# Between Boardrooms and the Beltway: The Career Paths of Senior Regulators *

Ran Duchin, Joseph Kalmenovitz, and Yudong Wang

November 18, 2025

**Abstract**

We compile a comprehensive database tracing the full career paths of senior regulators across all major U.S. federal agencies. Revolving door transitions between the public and private sectors are widespread and often repeated over a regulator's career. While in office, revolving regulators pursue more enforcement actions and introduce more complex and burdensome rules. We identify three forces shaping this behavior. (i) *Political alignment*: regulators time career moves around presidential turnovers well before reaching their top post. (ii) *Financial incentives*: those entering the labor market during recessions or from poorer backgrounds are more likely to revolve and ultimately accumulate greater wealth. (iii) *Career advancement*: regulators who enforce more aggressively or design more complex rules later secure more senior private sector roles, and their networks benefit affiliated firms. Together, political, financial, and career motives jointly drive revolving door dynamics and the regulatory footprints they leave behind.

*For helpful comments, we thank Christa Bouwman, Serdar Dinc, Jesse Ellis, Eitan Goldman, Lily Li, Tianyi Qu, Ana-Maria Tenekedjieva, Nishant Vats, Ekaterina Volkova, Edward Van Wesep, Shuran Zhang, and conference and seminar participants at the 3rd Annual Holden Conference in Finance and Real Estate (Indiana Kelley), 34th Annual Conference on Financial Economics and Accounting (CFEA), 9th Annual Young Scholars Finance Consortium (Texas A&M), 2023 Financial Research Association (FRA)'s Early Ideas Session, 2024 Annual Meeting of the Northern Finance Association (NFA), 2024 CUHK-RAPS-RCFS Conference on Asset Pricing and Corporate Finance, 2025 Annual Meeting of the Eastern Finance Association (EFA), 2025 Bretton Woods Accounting and Finance Ski Conference, 2025 Finance Down Under Conference, Babson College, Bentley University, Boston College, Copenhagen Business School, Norwegian School of Economics, and University of Utah. Contact: Ran Duchin, Carroll School of Management, Boston College, e-mail: duchinr@bc.edu; Joseph Kalmenovitz, Simon Business School, University of Rochester, e-mail: jkalmeno@simon.rochester.edu; Yudong Wang, Carroll School of Management, Boston College, e-mail: wangasv@bc.edu.

# Introduction

The U.S. government is steered by a small group of top regulators, such as the Chairmen of the Securities and Exchange Commission and the Federal Reserve Board. As the highest-ranking officials in their respective agencies, they oversee all regulatory activities – from rulemaking to enforcement. They are appointed for a time-limited term, bypassing the government's standard hiring and firing rules, and receive sweeping authority to advance the administration's policy goals. This sets them apart from most federal employees, who are career bureaucrats with limited influence on the overall regulatory landscape. But even though top regulators hold significant powers which affect every part of the economy, academic studies rarely analyze this influential group. We aim to fill the gap with the help of a new dataset that sheds new light on the incentives and actions of all top federal regulators. Our data reveal a defining feature of U.S. regulatory careers: revolving door moves between the public and private sectors are the norm rather than the exception, often repeated several times over a regulator's lifetime. We show that revolving regulators leave a distinct imprint on their agencies: they oversee more enforcement, initiate more rules and increasingly more complex ones, and ultimately pursue regulatory strategies that align with both their career incentives and broader political cycles.

Our analysis is centered on the 1,338 individuals who led the 50 largest federal agencies between 2000 and 2022. We hand-collect a novel dataset that tracks each regulator's full career path, from college graduation through public and private sector employment. To do so, we merge information from government payroll records, Congressional directories, confirmation hearing transcripts, as well as public websites and standard commercial databases. We document each regulator's political affiliation, educational background, job history, and personal wealth. Furthermore, we quantify each regulator's work output during their tenure by linking them to the full set of enforcement actions and rulemaking activity under their leadership. In particular, we link regulators to penalties imposed via enforcement actions based on the Violation Tracker database, and to rulemaking using the Unified Agenda and

Federal Register. In the process, we develop new measures of regulatory complexity, quantity, and productivity, to evaluate not only the volume of regulatory activity but also its type and character. The result is a comprehensive dataset that allows us to study top regulators in unprecedented detail – across agencies, over time, and through multiple lenses of incentives and outcomes.

The most striking pattern is the prevalence of the revolving door among top regulators, who move back and forth between the public and private sectors. Nearly 70% of the top regulators have worked in the private sector before their appointment, and 64% moved to the private sector after stepping down from their position. While the revolving door is widespread, its intensity varies, and in particular some officials move repeatedly between sectors. Our focus is on this latter group, whom we call revolving regulators. We define them as individuals who worked at least six consecutive months in the private sector both before and after holding their top regulatory position. Their fraction out of all senior regulators hovers around 50% throughout the sample period. On average they are younger, serve fewer years in the top regulatory position, and are more likely to be affiliated with the Republican party. Revolving regulators attend higher-ranked undergraduate institutions and graduate schools. The majority of agencies (90%) were led by at least one revolving regulator, and some, such as the Securities and Exchange Commission and the Department of Energy, were led almost exclusively by them. Revolving regulators are mostly lawyers, consultants, and corporate directors or executives, and they are most likely to work in the Business Services, Banking, Trading, and Personal Services industries.

We next turn to the central empirical question of whether revolving regulators behave differently in office. The analysis is motivated by theoretical frameworks seeking to explain why regulators move between the public and private sectors, and how these moves might shape their behavior.[1] One prominent view, *regulatory capture*, holds that regulators act to benefit prospective or former employers in the private sector. In contrast, theories of *regula-*

[1]See a comprehensive literature review in Appendix A.1.

*tory schooling* and *bureaucratic capital* emphasize the long-term value regulators derive from accumulating expertise within the government, which can later be monetized through private sector roles. While these theories offer distinct motivations, they often yield overlapping predictions: more active regulators may be seen as captured, ambitious, or simply competent. In this paper, we do not aim to adjudicate among these explanations. Instead, we take a descriptive approach, documenting systematic differences in regulatory activity and career outcomes between revolving and non-revolving regulators, while remaining agnostic about the precise motivation at play.

Specifically, we examine how regulators who have moved between the public and private sectors shape their agency's core functions: enforcement and rulemaking. To do so, we develop a comprehensive suite of metrics capturing the scope, intensity, and complexity of regulatory output, allowing us to systematically compare revolving and non-revolving regulators. We begin with enforcement activity. Using the Violation Tracker database, which covers over 500,000 federal enforcement actions and $860 billion in penalties from 2000 to 2022, we link each enforcement event to the tenure of the top regulator overseeing the issuing agency. This allows us to measure each regulator's enforcement output during their time in office, both in terms of the number of enforcement actions and the total dollar value of penalties imposed.

For rulemaking, we utilize data from Chang, Kalmenovitz, and Lopez-Lira (2023) to track every rule proposed and finalized by federal agencies since 1996. For each top regulator, we reconstruct the set of rules initiated and completed during their tenure. Not all rules are equal, however. Some impose meaningful compliance burdens on firms, while others are procedural or even deregulatory. To account for this, we construct three complementary enhancements. First, we classify rules as *regulatory* or *deregulatory* using a supervised machine learning algorithm. Specifically, we train a Legal BERT model on the subset of rules explicitly labeled under Executive Order 13771, and apply it to classify the remaining rules in the dataset. The model achieves 98% accuracy and enables us to isolate the volume of reg-

ulatory actions, separate from deregulatory ones. Second, we construct importance-weighted rulemaking scores that reflect each rule's policy significance, based on the government's own 3-tier priority ranking (Economically Significant, Other Significant, and Routine). Third, we measure rule complexity by analyzing the full regulatory text in the *Federal Register*, extracting indicators such as document length, frequency of binding legal terms (e.g., "must," "shall," "prohibited"), and the density of logical operators (e.g., "and," "or," "if"), following the methodology in Colliard and Georg (2020).

We estimate a series of panel regressions that relate a regulator's revolving door status to various regulatory outcomes, controlling for regulator demographics, year fixed effects, and agency fixed effects. Across all specifications, we find that revolving regulators impose a significantly greater regulatory burden. On the enforcement side, agencies led by revolving regulators impose 53% more enforcement actions per year and collect 486% more in total penalties, compared to their non-revolving counterparts. On the rulemaking side, revolving regulators issue more rules, particularly those that are economically significant and regulatory in nature. Importance-weighted rulemaking scores are 17% higher when the agency is led by a revolving regulator, and regulatory rulemaking (as opposed to deregulatory) is 14% higher. These effects are robust and economically meaningful. We also find that revolving regulators tend to pursue more complex rules: the likelihood that a revolving regulator will issue rules with above-median textual complexity is between 45% and 60% higher, depending on the metric used.

We further assess whether revolving regulators generate more output per unit of agency resources. Using payroll and headcount data from Kalmenovitz, Vij, and Xiao (2022), we construct productivity measures – enforcement and rulemaking output per employee and per dollar of payroll. Revolving regulators lead agencies with significantly higher productivity on enforcement, and modestly higher productivity on rulemaking, suggesting that they manage their agencies more intensively, not just more expansively.

Taken together, these results establish that revolving regulators leave a distinct and

measurable imprint on regulatory output. They oversee more enforcement, generate more complex rules, and push their agencies to produce more per unit of labor. These patterns are robust to a wide range of controls and hold within-agency over time. They underscore that the revolving door experience is not merely a curious trait, but rather a powerful predictor of real differences in regulatory behavior. While these findings are consistent with multiple theoretical interpretations, they do not map cleanly onto any single framework. The observed patterns could reflect forms of regulatory capture, if revolving regulators are currying favor with future employers; or they could indicate the accumulation of bureaucratic capital, if regulators are investing effort to build transferable expertise and influence.

The evidence that revolving regulators behave systematically different while in office raises a deeper question: what motivates these career moves in the first place, and why do they translate into more intensive regulatory behavior? We highlight three interrelated channels: political alignment, financial incentives, and career advancement. Together, these forces shed light on how top regulators navigate between sectors and how private sector opportunities can shape public sector conduct.

