean (6)	SD (7)	Median (8)
Management experience								
Prior manag. pos.	664	0.985	0.122	1.000	134	0.963	0.190	1.000
Prior manag. pos. in fin. industry	664	0.989	0.102	1.000	134	0.955	0.208	1.000
Prior manag. pos. in same institution	.	.	.	.	.	.	.	.
Public sector experience								
Prior employment in the public sector	664	0.190	0.392	0.000	134	0.239	0.428	0.000
Prior manag. pos. in the public sector	664	0.009	0.095	0.000	134	0.015	0.122	0.000
Private sector experience								
Prior employment in the private sector	664	1.000	0.000	1.000	134	1.000	0.000	1.000
No. prior spells in the private sector	664	14.708	9.361	13.000	134	14.299	8.118	13.000
Prior employment in the finance industry	664	1.000	0.000	1.000	134	0.993	0.086	1.000
No. prior spells in the finance industry	664	12.944	8.189	11.000	134	12.507	7.355	12.000
Education								
Economics	.	.	.	.	.	.	.	.
Law	.	.	.	.	.	.	.	.
Holds a Ph.D.	664	0.133	0.339	0.000	134	0.119	0.325	0.000
Demographics								
Age	644	50.995	7.551	50.000	129	52.946	9.662	51.000
Female	664	0.105	0.307	0.000	134	0.030	0.171	0.000

Table 4: Determinants of executive appointments

This table reports estimates from cross-sectional linear probability models for appointments of executives at financial supervisory institutions and banks. In columns 1 to 4 (5 to 8), the dependent variable in an indicator equal to 1 if the executive is appointed at a financial supervisory institution (bank). The sample comprises: (i) all executive appointments (columns 1 and 5); (ii) appointments with no prior executive experience (columns 2 and 6); (iii) appointments with prior executive experience (columns 3 and 7); (iv) appointments with prior executive experience in banking (column 4); (vi) appointments with prior executive experience in financial supervision (column 8). All specifications include executive-level covariates measured as of appointment time (age, an indicator for female executives, the logarithm of network size, the number of positions previously held, and the number of sectors in which the executive previously held positions) as well as education, nationality, and year fixed effects. The specifications in columns 3 and 7 include binary variables equal to 1 if the appointee has prior executive experience in the indicated sector, and 0 otherwise. The dependent variable in multiplied by 100 in each specification to favor readability. Robust standard errors (in parentheses) are clustered by year of appointment. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Appointment at financial supervisor				Appointment at bank			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	0.018***	0.015**	0.013**	0.034	0.091***	0.094***	0.041***	1.445
	(4.55)	(2.38)	(2.22)	(1.03)	(7.88)	(5.69)	(2.96)	(1.58)
Female	0.527***	0.349***	0.490*	2.443	0.015	0.230	-0.392	4.647
	(4.69)	(3.01)	(2.10)	(1.02)	(0.05)	(0.66)	(-0.78)	(0.44)
ln(Network size)	0.168***	0.121***	0.114***	0.664**	1.371***	1.287***	0.392***	2.839
	(6.39)	(4.56)	(4.29)	(2.58)	(12.11)	(9.97)	(3.74)	(0.41)
No. positions	-0.074***	-0.001	-0.125***	-0.155	-0.168**	0.062	-0.136*	-1.373
	(-3.46)	(-0.01)	(-4.98)	(-0.69)	(-2.44)	(0.62)	(-1.86)	(-0.39)
No. prior sectors	0.748***	0.487***	0.768***	1.425***	1.447***	-1.349***	2.155***	-0.489
	(8.13)	(3.97)	(5.82)	(3.15)	(4.76)	(-3.04)	(4.53)	(-0.14)
Exec. exp. in fin. supervision			45.139***				0.788	
			(7.65)				(0.17)	
Exec. exp. in government			1.610*				-6.713***	
			(2.09)				(-6.88)	
Exec. exp. in banking			0.677				37.247***	
			(1.40)				(19.97)	
Exec. exp. in insurance			0.322				-4.121***	
			(0.37)				(-3.44)	
Exec. exp. in other finance			0.001				-5.369***	
			(0.00)				(-7.28)	
Exec. exp. in nonfin. sector			-0.047				-10.968***	
			(-0.12)				(-8.87)	
Exec. exp. in academia			-1.810***				-8.379***	
			(-2.96)				(-5.27)	
Exec. exp. in unknown sector			-0.143**				-0.102	
			(-2.16)				(-0.49)	
Education FE	X	X	X	X	X	X	X	X
Nationality FE	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Sample of exec. appointments	All	Inexperienced	Experienced	Experienced in banking	All	Inexperienced	Experienced	Experienced in fin. sup.
Mean(y)	0.39	0.32	0.46	1.39	3.94	3.47	4.41	12.50
SD(y)	6.23	5.67	6.74	11.71	19.45	18.29	20.54	33.37
R^2	0.02	0.02	0.17	0.08	0.05	0.04	0.33	0.61
Observations	51,640	25,742	25,880	1,582	51,640	25,742	25,880	56

Table 5: Bank value and national supervisors' executive appointments

This table reports estimates from regressions of bank stock returns on an indicator for days in which the national supervisor appoints an executive director. The dependent variable is the bank's daily stock return. *Appointment* (+0) is an indicator variable equal to 1 if on a given the bank's national supervisor appoints an executive director, and 0 otherwise. The number of leads and lags of *Appointment* (+0), control variables, and fixed effects included in each specification are indicated below. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\overline{\text{CAR}}[-1,+1]$ is the average cumulative abnormal return between day -1 and day $+1$, computed as the sum of the coefficient estimates for *Appointment* (-1), *Appointment* (+0), and *Appointment* (+1). The p-value of the F-test of the null hypothesis that such a sum is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) are reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)					
	(1)	(2)	(3)	(4)	(5)	(6)
Appointment (-1)	0.018	0.026	0.004	-0.047	-0.048	-0.044
	(0.10)	(0.10)	(0.12)	(0.10)	(0.10)	(0.10)
Appointment (+0)	-0.467***	-0.469***	-0.464***	-0.396***	-0.397***	-0.386***
	(0.10)	(0.12)	(0.13)	(0.09)	(0.10)	(0.10)
Appointment (+1)	-0.374***	-0.397***	-0.419***	-0.083	-0.101	-0.095
	(0.13)	(0.14)	(0.14)	(0.11)	(0.10)	(0.10)
Lags/leads	-1/+1	-5/+5	-10/+10	-5/+5	-5/+5	-5/+5
Stoxx Europe 600 return				X	X	X
Bank FE					X	X
Month-year FE						X
$\overline{\text{CAR}}[-1,+1]$	-0.823	-0.839	-0.879	-0.526	-0.546	-0.525
H_0: $\overline{\text{CAR}}[-1,+1]=0$ (p-value)	0.001	0.004	0.005	0.016	0.013	0.017
No. appointments	77	75	72	74	74	74
No. bank-level events	304	263	232	262	262	262
Mean(y)	0.008	0.009	0.005	0.008	0.008	0.008
SD(y)	2.243	2.261	2.283	2.262	2.262	2.262
R^2	0.000	0.000	0.000	0.375	0.378	0.384
Observations	156,444	135,603	117,597	135,397	135,397	135,397

Table 6: Bank value, national supervisors' executive appointments, and their background
This table reports estimates from regressions of bank stock returns on indicators for days in which the national supervisor appoints an executive director with a certain work experience. The dependent variable is the bank's daily stock return. *Appointment, w/o fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with no prior finance experience, and 0 otherwise. *Appointment, with fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with prior finance experience, and 0 otherwise. *Appointment, with link to bank (+0)* is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director who previously held a position at the bank, and 0 otherwise. The number of leads and lags of the appointment indicator variables, control variables, and fixed effects included in each specification are indicated below. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\overline{\text{CAR}}[-1,+1]$ is the average cumulative abnormal return between day −1 and day +1 around the event, computed as the sum of the coefficient estimates for the appointment indicator variable on days −1, +0, and +1. The p-value of the F-test of the null hypothesis that such a sum is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)					
	(1)	(2)	(3)	(4)	(5)	(6)
Appointment, w/o fin. background (−1)	0.125	0.088				
	(0.15)	(0.16)				
Appointment, w/o fin. background (+0)	-0.642***	-0.680***				
	(0.15)	(0.16)				
Appointment, w/o fin. background (+1)	-0.251	-0.288*				
	(0.15)	(0.15)				
Appointment, with fin. background (−1)			-0.217*	-0.171		
			(0.12)	(0.12)		
Appointment, with fin. background (+0)			-0.135	-0.071		
			(0.11)	(0.10)		
Appointment, with fin. background (+1)			0.066	0.122		
			(0.09)	(0.09)		
Appointment, with link to bank (−1)					-0.197	-0.208
					(0.19)	(0.21)
Appointment, with link to bank (+0)					0.465**	0.481**
					(0.23)	(0.22)
Appointment, with link to bank (+1)					-0.230	-0.202
					(0.26)	(0.28)
Lags/leads	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5
Stoxx Europe 600 return	X	X	X	X	X	X
Bank FE	X	X	X	X	X	X
Month-year FE		X		X		X
$\overline{\text{CAR}}[-1,+1]$	-0.768	-0.880	-0.286	-0.12	0.038	0.071
H_0: $\overline{\text{CAR}}[-1,+1]=0$ (p-value)	0.014	0.007	0.169	0.542	0.931	0.888
No. appointments	41	41	33	33	13	13
No. bank-level events	134	134	128	128	15	15
Mean(y)	0.008	0.008	0.008	0.008	0.008	0.008
SD(y)	2.262	2.262	2.262	2.262	2.262	2.262
R^2	0.378	0.384	0.378	0.384	0.378	0.384
Observations	135,397	135,397	135,397	135,397	135,397	135,397

Table 7: Bank value and national supervisors' executive appointments across the business cycle
This table reports estimates from regressions of bank stock returns on indicators for days in which the national supervisor appoints an executive director, distinguishing between recession and non-recession periods. *Appointment* (+0) is an indicator variable equal to 1 if on a given the bank's national supervisor appoints an executive director, and 0 otherwise. Such an variable is interacted with *Recession*, an indicator variable equal to 1 if real GDP growth is negative for at least two quarters in a given year for the country where the bank is based. The number of leads and lags of *Appointment* (+0), control variables, and fixed effects included in each specification are indicated below. The number of leads and lags of *Appointment* (+0) indicator variables, control variables, and fixed effects included in each specification are indicated below. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\Delta\overline{\text{CAR}}[-1,+1]$ is the difference between appointments made in recession and those made in non-recession times in terms of average cumulative abnormal return between day -1 and day $+1$ around the event, computed as the sum of the coefficient estimates for the interaction term on days -1, $+0$, and $+1$. The p-value of the F-test of the null hypothesis that such a difference is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)					
	(1)	(2)	(3)	(4)	(5)	(6)
Appointment (-1)	0.120	0.103	0.032	-0.153*	-0.154*	-0.136*
	(0.07)	(0.08)	(0.09)	(0.08)	(0.08)	(0.08)
Appointment ($+0$)	0.053	0.030	-0.002	-0.097	-0.099	-0.070
	(0.10)	(0.13)	(0.13)	(0.09)	(0.10)	(0.10)
Appointment ($+1$)	-0.257**	-0.285**	-0.358***	0.085	0.061	0.083
	(0.11)	(0.11)	(0.11)	(0.09)	(0.08)	(0.08)
Appointment (-1) × Recession	-0.458	-0.300	-0.040	0.606	0.599	0.539
	(0.33)	(0.40)	(0.46)	(0.38)	(0.38)	(0.36)
Appointment ($+0$) × Recession	-2.289***	-2.369***	-2.337***	-1.354***	-1.359***	-1.432***
	(0.32)	(0.32)	(0.38)	(0.26)	(0.27)	(0.27)
Appointment ($+1$) × Recession	-0.511	-0.532	-0.286	-0.830**	-0.812**	-0.865**
	(0.40)	(0.42)	(0.46)	(0.37)	(0.37)	(0.34)
Lags/leads	-1/+1	-5/+5	-10/+10	-5/+5	-5/+5	-5/+5
Recession	X	X	X	X	X	X
Stoxx Europe 600 return				X	X	X
Bank FE					X	X
Month-year FE						X
$\Delta\overline{\text{CAR}}[-1,+1]$	-3.257	-3.201	-2.663	-1.579	-1.572	-1.757
H_0: $\Delta\overline{\text{CAR}}[-1,+1]=0$ (p-value)	0.000	0.000	0.004	0.028	0.031	0.007
No. appointments	77	75	72	74	74	74
No. bank-level events	304	263	232	262	262	262
Mean(y)	0.008	0.009	0.005	0.008	0.008	0.008
SD(y)	2.243	2.261	2.283	2.262	2.262	2.262
R^2	0.001	0.001	0.001	0.376	0.378	0.384
Observations	156,444	135,603	117,597	135,397	135,397	135,397