We begin with political cycles. It is well understood that top regulators are politically aware, since their appointments to the top position heavily depend on their party affiliation. We use this fact as revealed preference to study whether their movements between the public and private sectors also align with the political cycle. In particular, we examine whether career switches – not only into top roles, but also earlier, lower-profile stages – cluster around presidential turnovers, and whether the timing reflects partisan alignment. The evidence is striking. Revolving door transitions are 86% more likely in years when the presidency changes hands. Moreover, the direction of movement is strongly partisan: regulators are 270% more likely to move *into* government when the incoming president is from their own party, and 99% more likely to move *out* when the incoming president is from the opposing party. These patterns underscore that political beliefs shape not just top appointments, but also regulators' own choices of when to cross between the public and private sectors, and

consequently their overall career trajectories.

Next, we turn to financial incentives. Because we observe each regulator's full real estate holdings over time, we are able to construct a proxy for individual wealth at different stages of life. Regulators who ultimately become revolving door participants begin their careers with less wealth: at age 30, they own real estate valued at approximately $18,000 less than their non-revolving peers. However, by age 65, they have not only caught up but surpassed their peers, with real estate portfolios valued at roughly $555,000 more. This life-cycle pattern is consistent with financial motivations at both entry and exit. Regulators from relatively modest backgrounds may be more likely to pursue public sector roles early in their careers, but they may also have stronger incentives to exit into more lucrative private sector opportunities later in life.

Aggregate economic conditions further reinforce this interpretation. Regulators who entered the labor market during recession years are significantly more likely to begin their careers in the public sector, but they are also more likely to become revolving regulators down the line, particularly by exiting into the private sector after holding a top regulatory role. These individuals also follow the same wealth accumulation pattern, starting out with fewer assets but ultimately catching up and surpassing their peers. Together, these findings suggest that economic shocks at career entry can push individuals into government service while simultaneously increasing their long-run incentives to revolve out.

We next examine how the revolving door relates to post-government career outcomes, focusing on both the seniority of positions attained and the quality of employers. We find that regulators who switch more frequently between the public and private sectors go on to hold significantly more senior roles, as captured by the rarity of their job titles within firms. This indicates that revolving door experience is actively rewarded, with repeated transitions allowing regulators to build credibility, expertise, and connections that translate into more desirable positions. In addition, we find that regulators' in-office behavior predicts the caliber of their subsequent employment: those who enforce more aggressively, initiate

more regulatory (but not deregulatory) rules, and draft more complex regulations are more likely to join higher-performing firms, measured by sales-per-employee. The mechanisms behind this link may operate in at least two ways. First, regulatory activity can signal competence, making regulators more attractive to future employers. Second, regulators may be able to steer policy in ways that directly benefit certain industries, thereby raising their value as hires. Either channel reinforces the incentive for revolving regulators to be more active and assertive while in office.

Finally, we analyze how firms benefit from their connections to revolving regulators. We examine two key channels: stock market reactions to rule announcements and enforcement exposure. Connected firms – those that previously employed the regulator – experience significantly higher abnormal returns around the publication of economically significant rules, compared to otherwise similar firms. These effects hold even after controlling for rule and firm-year fixed effects, suggesting a direct link between the revolving door and firm valuation. On the enforcement side, we find that firms employing former top regulators face fewer enforcement actions and incur lower penalties during the regulator's employment at the firm. This leniency is even more pronounced when the hired regulator had a track record of stricter enforcement or more complex rulemaking while in government. Together, these patterns suggest that the revolving door is not only beneficial to the regulators themselves, but also creates tangible advantages for the firms that employ them.

Taken together, these findings demonstrate that revolving door moves are driven by a confluence of political alignment, financial gains, and career aspirations. Regulators time their moves around political transitions in ways that align with their partisan preferences. They respond to personal and macroeconomic financial incentives that affect both their entry into public service and their eventual exit. And once in office, their behavior appears shaped – at least in part – by the desire to enhance their future marketability. Those who enforce more strictly and regulate more intensively are rewarded with better private sector jobs, particularly at high-performing firms. Moreover, their former employers benefit

directly from favorable regulatory outcomes, including lighter enforcement and rulemaking that boosts market value. The revolving door, in this light, is not just a path between two sectors – it is a dynamic system of incentives that links individual effort to firm-level gains. These dynamics help explain both the persistence of revolving door behavior and its imprint on the regulatory landscape.

In sum, we find that top federal regulators frequently move between the public and private sectors, and that these patterns are strongly linked to measurable differences in regulatory behavior and career outcomes. Political alignment, financial incentives, and career motives jointly shape both the decision to revolve and the intensity of regulatory activity while in office. Taken together, our findings highlight how personal incentives and institutional design interact to shape the regulatory burden imposed on the public. While our goal is not to identify narrow causal effects, the breadth, granularity, and consistency of our results provide compelling descriptive evidence of the revolving door's significance for both regulators and the regulated.

**Contributions to the literature.** There is a growing recognition of the need to better understand the economics of regulation. In light of this challenge, our paper makes three main contributions. First, we show that the incentives of the most senior federal regulators matter. Studies typically center on career bureaucrats and highlight factors such as internal promotion incentives and pay-for-performance schemes. We focus on the top echelon of the federal government whose members oversee most of the federal regulatory activity. Despite their importance, little is known on their incentives and performance. We show that imposing heavier regulatory burden can help maximize their lifetime financial goals, which in turn can create an ex-ante incentive to increase regulatory burden.

Second, we shed new light on the revolving door among regulators. Earlier studies highlight the risk of regulatory capture, whereby regulators take actions to benefit future employers, and the possibility that regulators seek to build human capital or signal their skills

to future employers. We contribute to this literature by studying the behavior of top regulators, arguably the most influential – and yet understudied – group of regulators. Our database includes all top regulators across all major federal agencies, and covers their entire career, thus mitigating concerns about selection and allowing us to provide unconditional estimates. We develop and utilize a range of measures of regulatory activity, allowing us to test the various predictions on how regulators may influence the regulatory process.

Finally, our work adds to the growing literature that quantifies government regulation. Prior studies have evolved from simply counting the pages of regulatory text or the number of rules (Mulligan and Shleifer (2005); Coffey, McLaughlin, and Peretto (2020); Dawson and Seater (2013)) to more nuanced measures such as number of regulatory operators (Al-Ubaydli and McLaughlin (2017)), regulatory complexity (Colliard and Georg (2020)), and regulatory fragmentation (Kalmenovitz, Lowry, and Volkova (2025)). We add to the literature by providing novel measures of federal regulations that capture the scope of meaningful rulemaking and distinguish between regulatory and deregulatory rules.

# 1 Sample Construction and Data Sources

This section describes the data sources underlying our analysis and the construction of the main variables used throughout the paper. We draw on a wide range of administrative records, government publications, and commercial databases to capture regulators' career histories, regulatory activities, and potential incentives. In addition to the sources described below, we obtain information on macroeconomic conditions from the National Bureau of Economic Research (NBER) business cycle dating, where recession years include both troughs and contractions. For market-based outcomes, we obtain stock return data from the Center for Research in Security Prices (CRSP), which we use to compute cumulative and buy-and-hold abnormal returns around rule announcements.

## 1.1 Agencies and Regulators

We begin by selecting 50 federal agencies that were involved in enforcement actions between 2000 and 2022. We obtain these data from the Corporate Research Project of Good Jobs First's Violation Tracker. The Violation Tracker database covers enforcement fines since 2000 with total penalties of $863 billion. We provide a detailed list of the sample agencies in Table A.2.

Next, we identify the top executive of each agency at any point between 2000 and 2022. For instance, the Chairman of the Securities and Exchange Commission and the Administrator of the Federal Deposit Insurance Corporation. We obtain these data from the biannual Congressional Directory, the official directory of the United States Congress that contains lists of federal officials at the time of record. We identify the term start of each top regulators from the Congressional Documents collection and from the Federal Register, which includes information on temporary positions ("acting" or "interim") that often lack official nomination documents.

To obtain our final sample of top regulators, we apply two filters. First, we exclude regulators holding temporary positions for less than six months. We do so because such regulators have short time horizons and likely have different incentives compared to permanent regulators. Some agencies, however, such as the Food and Drug Administration, are often headed by an acting commissioner. We therefore only exclude acting regulators with terms of less than six months. Second, we exclude regulators who died while in their top regulatory position or within one year of stepping down. After applying these filters, we obtain our sample of 1,338 top federal regulators from 50 federal agencies.

## 1.2 Career Paths

We compile a database of post-undergraduate employment records for the top regulators in our sample. To obtain this information, we rely on the fact that the Senate holds nomination hearings that provide transparency about federal appointments and a forum to discuss them.

We use prepared statements and biographical information from those hearings' transcripts, which contain the detailed CVs of the nominees. Appendix A.2 provides three sample CVs in hearing transcripts. Note that the Senate does not always hold hearings, and more importantly, those only cover past positions (before the nomination). We therefore augment the dataset with employment records from various sources including BoardEx, LinkedIn, Wikipedia, and biographies on corporate websites.

We obtain firm-level financial information for companies that hire sample regulators, from Compustat and Mergent Intellect databases. We are able to obtain such data on approximately 95% of hiring firms, the balance reflecting firms not covered in those databases (such as smaller ones or those who have ceased to exist). In particular, we proxy for firm performance by calculating *Sales per employee*, defined as the ratio of annual net sales to the number of employees. We further collect from BoardEx information on the number of employees holding each job position within each firm-year, for instance, the number of "general counsels" at Chevron in 2012.

We collect information about regulators' educational backgrounds from their CVs and LinkedIn pages. Specifically, we collect detailed data on the undergraduate and graduate institutions that each top regulator attended. We match each undergraduate institution to the SAT scores of admitted students from the U.S. News & World Report Best Colleges Ranking 2023.[2] We also collect the ranking of each graduate institution from the U.S. News & World Report Best Graduate School Ranking 2023.