Table 8: Bank value and national supervisors' executive appointments around the SSM introduction
This table reports estimates from regressions of bank stock returns on an indicator for days in which the national supervisor appoints an executive director before and after the introduction of the SSM. The dependent variable is the bank's daily stock return. *Appointment* (+0) is an indicator variable equal to 1 if on a given the bank's national supervisor appoints an executive director, and 0 otherwise. The number of leads and lags of *Appointment* (+0), control variables, and fixed effects included in each specification are indicated below. Columns 1-2 (3-4) restrict the analysis to the pre-SSM (post-SSM) period. Odd columns identify the pre- and post-SSM period based on the date of the SSM agreement (June 29, 2012), whereas even columns refer to the date in which the SSM first came into force (November 3, 2014). Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\overline{\text{CAR}}[-1,+1]$ is the average cumulative abnormal return between day −1 and day +1, computed as the sum of the coefficient estimates for *Appointment* (−1), *Appointment* (+0), and *Appointment* (+1). The *p*-value of the *F*-test of the null hypothesis that such a sum is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)			
	Pre-SSM		Post-SSM	
	(1)	(2)	(3)	(4)
Appointment (−1)	-0.007	0.089	-0.116	-0.340***
	(0.16)	(0.15)	(0.11)	(0.09)
Appointment (+0)	-0.463***	-0.575***	-0.299	-0.019
	(0.12)	(0.10)	(0.19)	(0.18)
Appointment (+1)	-0.218	-0.139	0.081	-0.014
	(0.15)	(0.14)	(0.15)	(0.15)
Lags/leads	-5/+5	-5/+5	-5/+5	-5/+5
Stoxx Europe 600 return	X	X	X	X
Bank FE	X	X	X	X
SSM sample split around	Agreement	Enforcement	Agreement	Enforcement
$\overline{\text{CAR}}[-1,+1]$	-0.688	-0.625	-0.334	-0.372
H_0: $\overline{\text{CAR}}[-1,+1]=0$ (p-value)	0.032	0.031	0.098	0.108
No. appointments	43	47	31	27
No. bank-level events	162	180	100	82
Mean(y)	-0.014	0.008	0.035	0.009
SD(y)	2.424	2.411	2.048	1.990
R^2	0.404	0.400	0.337	0.327
Observations	74,202	84,592	61,195	50,805

Table 9: Bank value and SSM-related events

This table reports estimates of bank stock market reactions to the most salient events that led to the introduction of the SSM. For each event, average abnormal returns at days −1, 0, and +1 ($\overline{\text{AR}}[-1]$, $\overline{\text{AR}}[+0]$, and $\overline{\text{AR}}[+1]$) around the announcement date, as well as the average cumulative abnormal return between days −1, 0, and +1 ($\overline{\text{CAR}}[-1,+1]$) are reported. To obtain such estimates, separate event studies on bank daily stock returns have been conducted in the style of the event study baseline specification (Column 4 of Table 5). In each regression, we limit the sample to the two years around the respective event date. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. Refer to Appendix Table A.2 for variable definitions.

		$\overline{\text{AR}}[-1]$	$\overline{\text{AR}}[+0]$	$\overline{\text{AR}}[+1]$	$\overline{\text{CAR}}[-1,+1]$
Date	Event	(1)	(2)	(3)	(4)
June 29, 2012	Eurozone leaders agree on the establishment of the SSM.	-0.370	0.296	-0.130	-0.204
		(0.368)	(0.636)	(0.805)	(0.814)
September 7, 2012	ECB Vice President speech at the Duisenberg School of Finance titled "Toward a European Banking Union"	1.606***	1.948***	0.97**	4.524***
		(0.000)	(0.001)	(0.029)	(0.000)
September 12, 2012	European Commission adopts two proposals for the establishment of the SSM.	1.239***	-0.770***	0.182	0.650
		(0.003)	(0.002)	(0.684)	(0.236)
December 13, 2012	ECOFIN reaches a landmark agreement on the establishment of the SSM.	1.135***	1.147**	-0.047	2.235***
		(0.000)	(0.014)	(0.838)	(0.005)
December 14, 2012	Disclosure of the criteria adopted by the ECB to identify significant banks.	1.150**	-0.045	0.935**	2.040**
		(0.014)	(0.845)	(0.04)	(0.019)
February 12, 2013	ECB Vice President speech at the Warwick Economics Summit titled "Financial Stability Risks, Monetary Policy and the Need for Macro-Prudential Policy".	0.608	-1.409***	0.065	-0.737
		(0.143)	(0.001)	(0.887)	(0.295)
September 12, 2013	EU parliament approves the EU bank supervision system.	1.297***	-0.297	-0.823**	0.177
		(0.006)	(0.148)	(0.019)	(0.725)
October 23, 2013	ECB starts comprehensive assessment in advance of its supervisory role.	-0.819**	-1.726***	1.222***	-1.322***
		(0.040)	(0.001)	(0.002)	(0.008)
December 16, 2013	Danièle Nouy appointed as Chair of the supervisory board.	0.267	0.041	-0.464	-0.156
		(0.292)	(0.889)	(0.427)	(0.787)
January 9, 2014	Four directors appointed in the new Directorate General for supervision.	1.361***	0.661*	-0.693**	1.329**
		(0.000)	(0.098)	(0.017)	(0.010)
January 22, 2014	Sabine Lautenschläger appointed as Vice-Chair of the supervisory board.	-0.089	-0.692*	0.708	-0.074
		(0.737)	(0.063)	(0.108)	(0.905)
February 3, 2014	ECB makes progress with the Asset Quality Review (AQR) and confirms stress-test. parameters for comprehensive assessment.	0.049	-1.415***	1.444***	0.078
		(0.849)	(0.000)	(0.000)	(0.868)
March 7, 2014	ECB appoints three representatives to the bank supervisory board.	-0.008	-0.362	0.575*	0.205
		(0.985)	(0.180)	(0.061)	(0.752)
April 25, 2014	ECB publishes framework for SSM regulation.	-0.273	-0.894***	-0.327*	-1.494***
		(0.415)	(0.000)	(0.081)	(0.002)
April 29, 2014	ECB says that capital gaps from AQR must be covered with CET1 instruments.	-0.328*	0.800**	-0.770**	-0.298
		(0.081)	(0.029)	(0.011)	(0.516)
July 17, 2014	ECB Vice President says strictness of ECB test not just about results.	0.952***	-0.722***	0.112	0.342
		(0.006)	(0.001)	(0.651)	(0.412)
October 27, 2014	ECB discloses results of the AQR exercise and identifies banks that need further actions.	1.728***	-0.858**	-0.059	0.81*
		(0.000)	(0.039)	(0.814)	(0.094)
November 4, 2014	SSM starts.	-0.323	0.193	-1.783***	-1.912**
		(0.544)	(0.579)	(0.000)	(0.019)

Table 10: Bank debt value and national supervisors' executive appointments

This table reports estimates from regressions of changes in CDS spreads on an indicator for days in which the national supervisor appoints an executive director. The dependent variable is the bank's daily change in spreads on 5-year CDS contracts written on senior unsecured debt. *Appointment* (+0) is an indicator variable equal to 1 if on a given the bank's national supervisor appoints an executive director, and 0 otherwise. *Appointment, w/o fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with no prior finance experience, and 0 otherwise. *Appointment, with fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with prior finance experience, and 0 otherwise. *Appointment, with link to bank)* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director who previously held a position at the bank, and 0 otherwise. The number of leads and lags of the appointment indicator variables, control variables, and fixed effects included in each specification are indicated below. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\overline{\text{CAR}}[-1,+1]$ is the average cumulative abnormal CDS spread change between day −1 and day +1 around the event, computed as the sum of the coefficient estimates for the appointment indicator variable on days −1, +0, and +1. The p-value of the F-test of the null hypothesis that such a sum is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	ΔCDS spread							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Appointment (−1)	0.473**	0.438*						
	(0.21)	(0.22)						
Appointment (+0)	0.549*	0.514*						
	(0.30)	(0.30)						
Appointment (+1)	0.264	0.250						
	(0.24)	(0.26)						
Appointment, w/o fin. background (−1)			0.687	0.730*				
			(0.42)	(0.42)				
Appointment, w/o fin. background (+0)			0.633	0.747				
			(0.53)	(0.55)				
Appointment, w/o fin. background (+1)			0.394*	0.509**				
			(0.21)	(0.21)				
Appointment, with fin. background (−1)					0.227	0.104		
					(0.21)	(0.19)		
Appointment, with fin. background (+0)					0.448	0.243		
					(0.29)	(0.27)		
Appointment, with fin. background (+1)					0.126	-0.035		
					(0.49)	(0.54)		
Appointment of a director with link to bank (−1)							1.334***	1.389**
							(0.44)	(0.51)
Appointment of a director with link to bank (+0)							-0.363	-0.299
							(0.40)	(0.43)
Appointment of a director with link to bank (+1)							-0.185	-0.027
							(0.49)	(0.37)
Lags/leads	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5	-5/+5
Stoxx Europe 600 return	X	X	X	X	X	X	X	X
Sovereign credit spread	X	X	X	X	X	X	X	X
Bank FE	X	X	X	X	X	X	X	X
Month-year FE		X		X		X		X
$\overline{\text{CAR}}[-1,+1]$	1.286	1.202	1.714	1.986	0.801	0.312	0.786	1.062
H_0: CAR$[-1,+1]=0$ (p-value)	0.001	0.006	0.028	0.022	0.056	0.539	0.177	0.015
No. appointments	69	69	38	38	31	31	10	10
No. bank-level events	167	167	87	87	80	80	12	12
Mean(y)	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
SD(y)	6.963	6.963	6.963	6.963	6.963	6.963	6.963	6.963
R^2	0.088	0.106	0.088	0.106	0.089	0.106	0.088	0.106
Observations	83,724	83,724	83,724	83,724	83,724	83,724	83,724	83,724