To study regulators' financial incentives, we measure their wealth accumulation over time based on real estate purchases inferred from deed transfer records. To do so, we hand-match our sample regulators to the Lexis Nexis Public Records (LNPR) database with information about more than 500 million U.S. individuals, identified throughout the database using a unique ID linked to one's social security number and employment records. We use each regulator's full name and birth year, and manually validate the matches by ensuring that

[2]We use SAT scores of admitted students instead of institution rankings because there is no single ranking for both national universities and liberal arts colleges.

the regulator's employer, work email address, and title listed in the employment records in LNPR match the regulator's career history. We obtain all deed records for each matched regulator.[3] We adjust the sale value on deed transfer records with the inflation-adjusted Case-Shiller Home Price Index, to calculate the current market value of real estate holdings.

## 1.3 Regulatory Activities

**Enforcement.** To measure regulators' enforcement activity, we use data from the Corporate Research Project of Good Jobs First's Violation Tracker. This database covers 538,514 enforcement actions by federal regulatory agencies between 2000 and 2022, with total penalties of $863 billion. These enforcement actions cover a wide range of topics, including banking, consumer protection, false claims, environmental, wage and hour, safety, discrimination, and price-fixing. The Violation Tracker obtains this data through agencies' official website disclosures. It excludes enforcement actions with penalties below $5,000 and those with no dollar penalties. The database uses revised penalty amounts rather than the initially proposed amounts to account for possible negotiated reductions. We match each recorded enforcement action to a unique top regulator based on the agency that issued the enforcement action and the penalty date.

**Rulemaking.** We develop a set of rulemaking output measures, using data from the Unified Agenda and from the Federal Register. The former is a biannual official publication with information on all rules that are currently under development by federal agencies. The latter is the official daily publication of the federal government. We leverage the relative advantages of both databases. From the Agenda, we reconstruct each rule's detailed timeline, from origination to finalization. From the Register, we obtain the full language of rule proposals and final rules, which are not part of the succinct entries in the Unified Agenda.

Beginning with the Unified Agenda, we use data from Chang, Kalmenovitz, and Lopez-

[3] We manually investigate and clean the data to remove inconsistencies and duplicates, for example, if the LNPR falsely attributes an older sale record to the current homeowner.

Lira (2023) to reconstruct each rule's timeline. We then restrict the sample to 14,178 rules that were under consideration by the sample agencies during the sample period (2000-2022). Then, for each regulator×year, we count how many rules were newly proposed by the agency and how many rules were finalized. Since not all rules are equally important, for some of our tests we weight rules by their priority level as determined by the agency: significant, substantive, and routine or administrative rules.

We separately collect 70,778 documents published in the "Final Rules" section of the Federal Register. We merge it with the Unified Agenda information using the Regulation Identifier Number (RIN), a unique identifier allowing us to track each regulatory action over time. We use the content of the Register documents to differentiate between regulatory and deregulatory rules. We rely on Executive Order 13771 which was signed by President Trump on January 2017 and rescinded by President Biden in January 2021. The Order required agencies to specify in the Unified Agenda if the rule proposal is regulatory or deregulatory. We collect 1,784 federal rules with EO 13771 classification and split them into two datasets: a training dataset that comprises 90% of the sample, and an evaluation dataset that comprises 10% of the sample. Using the text from the Federal Register that is associated with those rules, we train and evaluate a Legal Bidirectional Encoder Representations from Transformers (BERT) model (Chalkidis et al. (2020)). Our model achieves a 97.97% accuracy score and is thus highly successful in distinguishing between regulatory and deregulatory rules. We subsequently apply the model to all the remaining rules in our dataset and obtain a regulatory/deregulatory classification for each rule. Using the fine-tuned Legal BERT model, we calculate both a rulemaking regulatory score and a rulemaking deregulatory score. The overall rulemaking quantity score sums both components, measuring how productive a regulator is in making significant rules regardless of whether they are regulatory or deregulatory.

Finally, we use the full text associated with the rules, obtained from the Federal Register, to construct measures of regulatory complexity. Our approach is motivated by Colliard and Georg (2020), who investigate which text characteristics best capture the text's complexity.

In particular, we construct three measures of regulatory complexity. The first is the rule's length, defined as the total number of words in the Register associated with the rule. The second is cyclomatic complexity, defined as the total number of logical operators such as "and", "or", "no", "if", "then". This measure represents the number of different paths an algorithm can follow. The third is the total number of regulatory operators, that is, words indicating a binding constraint: "shall", "must", "may not", "required", and "prohibited". We aggregate the rule-level counts to each regulator×year observation.

**Productivity.** Our final set of variables captures productivity. We obtain the full payroll data of the Federal government from Kalmenovitz, Vij, and Xiao (2022), and compute the number of employees and the total payroll expenses for each agency×year. We then divide the number of rules developed by either measure of labor, and we similarly divide enforcement actions by the labor measures. The resultant measures serve as proxies for the agency's productivity, that is, how much output per unit of labor.

# 2 Stylized Facts

## 2.1 Top Regulators

Table 1 provides summary statistics in the sample of 1,388 regulator×year observations (corresponding to 406 unique regulators). The average top regulator is appointed at the age of 54 and stays in the top regulatory position for 4.1 years. 72% of the sample regulators are male. The sample is balanced across party lines, with 47% Democrats and 46% Republicans (based on party registration). Vast majority of top regulators (87.1%) hold an advanced degree above the undergraduate level. The average top regulator begins their career (age 30) with real estate valued at $47,000, and enter retirement stage (age 65) with 2.1 properties worth $2.1 million. Agencies overseen by the top regulators in our sample issue 369 enforcement actions per year, with penalties totaling $171 million. The average rulemak-

ing productivity score for a regulator is 20.848, while the regulatory score averages 17.088 and the deregulatory score averages 3.856. The average annual rulemaking contains 408,940 words, 1,598 regulatory operators, and 16,658 logical operators.

## 2.2 The Revolving Door

In Table 2, we turn to a key feature of top regulators: ubiquitous transitions between the public and private sectors. We report the characteristics of the 1,388 regulator×year observations in our sample. Among our top regulators, 69% worked in the private sector before the top regulatory position, and 64% moved to the private sector after stepping down from it. The average regulator has 13.4 years of work experience in the private sector and 16.0 years in the government sector before taking the top position. On average, top regulators move 2.52 times between the private and public sectors. Nearly half (47.5%) of top regulators start their career in the public sector, while 29.2% start in the private sector, with the rest starting in nonprofits or academic institutions. After leaving their regulatory position, ex-top regulators tend to work for economically important firms: after hiring an ex-regulator, the average firm has annual sales of $10.2 billion, 17,730 employees, and $0.91 million in sales per employee.

Figure 1 presents the number of moves between the private and public sectors among our sample regulators. As before, we compute the number of moves for each regulator and report the distribution across the 1,388 regulator×year observations. 84% of the top regulators in our sample have moved between the public and private sectors at least once, with 62% moving at least twice, 47% moving at least three times, and roughly 10% moving six times or more. Additionally, 47% of regulators have moved between the private and public sector more than once *before* assuming the top regulatory position.

Figure 2 lists the professional occupations of top regulators, before assuming the top position (Panel A) and after stepping down from it (Panel B).[4]. Note that the percentages

[4]Occupations are based on the job titles, which we aggregate into 15 broad categories: Government,

in each panel do not add up to 100, since many top regulators hold multiple positions throughout their career. We find that 86.2% of the sample regulators had prior government work experience before assuming their top regulatory roles, while 13.8% had not worked in government at all before becoming top regulators. With respect to private sector occupations, the three most common are lawyers (42%), corporate executives (21.6%), and consultants (20.8%). In the post-top position stage of their careers, 58.2% of the ex-top regulators work as consultants. Other popular private sector occupations include non-executive directors (32.5%), corporate executives (24.1%), and lawyers (21.3%). 41.6% of regulators continue to hold non-top government positions.

Focusing on the latter stage of their careers, Figure 3 plots the 48 Fama-French industry classification of firms that hire ex-top regulators as executives, board members, or advisors. The most common industries are Business Services (57.5%), Banking (31.0%), Trading (21.4%) and Personal Services (22.1%).[5]

In summary, the door between the private and the public sectors revolves frequently, and the private and public sectors appear more intertwined than documented before. In particular, top federal regulators often work in the private sector both before and after holding the top regulatory positions. Lawyers, corporate executives, and consultants are their most common career backgrounds, while consultants, non-executive directors, and corporate executives are the most popular post-regulation career outcomes. Such private sector employment covers all the main industries, with Business Services and Banking being the most common.

Lawyer – Private Practice, Lawyer – Public Practice, Academia, Non-Profit Organization, Other White-Collar Job, Executives, Consultant, Non-Executive Director, Lobbyist, Middle/Elementary School Teacher, Business Owner, Commenter/Writer, Farmer, and Athlete.

[5]Those percentages do not add up to 100, since many regulators work for multiple firms across different industries over time.

## 2.3 The Revolving Regulators

For the remainder of the paper, we differentiate between revolving and non-revolving top regulators. We define revolving regulators as those who satisfy two cumulative conditions: they worked at least 6 consecutive months in the private sector *before* taking the top regulatory position, and at least 6 consecutive months in the private sector *after* stepping down from that position.[6] Based on this definition, we report in Table 2 that nearly half the sample (47.9%) are revolving regulators.

Figure 4 plots the proportion of revolving regulators among all sample top federal regulators from 2000-2022. That is, we divide the number of top regulators classified as revolvers by the total number of top regulators currently holding top regulatory position. The fraction has been relatively steady, hovering around 50% over the sample period. While the proportion somewhat fluctuates throughout the sample period, and it was at its height during the Bush administration, peaking at 63% in 2003. We separately compute the proportion of revolving regulators in each agency. Among the 50 agencies, 45 (or 90%) have had at least one revolving door top regulator during the sample period, and several have had mostly revolving regulators. We plot the agencies with the most and least revolving regulators in Figure 5. That is, for each agency, we divide the number of regulator-year observations classified as revolvers by the total number of observations for this agency over the sample period. For example, all the top regulators of the Department of Energy and the Federal Communications Commission were revolving regulators, while none of the top regulators in the Coast Guard were revolvers.

In Table 3, we compare revolving and non-revolving top regulators. Revolving regulators are younger, serve fewer years in the top regulatory position, and are considerably more likely to be affiliated with the Republican party. Revolving regulators attend undergraduate institutions whose students attain higher SAT scores. They are 7.7% more likely to hold

[6] We exclude positions in non-profit organizations, such as academia and think tank, from the definition of private sector.

an advanced degree, and conditional on having one, they attend higher-ranked graduate institutions. In terms of real estate holdings, revolving and non-revolving regulators have a similar starting point at age 30, but their paths diverge substantially over their career. By the age of 65, both the value and number of real estate properties are considerably higher for revolving regulators compared to non-revolving ones.

Next, we compare the regulatory actions of revolving and non-revolving regulators. We find that revolving regulators are 28.7% more productive compared to non-revolving regulators.[7] This difference is statistically significant at the 1% level. Moreover, revolving regulators issue 28.4% more enforcement actions with 315% higher enforcement amounts, and the differences are statistically significant at the 5% level or higher.[8] Finally, revolving regulators develop more complex regulations, where we use three text-based measures of complexity. We find that revolving regulators are 14-16 percentage points more likely to oversee rulemaking with above-median complexity, compared to non-revolving regulators.

Taken together, these univariate comparisons point to systematic differences between revolving and non-revolving regulators across political affiliation, education, real estate accumulation, enforcement, rulemaking quantity, and rule complexity. The next section examines these patterns in a multivariate framework that controls for observed traits and absorbs time and agency effects.

# 3 Regulatory Activity

In this section, we examine whether regulatory agencies behave differently when led by revolving regulators, who transition between public service and private sector roles. Rather than attempting to adjudicate among competing theories such as regulatory capture, bureaucratic capital accumulation, or signaling competence, our goal is more empirical and

[7] The percentage difference in productivity is computed relative to the sample mean number of finalized rules: $\frac{23.965-17.985}{20.848} = 28.7\%$..

[8] The calculation is based on the log number or dollar amount of enforcement actions, relative to the sample mean: $\frac{e^{2.556}-e^{2.260}}{e^{2.452}} = 28.4\%$., and $\frac{e^{12.309}-e^{9.729}}{e^{11.082}} = 315\%$..

descriptive: we aim to assess whether revolving regulators systematically differ from their non-revolving counterparts in how they carry out core agency functions. We focus on two main domains of regulatory activity: enforcement and rulemaking. By applying a unified empirical framework across these distinct outcomes, we characterize the behavioral footprint of revolving regulators and offer a broad view of their influence on agency output.

Our workhorse specification is:

$$Y_{at} = \alpha + \beta \, RevolvingDoor_{at} + \gamma X_{at} + \delta_a + \lambda_t + \varepsilon_{at}, \tag{1}$$

where $Y_{at}$ denotes the regulatory outcome for agency $a$ in year $t$, such as the intensity of enforcement, the volume of rulemaking, or the complexity of regulations. The key independent variable is $RevolvingDoor$, an indicator variable equal to one if the regulator overseeing the agency worked for more than 6 consecutive months in the private sector both before and after the top regulatory position. $X_{at}$ is a vector of regulator-level controls (gender, party affiliation, and age at appointment), $\delta_a$ are agency fixed effects, and $\lambda_t$ are year fixed effects. Standard errors are clustered by agency. This structure allows us to identify how the presence of revolving regulators is associated with variation in regulatory outcomes, while absorbing unobserved heterogeneity across agencies and common shocks over time. We will use this same framework to examine a range of outcomes including enforcement activity, rulemaking intensity, and the textual complexity of regulations.

## 3.1 Enforcement

Table 4 investigates the relation between enforcement actions and the revolving door between the public and private sectors. First, we study enforcement strictness measured by the logarithm of the overall annual dollar amount of enforcement actions issued by each regulatory agency. The estimates in Columns (1) and (2) suggest that agencies overseen by revolving regulators collect considerably larger enforcement fines compared to non-revolving regula-

tors. The effects are economically meaningful, implying that revolving regulators collect 486% ($e^{1.768} - 1$) higher fees relative to the sample mean, or $831 million more in enforcement fees every year. The effects are statistically significant at the 1% level and hold in tight specifications that control for demographic differences between regulators and include both year and regulatory agency fixed effects. Columns (3) and (4) repeat the analyses for a different measure of enforcement – the number of enforcement actions that an agency issues in a given year. Similarly, the estimates suggest that regulatory agencies run by revolving regulators enforce more. In particular, agencies run by revolving regulators issue 53% more enforcement actions in a year.

## 3.2 Rulemaking

Table 5 explores whether revolving regulators engage in more extensive and complex rulemaking activity. We start by estimating Equation 1 with a set of three outcomes representing rulemaking quantity. The first measure, *RuleQuantity*, is the relevance-weighted sum of all final rules published in the Federal Register by the regulator's agency.[9] The second measure, $RuleQuantity^{reg}$, is defined analogously for rules that we classify as regulatory based on textual analysis using a fine-tuned Legal BERT model. The third measure, $RuleQuantity^{dereg}$, focuses on deregulatory rules, as classified by the Legal BERT model.

The results are in the first three columns in Table 5, demonstrating how agencies led by revolving regulators appear to issue more rules. Specifically, they make more significant rules (column 1), and these rules tend to be regulatory (column 2) rather than deregulatory (column 3). The estimates suggest that revolving door top regulators have 15% ($e^{0.141} - 1$) higher overall quantity scores and 19% ($e^{0.174} - 1$) higher regulatory scores, both statistically significant at the 5% level, while the effect on deregulatory rules is small and insignificant. These effects hold in regression specifications that control for regulators' demographics as

[9]Formally, it equals to 3*(number of Economically Significant rules and Other Significant rules) + 2*(number of Substantive, Nonsignificant rules) + 1*(number of Routine and Frequent rules and Informational/Administrative/Other rules).

well as year fixed effects and agency fixed effects.

Next, we construct measures of rulemaking complexity based on the full text of the rules published in the Federal Registry. Those measures represent the number of words in each published rule, the number of logical operators in the full text of the rule, and the number of regulatory operators in the full text. The last three columns in Table 5 present the results of regressions explaining rule complexity. The key independent variable in these regressions is the Revolving door indicator. Across all the regressions, which include controls for regulator demographics as well as year and agency fixed effects, we find that revolving regulators issue more complex rules. These findings are statistically significant at conventional levels and are economically large. Revolving regulators are 45.2%-59.6% more likely to oversee rulemaking with above-median complexity.

## 3.3 Productivity

Finally, in Table 6 we study the productivity of revolving regulators. Here, the sample includes regulator×year observations, and the dependent variables capture two distinct dimensions of regulatory productivity. Intuitively, we scale the agency's annual regulatory output by the size of its workforce. On the rulemaking side, we calculate the number of rules finalized per employee (Column 1) and per dollar of salary (Column 2). On the enforcement side, we measure the log dollar amount of enforcement actions per employee (Column 3) and per dollar of salary (Column 4). The key explanatory variable is an indicator for whether the agency's top regulator is classified as a revolving regulator, having worked in the private sector for more than six consecutive months before and after holding a top regulatory position. All regressions control for regulator characteristics – gender, political affiliation, and age at the time of becoming a top regulator, and include both year-quarter and agency fixed effects.

The results indicate a systematic relationship between revolving door experience and regulatory productivity. Revolving regulators are significantly more productive in making

rules and giving out enforcement fines. Columns (1) and (2) show that the number of rules finalized per employee and per dollar salary are about 30% ($e^{0.268}-1$) higher when an agency is led by a revolving regulator. Columns (3) and (4) show that the dollar value of enforcement actions per employee is roughly 232% ($e^{1.200}-1$) higher, and per dollar salary is about 8.8% ($e^{0.084}-1$) higher. These effects are economically large and statistically significant (5% in column (3), 10% in column (4)).

## 3.4 Summary and Interpretation

In sum, revolving regulators are associated with more active, expansive, and complex regulatory activity. They pursue enforcement more aggressively than their non-revolving counterparts, filing more enforcement actions and obtaining greater monetary penalties. Furthermore, revolving regulators preside over greater rulemaking activity, particularly the issuance of significant and regulatory rules. Textual analysis further reveals that rules issued under revolving door leadership are more complex along a variety of proxies – word counts, logical operators, and regulatory operators. Finally, revolving regulators mobilize agency resources more intensively, especially in terms of enforcement productivity.

Combined, these patterns are difficult to reconcile with a strong form of regulatory capture narrative, which would predict more lenient enforcement and lighter rulemaking portfolio. More likely, the results are consistent with a framework emphasizing the role of career incentives – whether through competence signaling or the accumulation of bureaucratic capital. Our analysis does not adjudicate among these precise mechanisms, rather seeking to establish that revolving regulators leave a distinct imprint on the scale and direction of regulatory outcomes. They systematically generate more aggressive and complex regulatory outputs and succeed in translating agency resources into regulatory activity.

# 4 Incentives

This section investigates the incentives underlying the revolving door dynamics. We ask two related questions. First, what drives regulators to step through the revolving door in the first place – entering or exiting public service at particular times (Section 2)? Second, once in office, why do revolving regulators systematically engage in more enforcement and rulemaking than their peers (Section 3)? To address these questions, we analyze how political cycles, economic conditions, financial motives, and career concerns shape both the decision to revolve and the intensity of regulatory activity. By linking the observed career patterns and regulatory footprints to underlying incentive forces, we provide a unified account of how private sector opportunities influence public sector conduct.

## 4.1 Political Motivation

We start by investigating the role of political cycles in revolving door moves. We hypothesize that changes in administration trigger two-way moves between the private and public sectors. Moreover, we expect to observe regulators whose partisanship aligns with the party of the outgoing president moving to the private sector. Conversely, we expect those whose partisanship aligns with the incoming president's party to move to the public sector. Since top regulatory appointments are often political appointments, we exclude such appointments and focus on career moves prior to becoming a top regulator. This mitigates concerns that the effects are mechanical rather than driven by regulators' political views.[10] The results are summarized in Table 7.