Table 11: Bank-level outcomes and supervisors' background

This table reports estimates from regression for selected bank-level outcomes on measures of the background of executives serving on the board of the relevant national supervisory authorities. The dependent variables are Tier 1 capital ratio (columns 1 and 2), the logarithm of the CDS spread (columns 3 and 4), loan growth (columns 5 and 6), and asset growth (columns 7 and 8). *Share of supervisors with experience in finance* measures the fraction of executives that previously held positions in the finance sector at supervisory authorities of the country in which the bank is located. *Share of supervisors with management experience in finance* measures the fraction of executives that previously held managerial positions in the finance sector at supervisory authorities of the country in which the bank is located. *At least one executive with financial supervision experience* is an indicator variable equal to 1 if in the executive team of the bank there is one or more individual with prior experience in financial supervision, and 0 otherwise. Each specification includes year fixed effects and the following control variables: the costs-to-income ratio, the logarithm of total assets, the loans-to-assets ratio, and the deposits-to-assets ratio. Robust standard errors (in parentheses) are clustered by bank home country. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Tier 1 cap. ratio		ln(CDS spread)		Loan growth		Asset growth	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share of supervisors with experience in finance	-0.032		-0.243		0.056		0.075**	
	(-1.46)		(-0.79)		(1.73)		(3.23)	
Share of supervisors with management experience in finance		-0.043		-0.537**		0.040		0.080**
		(-1.67)		(-2.29)		(1.30)		(2.45)
At least one executive with financial supervision experience	0.013	0.012	0.069	0.053	-0.007	-0.007	-0.002	-0.002
	(0.65)	(0.63)	(0.59)	(0.47)	(-0.56)	(-0.56)	(-0.22)	(-0.18)
Bank control variables	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Mean(y)	0.12	0.12	4.34	4.34	0.04	0.04	0.03	0.03
SD(y)	0.07	0.07	1.06	1.06	0.11	0.11	0.11	0.11
R^2	0.40	0.40	0.87	0.88	0.22	0.22	0.29	0.29
Observations	948	948	352	352	942	942	948	948

Appendix for

"The Reverse Revolving Door in the Supervision of European Banks"

Figure A.1: Demographic characteristics in executive boards of national banking supervisors
This figure shows the dynamics of selected demographic traits of executive directors of national banking supervisors from selected EU countries between 2002 and 2019. The red line indicates the share of female directors. The green line indicates the average age of newly appointed executive directors. The covered countries are Austria (AT), Belgium (BE), Germany (DE), Spain (ES), France (FR), Ireland (IE), Italy (IT), Netherlands (NL), Sweden (SE), and United Kingdom (UK).

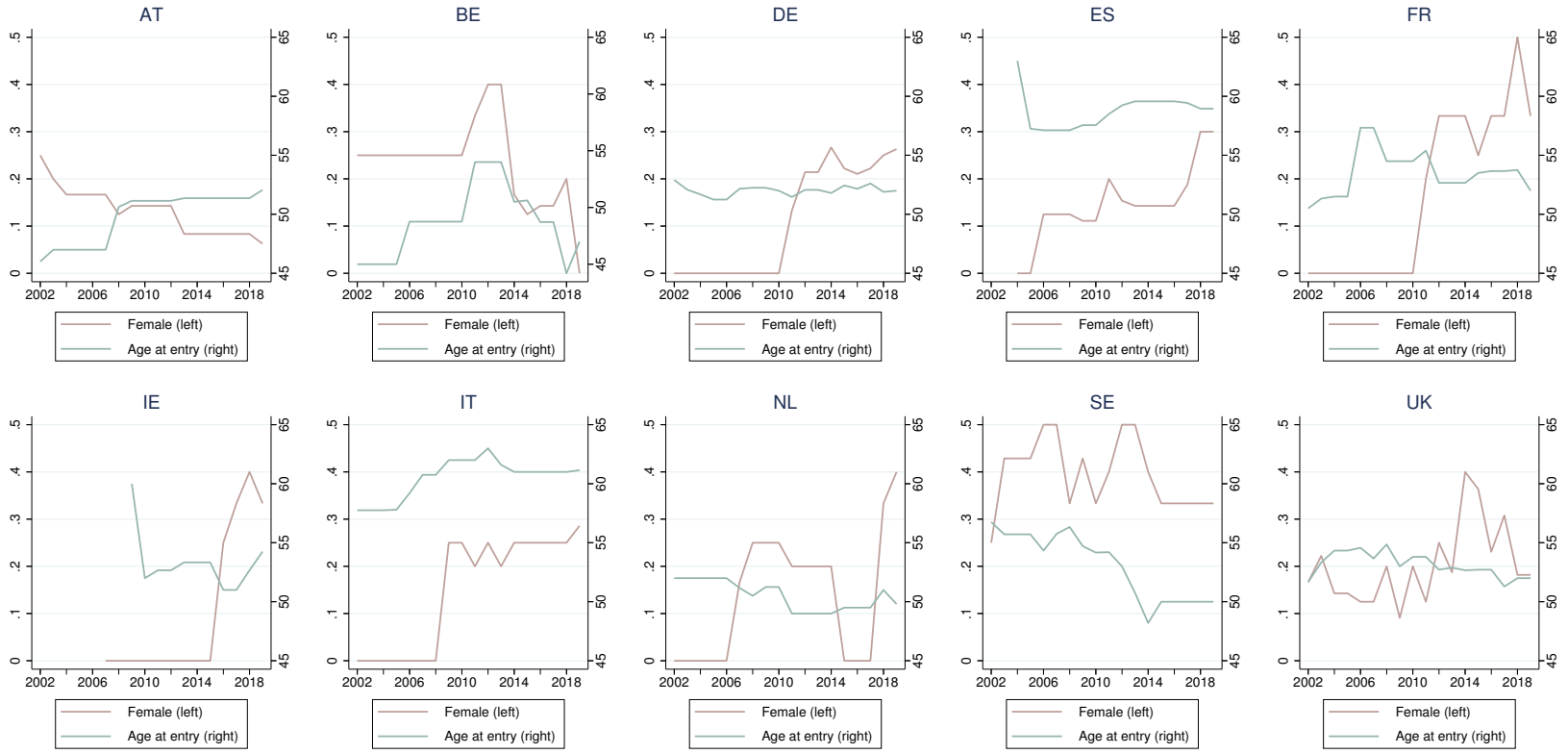


Figure A.2: Education background in executive boards of national banking supervisors
This figure shows what fraction of executive directors of national banking supervisors from selected EU countries has an education background in economics (positive domain of the y-axis, in brown) or law (negative domain of the y-axis, in green) between 2002 and 2019. A board member is categorized as having an education background in economics if she studied economics, finance, business, or completed an MBA program. The covered countries are Austria (AT), Belgium (BE), Germany (DE), Spain (ES), France (FR), Ireland (IE), Italy (IT), Netherlands (NL), Sweden (SE), and United Kingdom (UK).