The unit of observation is regulator×year . Columns (1) and (2) investigate all two-way moves, that is, all moves from the private sector to the public sector or vice versa. The main independent variable, $PresTurnover$, equals one in the year when an incoming Republican President replaces an incumbent Democratic President or vice versa. The estimates in Column (1) show that regulators are significantly more likely to move across the private and

[10]For completion, in Table A.3 we consider all regulatory appointments, including top regulatory positions.

public sectors during presidential turnovers, with a coefficient of 0.623. Column (2), which adds regulator fixed effects, confirms this finding with a nearly identical coefficient (0.620), showing that the effect is not driven by unobserved time-invariant heterogeneity across regulators. Columns (3) and (4) focus on moves from the private sector to the public sector, where the main independent variable is co-partisanship with the incoming president. We find that such moves are strongly associated with co-partisan presidential turnovers, with a coefficient of 1.279. Once regulator fixed effects are included in Column (4), the coefficient increases further to 1.309, suggesting that within-regulator variation strengthens the co-partisan effect. Columns (5) and (6) turn to moves from the public sector to the private sector. Non-co-partisan turnovers (when the president comes from the opposite party) are associated with a 0.621-0.689 increase in the probability of such moves.

Across specifications, odd-numbered columns present the baseline associations with demographic controls such as age, gender, and party affiliation, while even-numbered columns incorporate regulator fixed effects. The comparison highlights that the estimated turnover effects are robust to the inclusion of these controls and, in some cases, are even stronger once regulator-level heterogeneity is absorbed. Finally, note that the coefficient on *Age* is positive and statistically significant across specifications, indicating that older regulators are systematically more likely to move during presidential turnovers. Gender and party affiliation, by contrast, are not significant predictors of revolving door moves.

Together, the results in Table 7 suggest that political partisanship plays an important role in revolving door career moves. It reinforces the evidence for a career ladder mechanism, whereby political turnover creates opportunities for regulators to advance by strategically alternating between public and private positions.

## 4.2 Business Cycles

In this section, we investigate the relation between career paths and aggregate economic conditions. The results are summarized in Table 8. Panel A focuses on the regulator's first

job. We estimate a Logit model, where the key independent variable is *RecessionRegulator*, defined as an indicator variable that equals one if the regulator entered the labor market during a recession. Table 1 shows that 35.6% of the observations in our sample fall into recession years, and 37% of our sample regulators are *RecessionRegulator*s. The estimates suggest that top regulators are about 64% more likely to start their careers in the public sector if they enter the workforce during a recession, but 52%–99% less likely to start their career in the private or nonprofit sectors. This finding holds after controlling for regulator gender, education, and birth cohort and agency fixed effects, which ensure that the estimated effect of recessions is not confounded by differences in demographics or institutional environments. Overall, the evidence suggests that adverse economic conditions at labor market entry systematically tilt regulators toward public sector careers, shaping the long-run trajectory of who becomes a top regulator.[11]

Panel B of Table 8 extends the analyses to study the overall relation between being a revolving regulator and the economic conditions at the start of one's career. The results show that *RecessionRegulator*s, who start their careers during economic downturns, are more likely to be revolving regulators and work in the private sector after stepping down from their top regulatory position. As such, these findings demonstrate the persistent effect that early career economic conditions and choices have on subsequent career trajectories. Poor economic conditions at the beginning of one's career increase the likelihood of starting in the public sector and subsequently stepping through the revolving door. A possible explanation is that public sector jobs mitigate the labor market effects of economic downturns, while creating financial incentives to move to the private sector in the future.

Finally, in Panel C we investigate the wealth accumulation of *RecessionRegulator*s. We find that while *RecessionRegulator*s appear to have considerably less wealth at the age of 30, they close the wealth gap by 65, when they retire. These findings are consistent with a

[11] In Table A.4, we estimate a panel regression where the outcome equals one if the regulator moved from the private to the public sector, and the independent variable equals one in a recession year. We find that regulators are more likely to move to the public sector during recession years, consistent with the insulation of public sector employees from external economic pressures.

financial motive to step through the revolving door when entering the labor market during an economic downturn.

Overall, the evidence paints a consistent picture of how aggregate economic conditions shape both the entry point and the long-term trajectory of regulatory careers. Recessions at labor market entry push individuals toward the public sector (Panel A), revealing how macroeconomic shocks influence who selects into government service in the first place. These early choices are not transient: regulators who begin their careers in downturns are systematically more likely to engage in revolving door moves later on, starting in the public sector but eventually transitioning into the private sector (Panel B). This persistence highlights how initial economic conditions set regulators on career paths that amplify their likelihood of crossing between sectors. Finally, *RecessionRegulator*s begin their careers with less wealth but eventually close the gap through greater private sector accumulation (Panel C), consistent with financial incentives to step through the revolving door. Taken together, the findings indicate that recessions generate lasting imprints on career choices, revolving door behavior, and wealth outcomes. It underscores the role of exogenous economic shocks in shaping the supply of future regulators and their incentives to transition between public and private roles.

## 4.3 Real Estate Acquisitions

In Table 9, we investigate the regulators' financial incentives by studying the accumulation of wealth throughout their careers. We proxy for wealth accumulation using data on real estate purchases obtained from the LNPR. The sample includes a cross-section of top regulators observed at the ages of 30 and 65.

In Columns (1) and (2), we compare the market value of real estate owned by revolving and non-revolving regulators at ages 30 and 65. The estimates show that, by retirement, revolving regulators hold about $454,000 more in real estate wealth than their non-revolving counterparts. In contrast, early in their careers they start with slightly less wealth: at age

30 their real estate holdings are roughly $10,000 lower, yet the difference is not statistically significant.

All specifications include controls for gender, party affiliation, and age at the time of becoming a top regulator, as well as birth-cohort and agency fixed effects. These controls and fixed effects mitigate concerns that the estimated revolving door effects simply reflect demographic composition or agency-level differences.

Taken together, the results indicate a clear life-cycle pattern: revolving regulators enter with comparable (if anything, slightly lower) real-estate wealth, but surpass non-revolving peers by retirement, ending their careers with substantially higher asset values.

## 4.4 Career Development

In this section, we explore how the possibility for future career achievements shapes the decision to step into the revolving door. We begin by studying whether regulators who have stepped more times through the revolving door serve in more senior positions when they move to the private sector. The sample includes all individual-year observations when the regulator is in the private sector and a job ranking score can be computed. The dependent variable is Job ranking, defined as one minus the frequency of a job title relative to the firm's total number of employees. The main explanatory variable is Cumulative number of switches, defined as the cumulative number of moves the regulator made between the private and public sectors before a given year.

The results are summarized in Table 10. Column (1) shows that a regulator's job ranking is positively correlated with the number of past revolving door moves, and this relation is statistically significant at the 1% level. In this specification we use regulator fixed effects, focusing on how changes in the number of switches relate to to changes in job ranking. In the next three columns we remove those fixed effects, instead controlling directly for various regulator characteristics. Concretely, in column (2) we control for the regulator's career length, since the number of revolving door moves is likely higher for longer careers. We also control

for the total number of switches throughout the regulator's entire career. The estimates in column (2) show that for the same regulator, the more switches she makes, the relatively higher position she subsequently obtains. In column (3) we add an indicator for male regulator as well as fixed effects based on the regulator's first job. The coefficient is somewhat smaller but still significant. Finally, in column (4) we add agency and birth cohort FE. This specification compares regulators with similar career lengths, from the same regulatory agency, same birth cohort, and same starting jobs. The estimates show that regulators who have stepped more times through the revolving door serve in more senior positions. Overall, these findings are consistent with a career ladder motive whereby roundtrips between the private and public sectors allow individuals to climb up the corporate ladder.

Next, we investigate whether regulatory quantity, complexity and enforcement correlate with variation in private sector career outcomes. To do so, we collect data on the companies that regulators work for from Compustat and Mergent Intellect. Since many of these companies are private companies, we do not observe performance measures such as Return on Assets (ROA) or Return on Equity (ROE). Instead, we attempt to proxy for firm performance using available data on sales and employees, by calculating the ratio of firms' sales to the number of employees. We then estimate firm-level regressions, where the outcome variable – sales per employee – is measured in the year the regulator joins the firm. Our regulatory activity measures – enforcement, quantity, and complexity – are computed as the average level of activity during the regulator's tenure at the agency, before joining the firm. This setup allows us to examine whether firms that hire regulators with different regulatory profiles systematically differ in their performance at the time of hire. Control variables include regulator demographics (age, gender, and political affiliation). In addition, we include year fixed effects, which absorb macroeconomic shocks or business-cycle fluctuations that could otherwise confound the relation between regulatory activity and firm performance. We further include agency fixed effects, which absorb systematic differences across regulatory bodies; for example, if some agencies both lead to more prestigious post-regulatory jobs

and tend to issue more complex rules. Together, these fixed effects ensure that the estimated coefficients are not simply capturing broad economic conditions or agency-specific patterns, but instead reflect variation in regulators' own activity

The results are summarized in Table 11. We find that stricter enforcement, higher regulatory (but not deregulatory) quantity, and higher rulemaking complexity all increase the likelihood of working at better-performing firms, as measured by the ratio of firms' sales to the number of employees. These findings are statistically significant at conventional levels. To the extent that better-performing firms provide better, or more prestigious, employment opportunities, this evidence implies that the prospects of better career outcomes incentivize regulators to increase enforcement, quantity, and complexity.

Overall, this section highlights the career development incentives embedded in the revolving door. Regulators who move more frequently between the public and private sectors tend to secure positions that are rarer, more specialized, and likely higher up the corporate hierarchy. These findings suggest that revolving door activity is not simply lateral job hopping, but a mechanism through which regulators accumulate career capital and leverage their experience into increasingly prominent roles. In this sense, the revolving door functions as a ladder that rewards repeated transitions with elevated status and responsibility in the private sector.

## 4.5 Benefits for Employers

A central question in understanding the revolving door is whether regulators' actions while in office create advantages for affiliated firms. If such benefits exist, they could strengthen the regulators' attractiveness as private sector hires and reinforce their incentive to revolve. To investigate this possibility, we examine two settings where regulators' influence is particularly salient: the impact of rulemaking on market valuations and the intensity of enforcement activity. By comparing outcomes for firms with and without ties to sitting regulators, we test whether prior professional connections shape how regulatory decisions translate into

firm-level benefits.

We begin by examining the stock market reaction to the publication of significant rules authored by revolving regulators. We focus on 675 final rules classified as economically significant by the Office of Information and Regulatory Affairs (OIRA). Following the methodology of Lowry and Volkova (2024), we use the list of publication dates of the final rules from Chang, Kalmenovitz, and Lopez-Lira (2023). We focus on the universe of publicly traded firms covered by CRSP at the time the rule is published (19,500 unique firms), and compute abnormal returns for each firm×rule in our sample over a three-, five-, and seven-day window surrounding the rule announcement. Specifically, we use both Cumulative Abnormal Returns (CAR) and Buy-and-Hold Abnormal Returns (BHAR) as complementary measures of stock-price reactions. CAR is constructed by summing daily abnormal returns over the event window, where each abnormal return equals the firm's daily return minus the S&P 500 return. BHAR captures the compounded performance over the same horizon, where we compound both the firm's and the S&P 500's returns over the same period and take the difference. CAR therefore reflects the additive daily departure from market performance, while BHAR reflects the total buy-and-hold performance relative to the market. Our goal is to see whether abnormal returns vary systematically between connected firms, who previously employed the current top regulators, and unconnected firms.

The results are in Table 12. In Panel A we show that connected firms, on average, experience positive abnormal returns around the announcement of final rules. Their average abnormal return is approximately 0.95 percentage points over the seven-day window. In Panel B, we use rule-firm regression framework to directly compare abnormal returns of connected and unconnected firms. The dependent variable is the abnormal return around the announcement of the final rule, using CAR and BHAR and different estimation windows. The key explanatory variable, $ConnectedFirm$, equals one if the rule was published by a regulator who had previously worked at the firm. The coefficients indicate that the effect is economically meaningful: for instance, the abnormal return for connected firms is about 0.57

percentage points in the five-day window and rises to more than 0.9 percentage points in the seven-day window. Notably, the effects are robust to the inclusion of rule fixed effects and firm-year fixed effects. Rule fixed effects absorb all shocks common to a given rule, as some rules can be more impactful than others. Firm×year fixed effects absorb contemporaneous firm-specific shocks that affect its stock price. Together, our specification rules out the concern that the estimated effects are driven by either the nature of the rule or the underlying trajectory of the firm, leaving only the incremental impact of prior employment ties.

We next turn to enforcement activity, and analyze whether former employers of top regulators face different enforcement exposure while those regulators occupy senior posts. The results are in Table 13. Panel A uses firm-year data to test whether firms connected to currently-serving top regulators receive more favorable enforcement treatment. For each regulator's previous employer, we construct a panel dataset that records both the number and the total dollar amount of enforcement actions in each year. The key explanatory variable, *Previous Employee as Top Regulator*, is a binary indicator equal to one if the firm has a former employee serving as a top regulator in that year. The results show a clear pattern: firms face fewer enforcement, both in number and dollar amount, when one of their former employees occupies a senior regulatory position. This complements the announcement return evidence, suggesting that regulators' former employers not only benefit from favorable rules but also from lighter oversight.

In sum, the evidence shows that revolving regulators are associated with favorable outcomes for their former employers along two dimensions: positive abnormal stock returns when significant rules are announced, and reduced enforcement exposure while those regulators occupy senior posts. These patterns point to the enduring value of prior professional ties, suggesting that regulators' past affiliations shape both market and enforcement outcomes. By generating tangible benefits for former employers, regulators build reputations that can enhance their attractiveness to private sector firms ex post, thereby reinforcing the incentives to engage in revolving door moves.

Our final table tests this angle explicitly, by asking whether firms from hiring proactive ex-regulators: regulators who demonstrated stricter enforcement behavior, and were responsible for drafting longer and more complex rules, during their government tenure. We focus on the firm×year as the unit of observation, restricting the sample to observations in which the firm employs at least one revolving regulator. The dependent variables capture two dimensions of regulatory scrutiny: the total dollar amount of enforcement actions imposed on the firm in a given year, and the number of separate enforcement actions initiated against it. These outcomes allow us to measure both the intensity and the frequency of enforcement exposure. The results are in Table 13. Among firms that employ revolving regulators, those hiring regulators with a track record of stricter enforcement or more complex rulemaking experience face even fewer enforcement actions. Both the intensity (dollar amounts) and frequency (number of cases) of enforcement are reduced. While the rulemaking productivity score is not significant, the consistency of results across enforcement intensity and frequency underscores the robustness of the pattern.

Overall, the evidence demonstrates that revolving regulators generate private value for firms through multiple channels. First, their former employers benefit directly while they hold office, via favorable rulemaking outcomes and reduced enforcement exposure. Second, firms actively reward regulators with reputations for being proactive in government – those who previously enforced more strictly or drafted rules of greater complexity – by hiring them and subsequently enjoying lighter enforcement scrutiny. For regulators, these employer-side benefits translate into stronger career prospects in the private sector. Regulators can transform bureaucratic experience and influence into tangible advantages for firms, thereby increasing their value as private sector hires. Thus, the revolving door embeds a dual dynamic: regulators enhance their marketability by delivering advantages to past employers, while firms strategically recruit ex-regulators to mitigate regulatory risk and secure privileged access to expertise. This reciprocal logic helps explain why revolving door moves are so persistent and central to regulatory careers.

## 4.6 Summary and Interpretation

In sum, the evidence shows that both political and economic forces shape revolving door dynamics. Political turnovers trigger two-way movements between the public and private sectors, with co-partisan regulators – those politically aligned with the President – more likely to enter government and non-co-partisans more likely to exit. Economic shocks at labor market entry also leave a lasting imprint: regulators who begin their careers during recessions are disproportionately drawn into public service, more likely to revolve later in life, and ultimately catch up in wealth through private sector opportunities. Beyond these macro forces, financial considerations emerge at the individual level. Revolving regulators start their careers with fewer assets, but accumulate substantially more wealth by retirement, particularly through real estate holdings. Finally, career concerns reinforce these patterns: regulators who switch more often between sectors secure rarer and higher-ranking positions in the private sector, and their regulatory output – stricter enforcement, more numerous and complex rules – translates into better post-government career opportunities.

Taken together, these findings highlight the central role of incentives in both the decision to step through the revolving door and the conduct of regulators once in office. Revolving door careers are not random churn between sectors, but structured responses to political cycles, economic shocks, and financial and career motives. Regulators revolve because the timing and payoffs make it attractive, and they regulate more actively because doing so enhances their marketability. The revolving door thus embeds a dual dynamic: public sector activity shapes private sector opportunities, and private sector prospects shape public sector conduct. This perspective helps explain why revolving door moves are persistent and widespread, and why they leave a systematic imprint on the scale, complexity, and direction of regulation.

# 5 Conclusion

We assemble a comprehensive database on the careers, incentives, and regulatory actions of the most senior federal regulators who lead all major agencies of the U.S. government. We document a series of patterns on the revolving door phenomenon. Revolving door moves are widespread and often repeated several times over a regulator's career. Revolving regulators – who have private sector experience both before and after their top appointment – oversee significantly more enforcement and engage in more intensive rulemaking activity.

Digging deeper, we highlight three interrelated forces behind these patterns. Political alignment shapes when regulators move between sectors, with transitions clustering around presidential turnovers – decades before the individuals reach the top office. Financial incentives play a central role: individuals entering the labor market during recessions or from poorer backgrounds are more likely to revolve and ultimately accumulate substantially more wealth. Finally, career advancement exerts a strong pull. Regulators who enforce more strictly or craft more complex rules subsequently obtain more senior private sector positions. Employers affiliated with revolving regulators benefit through favorable rulemaking outcomes and reduced enforcement exposure, relative to unaffiliated employers. Together, these findings show that political, financial, and career motives jointly underpin both the decision to revolve and the regulatory footprints these officials leave behind.

Our work opens the door for future research opportunities. One possibility is to explore how the revolving door shapes organizational dynamics inside agencies, such as delegation and internal decision-making. Another possibility is to investigate the downstream effects of revolving door behavior on firms, consumers, and long-run regulatory quality. More broadly, our findings invite a deeper exploration of how individual incentives determine the allocation of talent, the evolution of regulatory performance, and the balance between public and private interests in government.

# References


Agarwal, S., D. Lucca, A. Seru, and F. Trebbi. 2014. Inconsistent regulators: Evidence from banking. *Quarterly Journal of Economics* 129:889–938.

Al-Ubaydli, O., and P. A. McLaughlin. 2017. Regdata: A numerical database on industry-specific regulations for all united states industries and federal regulations, 1997–2012. *Regulation & Governance* 11:109–23.

Bar-Isaac, H., and J. Shapiro. 2011. Credit ratings accuracy and analyst incentives. *American Economic Review* 101:120–24.

Bhattacharjee, S., and J. O. Brown. 2018. The impact of management alumni affiliation and persuasion tactics on auditors' internal control judgments. *The Accounting Review* 93:97–115.

Brezis, E. S. 2023. Regulating the revolving door of regulators: Legal vs. ethical issues. *Economies* 12:5–.

Chalkidis, I., M. Fergadiotis, P. Malakasiotis, N. Aletras, and I. Androutsopoulos. 2020. Legal-bert: The muppets straight out of law school. *arXiv preprint arXiv:2010.02559* .

Chang, S., J. Kalmenovitz, and A. Lopez-Lira. 2023. Follow the pipeline: Anticipatory effects of regulatory proposals. *Working paper* .

Che, Y.-K. 1995. Revolving doors and the optimal tolerance for agency collusion. *The Rand Journal of Economics* 378–97.

Coffey, B., P. A. McLaughlin, and P. Peretto. 2020. The cumulative cost of regulations. *Review of Economic Dynamics* .

Cohen, L., A. Frazzini, and C. J. Malloy. 2012. Hiring cheerleaders: Board appointments of "independent" directors. *Management Science* 58:1039–58.

Colliard, J.-E., and C.-P. Georg. 2020. Measuring regulatory complexity. *Working paper* .

Cornaggia, J., K. J. Cornaggia, and H. Xia. 2016. Revolving doors on Wall Street. *Journal of Financial Economics* 120:400–19.

Correia, M. M. 2014. Political connections and sec enforcement. *Journal of Accounting and Economics* 57:241–62.