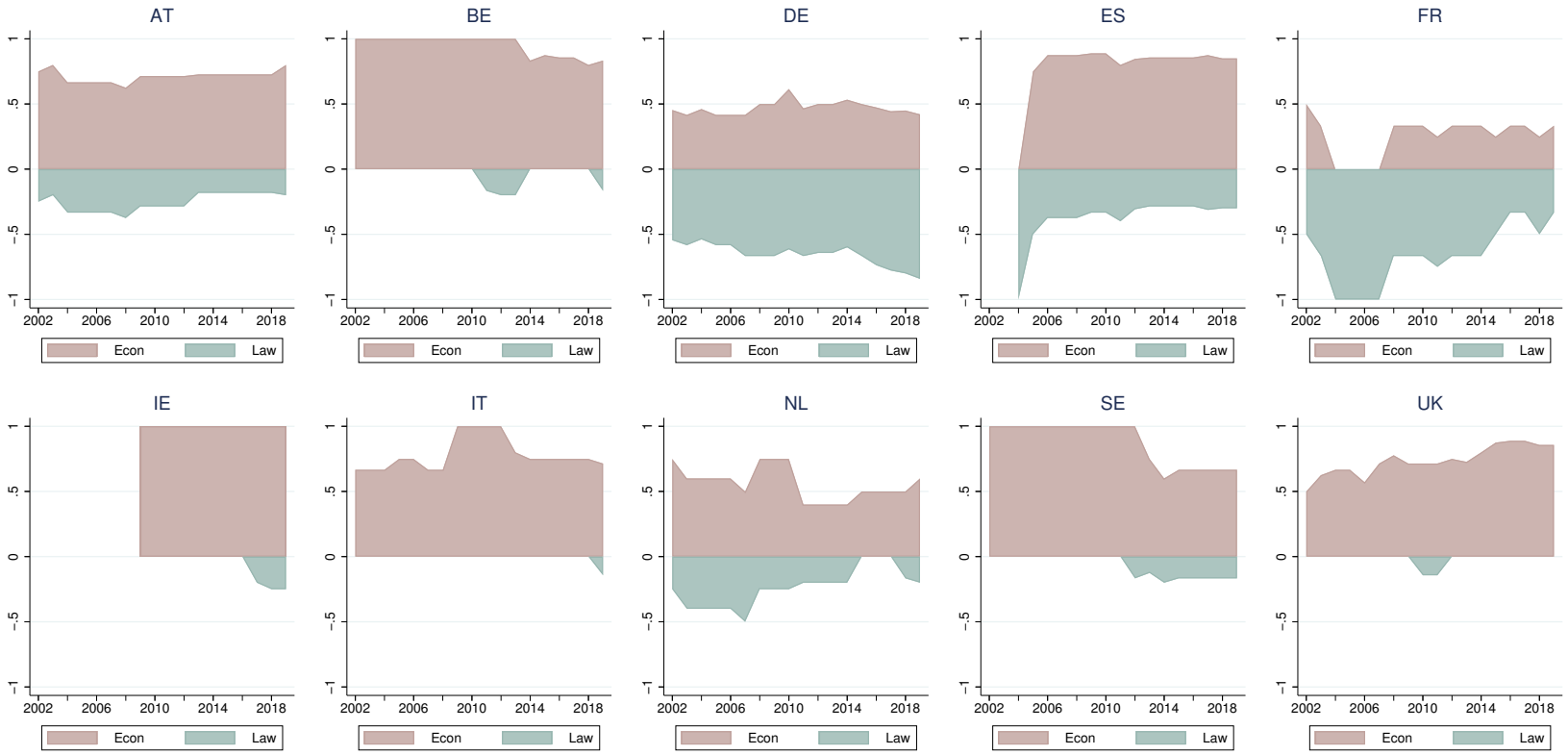


Figure A.3: Bank-level outcomes and supervisors' experience in the finance industry
This figure plots the average marginal effects (AMEs) of prior experience in the finance industry of banking supervisors on selected bank-level outcomes over time, estimated from regressions of the following form:

$$y_{it} = \sum_t \beta_t \cdot z_{ct} \times \mathbf{1}_{\{\text{Year}=t\}} + \Gamma \boldsymbol{X}_{it} + \eta_t + \epsilon_{it},$$

where y_{it} is an outcome variable (Tier 1 capital ratio, the logarithm of the CDS spread, loan growth, and asset growth) for bank i in year t. The variable z_{ct} is the fraction of executives with experience in finance in the banking authorities of country c (where the bank is based) for year t. $\mathbf{1}_{\{\text{Year}=t\}}$ is an indicator variable equal to 1 in year t, and 0 otherwise. The specification includes year fixed effects (η_t) as well as the following control variables ($\boldsymbol{X}_{it}$): an indicator for the presence of at least one executive at the bank with prior experience in financial supervision, the costs-to-income ratio, the logarithm of total assets, the loans-to-assets ratio, and the deposits-to-assets ratio. The vertical bars denote 95% confidence intervals, based on standard errors clustered by bank home country.