Dawson, J. W., and J. J. Seater. 2013. Federal regulation and aggregate economic growth. *Journal of Economic Growth* 18:137–77.

deHaan, E., S. Kedia, K. Koh, and S. Rajgopal. 2015. The revolving door and the SEC's enforcement outcomes: Initial evidence from civil litigation. *Journal of Accounting and Economics* 60:65–96.

Eckert, R. D. 1981. The life cycle of regulatory commissioners. *The Journal of Law and Economics* 24:113–20.

Emery, L. P., and M. Faccio. 2020. Exposing the revolving door in executive branch agencies. *Journal of Financial and Quantitative Analysis* 1–31.

Geiger, M. A., C. S. Lennox, and D. S. North. 2008. The hiring of accounting and finance officers from audit firms: how did the market react? *Review of Accounting Studies* 13:55–86.

Geiger, M. A., D. S. North, and B. T. O'Connell. 2005. The auditor-to-client revolving door and earnings management. *Journal of Accounting, Auditing & Finance* 20:1–26.

Heese, J. 2022. Does industry employment of active regulators weaken oversight? *Management Science* .

Hendricks, B. E., W. R. Landsman, and F. D. Peña-Romera. 2022. The revolving door between large audit firms and the PCAOB: Implications for future inspection reports and audit quality. *The Accounting Review* 97:261–92.

Kalmenovitz, J., M. Lowry, and E. Volkova. 2025. Regulatory fragmentation. *Journal of Finance* .

Kalmenovitz, J., S. Vij, and K. Xiao. 2022. Closing the revolving door. *Working paper* .

Katic, I. V., and J. W. Kim. 2024. Caught in the revolving door: Firm-government employee mobility as a fleeting regulatory advantage. *Organization Science* 35:281–306.

Kempf, E. 2020. The job rating game: Revolving doors and analyst incentives. *Journal of Financial Economics* 135:41–67.

Laffont, J.-J., and J. Tirole. 1991. The politics of government decision-making: A theory of regulatory capture. *The quarterly journal of economics* 106:1089–127.

Lowry, M., and E. Volkova. 2024. Corporate lobbying of bureaucrats. *Available at SSRN* .

Lucca, D., A. Seru, and F. Trebbi. 2014. The revolving door and worker flows in banking regulation. *Journal of Monetary Economics* 65:17–32.

Mulligan, C. B., and A. Shleifer. 2005. The extent of the market and the supply of regulation. *Quarterly Journal of Economics* 120:1445–73.

Peltzman, S. 1976. Toward a more general theory of regulation. *The Journal of Law and Economics* 19:211–40.

Salant, D. J. 1995. Behind the revolving door: A new view of public utility regulation. *The Rand Journal of Economics* 362–77.

Shive, S. A., and M. M. Forster. 2016. The revolving door for financial regulators. *Review of Finance* 21:1445–84.

Shleifer, A., and R. Vishney. 1993. Corruption. *Quarterly Journal of Economics* 108:599–617.

Stigler, G. J. 1971. The theory of economic regulation. *The Bell Journal of Economics and Management Science* 3–21.

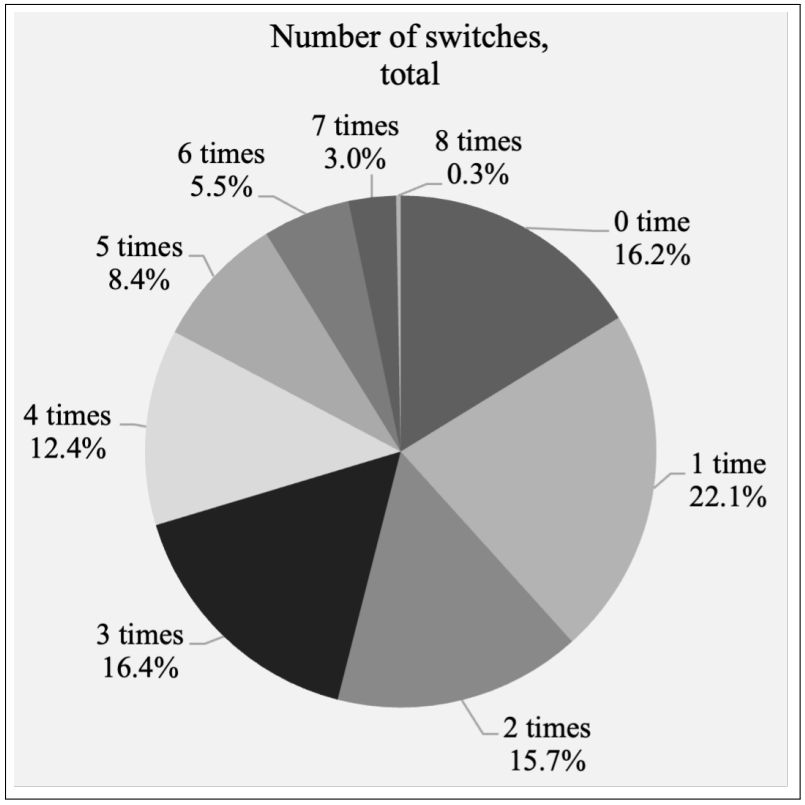
Tabakovic, H., and T. G. Wollmann. 2018. From revolving doors to regulatory capture? Evidence from patent examiners. Working Paper, National Bureau of Economic Research.

Zingales, L. 2017. Towards a political theory of the firm. *Journal of Economic Perspectives* 31:113–30.

Figure 1: **The Revolving Door between the Private and Public Sectors**

This figure reports the distribution of the number of moves between the private and public sectors throughout a regulator's career. The sample consists of 406 top federal regulators across 50 executive branch agencies from 2000 to 2022. In Panel A, we include switches over the regulator's entire career, including after stepping down from the top regulatory position. In Panel B, we focus on switches before taking the top regulatory position. The revolving door is pervasive: 84% of regulators revolve at least once, 62% at least twice, and nearly half revolve multiple times before they ever hold the top role. See Section 2.2.

**Panel A**




**Panel B**

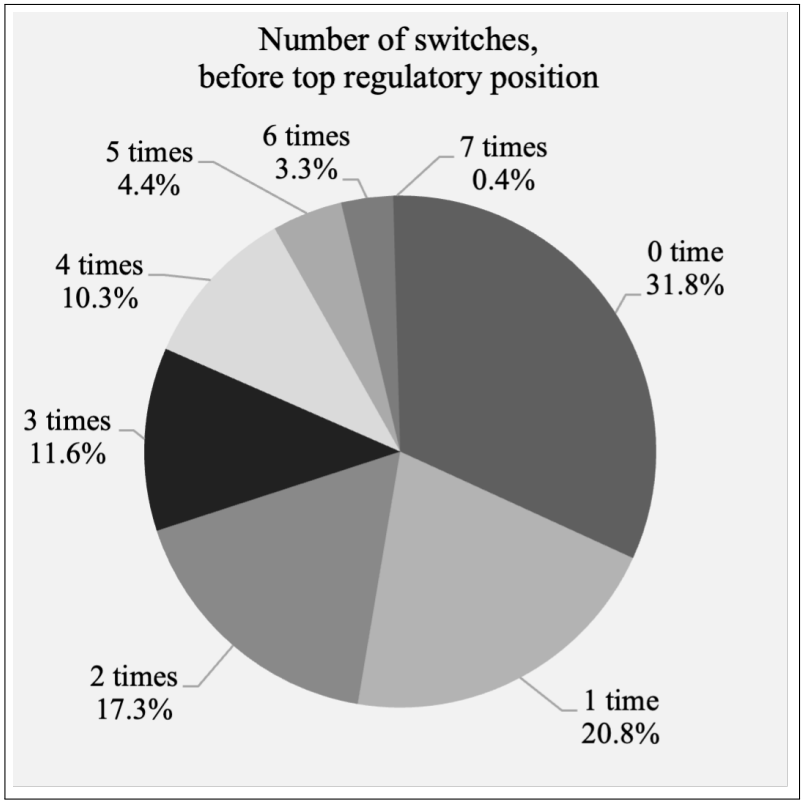
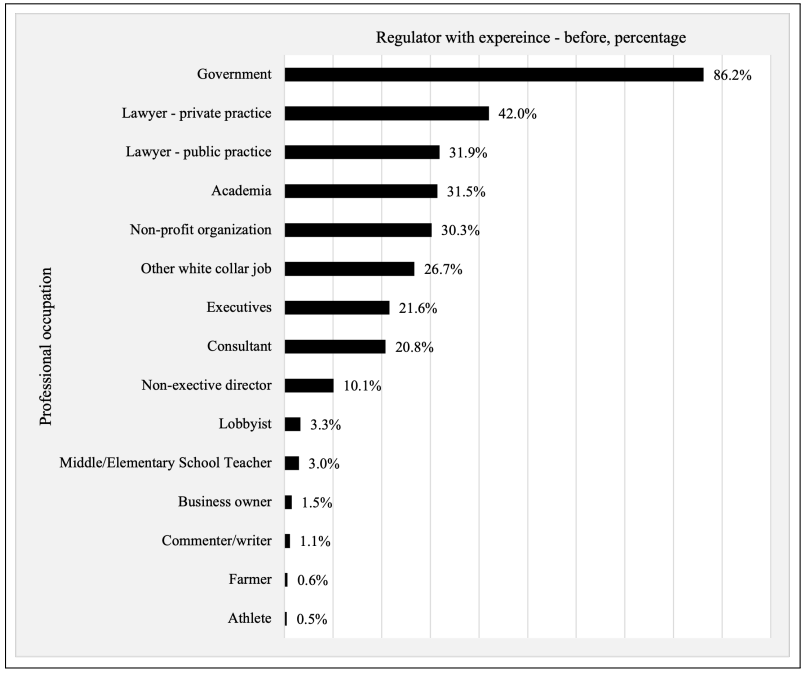


Figure 2: **Positions Held by Top Regulators**

This figure plots the distribution of professional occupations among top regulators, prior to assuming the top regulatory position (Panel A) and after stepping down (Panel B). Each bar represents the percentage of regulators with at least 6 months of consecutive working experience in a given job category. The sample consists of 406 top federal regulators across 50 executive branch agencies from 2000 to 2022. Most top regulators have prior government experience and they enter and exit through a narrow set of private sector roles – primarily lawyers, corporate executives, and consultants. See Section 2.2.