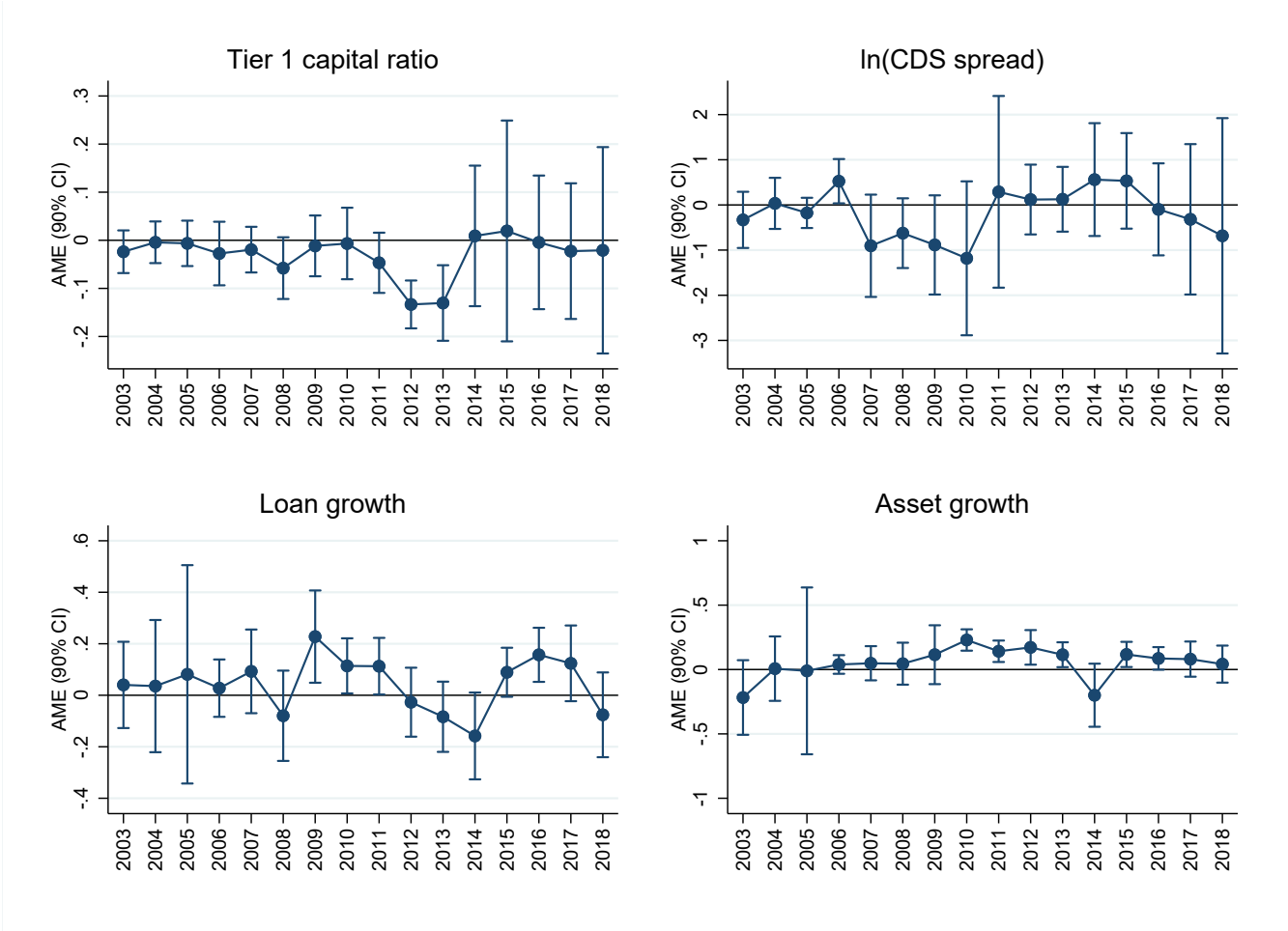


Table A.1: List of national banking supervisors
This table lists the national banking supervisors included in the sample, together with the time span, the number of distinct executive directors, and the number of executive-years available for each of them. The covered institutions are from the following countries: Austria (AT), Belgium (BE), Germany (DE), Spain (ES), France (FR), Ireland (IE), Italy (IT), Netherlands (NL), Sweden (SE), and United Kingdom (UK).

Country	Institution	First year	Last year	No. executives	No. executive-years
AT	Österreichische Nationalbank	2002	2019	13	120
AT	Österreichische Finanzmarktaufsichtsbehörde	2002	2019	4	37
BE	Nationale Bank van België	2002	2019	14	91
DE	Deutsche Bundesbank	2002	2019	20	135
DE	Bundesanstalt für Finanzdienstleistungsaufsicht	2002	2019	14	126
ES	Banco de España	2004	2019	20	182
FR	Banque de France	2002	2019	9	58
IE	Central Bank of Ireland	2007	2019	9	44
IT	Banca d'Italia	2002	2019	15	79
NL	De Nederlandsche Bank	2002	2019	13	85
SE	Sveriges Riksbank	2002	2019	16	112
UK	Bank of England	2002	2019	16	77
UK	Prudential Regulation Authority	2012	2019	13	52
UK	Financial Services Authority	2002	2013	14	57

Table A.2: Definition of main variables

Variable	Databases	Definition
Stock return	BPS	Daily stock return.
CDS spread	BPS, Datastream	Bank CDS spread on unsecured bonds.
Appointment	BPS	Indicator equal to 1 on the day of an announcement of an appointment of a new executive director at a supervisory institution in the home country of the bank, and 0 otherwise.
Appointment, w/o fin. background	BPS, manually collected	Indicator equal to 1 if *Appointment* is equal to 1 and the appointee has no prior experience in the finance industry, and 0 otherwise.
Appointment, with fin. background	BPS, manually collected	Indicator equal to 1 if *Appointment* is equal to 1 and the appointee has prior experience in the finance industry, and 0 otherwise.
Appointment, with link to bank	BPS, manually collected	Indicator equal to 1 if *Appointment* is equal to 1 and the appointee previously held a position at the supervised bank, and 0 otherwise.
Share of supervisors with experience in finance	Manually collected	Fraction of executives on the board of the bank's supervisory authority that have prior experience in the finance industry.
Share of supervisors with experience in finance		Fraction of executives on the board of the bank's supervisory authority that have prior management-level experience in the finance industry.
At least one executive with financial supervision experience	BoardEx	Indicator variable equal to 1 if at least one executive on the bank's board has prior experience in supervision (including national and European banking authorities as well financial markets authorities), and 0 otherwise.
Total assets	Bankscope, Orbis Bank Focus	Book value of total assets.
Impaired loans ratio	Bankscope, Orbis Bank Focus	Ratio of impaired loans over total loans.
Tier 1 capital ratio	Bankscope, Orbis Bank Focus	Ratio of tier 1 regulatory capital over risk weighted assets.
Loan growth	Bankscope, Orbis Bank Focus	Annual growth rate of total loans.
Asset growth	Bankscope, Orbis Bank Focus	Annual growth rate of total asset.
Costs-to-income ratio	Bankscope, Orbis Bank Focus	Ratio of non-interest expenses over the sum of net interest income and other operating income.
Loans-to-assets ratio	Bankscope, Orbis Bank Focus	Ratio of total loans over total assets.
Deposits-to-assets ratio	Bankscope, Orbis Bank Focus	Ratio of deposits over total assets.
Age	BoardEx, manually collected	Age of the executive.
Female	BoardEx, manually collected	Indicator equal to 1 if the executive is female, and 0 otherwise.
Network size	BoardEx	Size of the executive's personal network based on overlaps via job spells, education, etc.
No. positions	BoardEx	Number of positions (executive and supervisory directorships as well as below-board positions) previously held by the executive.
No. prior sectors	BoardEx	Number of sectors in which the executive has experience based on prior positions (executive and supervisory directorships as well as below-board positions).
Executive experience in [*sector*]	BoardEx	Indicator variable equal to 1 if the executive has prior executive-level in [*sector*], and 0 otherwise.
Sovereign credit spread	BPS, Datastream	Difference between sovereign yield and reference rate.
Stoxx Europe 600 return	BPS	Return of Stoxx Europe 600 stock market index.

Table A.3: Bank value and national supervisors' executive appointments (in event time)
This table reports estimates from event-time regressions of bank stock returns on an indicator for days in which the national supervisor appoints an executive director. The dependent variable is the bank's daily stock return. *Appointment* (+0) is an indicator variable equal to 1 if on a given the bank's national supervisor appoints an executive director, and 0 otherwise. *Appointment, w/o fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with no prior finance experience, and 0 otherwise. *Appointment, with fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with prior finance experience, and 0 otherwise. *Appointment, with link to bank)* (+0 is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director who previously held a position at the bank, and 0 otherwise. The number of leads and lags of the appointment indicator variables, control variables, and fixed effects included in each specification are indicated below. The estimation sample is restricted to the window of $[-50, +50]$ days around each appointment event, and excludes events exhibiting overlapping windows. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\overline{\text{CAR}}[-1, +1]$ is the average cumulative abnormal stock return of the null hypothesis that such a sum is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)			
	(1)	(2)	(3)	(4)
Appointment (+0)	-0.317***			
	(0.09)			
Appointment, w/o fin. background (+0)		-0.668***		
		(0.14)		
Appointment, with fin. background (+0)			0.023	
			(0.12)	
Appointment of a director with link to bank (+0)				0.511**
				(0.21)
Lags/leads	-10/+10	-10/+10	-10/+10	-10/+10
Stoxx Europe 600 return	X	X	X	X
Bank FE	X	X	X	X
$\overline{\text{CAR}}[-1, +1]$	-0.353	-0.605	-0.179	0.743
H_0: $\overline{\text{CAR}}[-1, +1] = 0$ (p-value)	0.193	0.072	0.780	0.897
No. appointments	67	38	33	14
No. bank-level events	268	148	144	16
Mean(y)	-0.002	-0.022	0.027	-0.035
SD(y)	2.276	2.347	2.344	2.405
R^2	0.360	0.343	0.398	0.545
Observations	24,015	13,567	13,886	1,556

Table A.4: Bank value, national supervisors' executive appointments, and their background (joint estimation)

This table reports estimates from regressions of bank stock returns on indicators for days in which the national supervisor appoints an executive director with a certain work experience. The dependent variable is the bank's daily stock return. *Appointment, with fin. background* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director with prior finance experience, and 0 otherwise. *Any other appointment* (+0) is an indicator variable equal to 1 if on a given day the bank's national supervisor appoints an executive director and *Appointment, with fin. background* (+0)= 0, and 0 otherwise. The number of leads and lags of the appointment indicator variables, control variables, and fixed effects included in each specification are indicated below. Robust standard errors (in parentheses) are clustered by bank. Significance at the 10%, 5%, and 1% level is indicated by *, **, and ***, respectively. $\Delta\overline{\text{CAR}}[-1,+1]$ is the difference between finance-related and other appointments in terms of average cumulative abnormal return between day -1 and day $+1$ around the event. The p-value of the F-test of the null hypothesis that such a difference is equal to 0 is reported below. The number of events (*No. appointments*) as well as the number of banks affected by them (*No. bank-level appointments*) is reported below. Refer to Appendix Table A.2 for variable definitions.

Dependent variable:	Stock return (in %)	
	(1)	(2)
Appointment, with fin. background (-1)	-0.218*	-0.172
	(0.12)	(0.12)
Appointment, with fin. background (+0)	-0.136	-0.073
	(0.11)	(0.10)
Appointment, with fin. background (+1)	0.064	0.121
	(0.10)	(0.10)
Any other appointment (-1)	0.124	0.088
	(0.15)	(0.16)
Any other appointment (+0)	-0.643***	-0.680***
	(0.15)	(0.16)
Any other appointment (+1)	-0.252	-0.288*
	(0.15)	(0.15)
Lags/leads	-5/+5	-5/+5
Stoxx Europe 600 return	X	X
Bank FE	X	X
Month-year FE		X
$\Delta\overline{\text{CAR}}[-1,+1]$	0.480	0.757
H_0: $\Delta\overline{\text{CAR}}[-1,+1]=0$ (p-value)	0.104	0.0125
No. appointments	74	74
No. bank-level events	262	262
Mean(y)	0.008	0.008
SD(y)	2.262	2.262
R^2	0.378	0.384
Observations	135,397	135,397