**Panel A: before**




**Panel B: after**

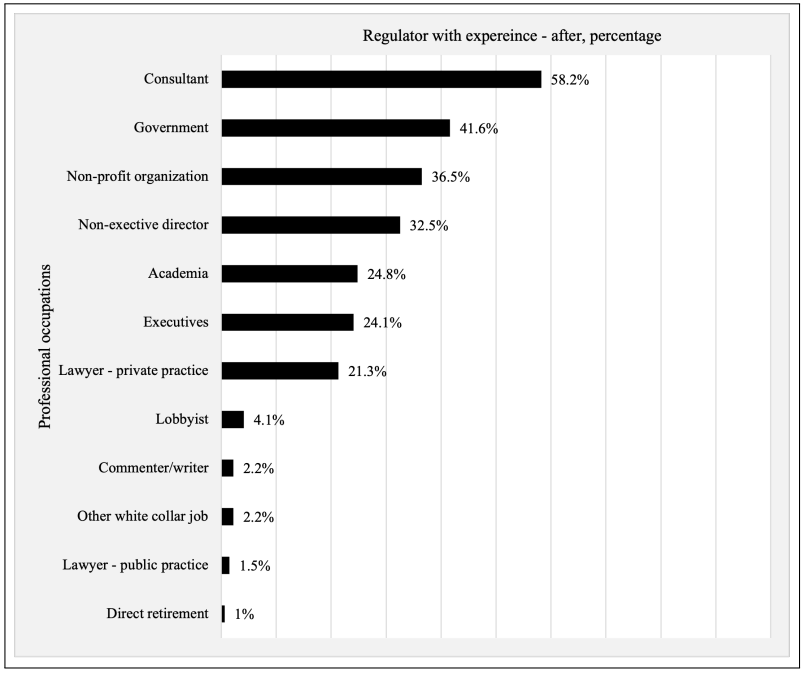


Figure 3: **Corporate Employment by Industry**

This figure plots the distribution of the 48 Fama-French industries in which regulators work after stepping down from the top regulatory position. The sample consists of 406 top federal regulators across 50 executive branch agencies from 2000 to 2022. Former top regulators are heavily concentrated in a few key industries, most notably Business Services and Banking. See Section 2.2.

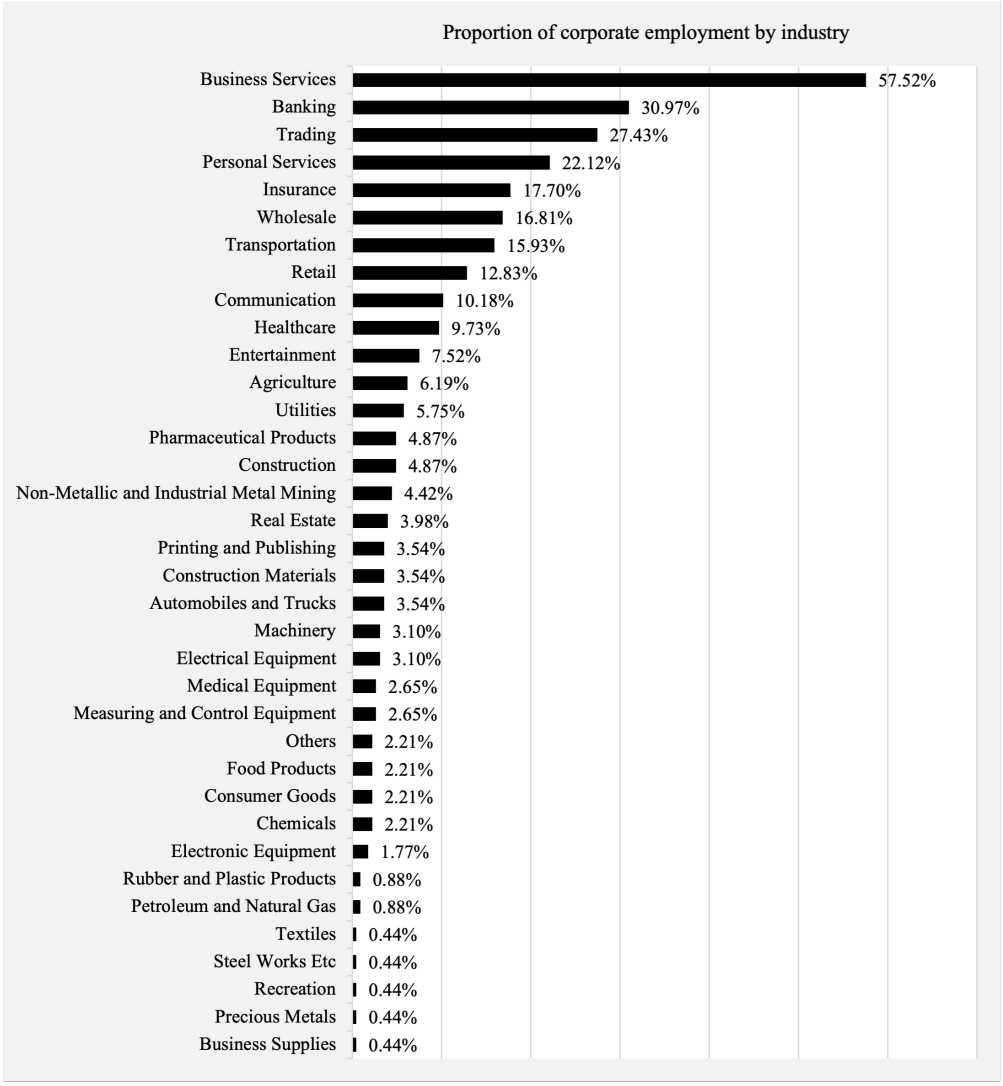


Figure 4: **Percentage of Revolving Regulators Over Time**

This figure plots the annual proportion of revolving regulators among all sample top federal regulators. revolving regulator is an indicator that equals one for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. The sample consists of 406 top federal regulators across 50 executive branch agencies from 2000 to 2022. The dashed line marks the sample mean of 47.9%, as reported in Panel B of Table 2. The fraction of revolving regulators remains consistently around 50% throughout the sample period, with a notable peak during the early 2000s. See Section 2.3.

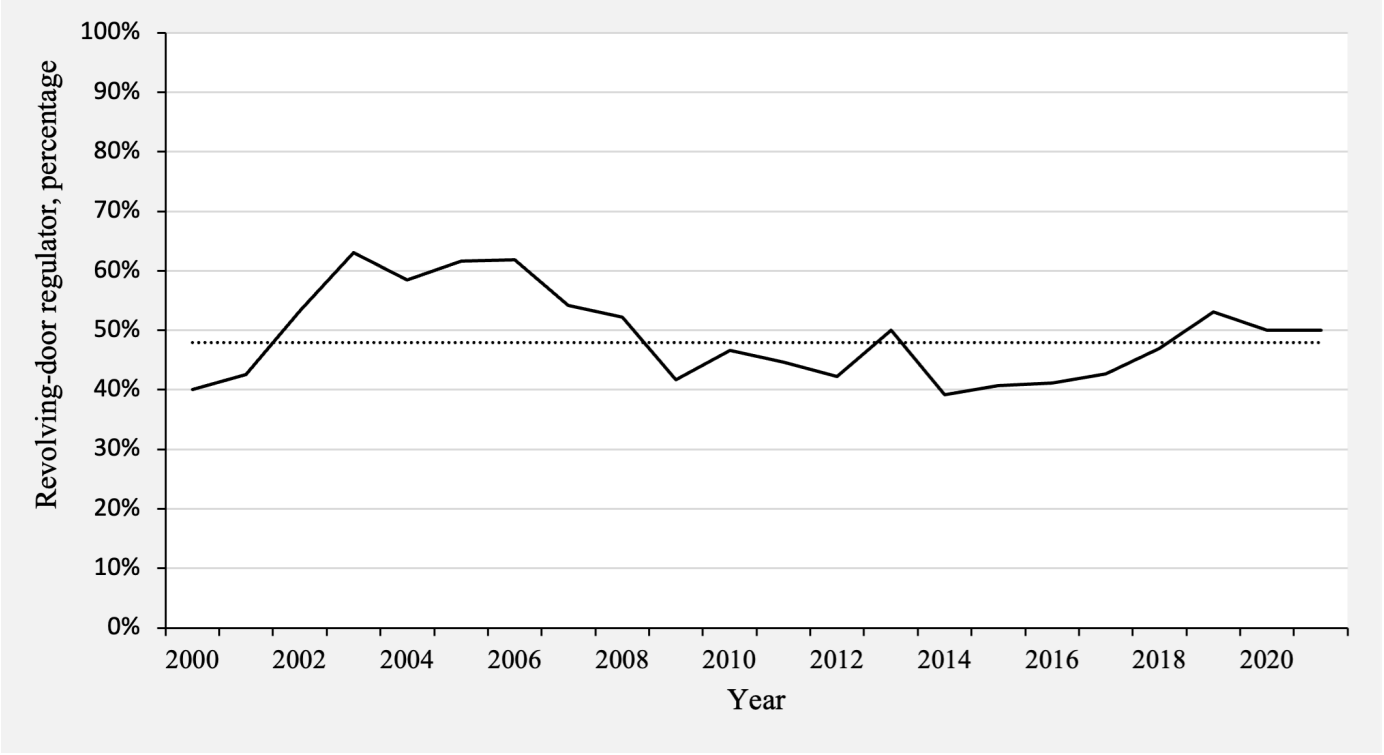


Figure 5: **Percentage of Revolving Regulators Across Agencies**

This figure plots the proportion of revolving regulators across agencies. A revolving regulator is one that has worked in the private sector more than 6 consecutive months before and after their top regulatory position. The bars indicate the fraction of revolving regulators in a given agency, averaged over the sample period from 2000 to 2022. The sample consists of 406 top federal regulators across 50 executive branch agencies from 2000 to 2022. Revolving regulators lead nearly all agencies, yet their prevalence varies, with some agencies almost exclusively led by revolving regulators and others exhibiting virtually none. See Section 2.3.

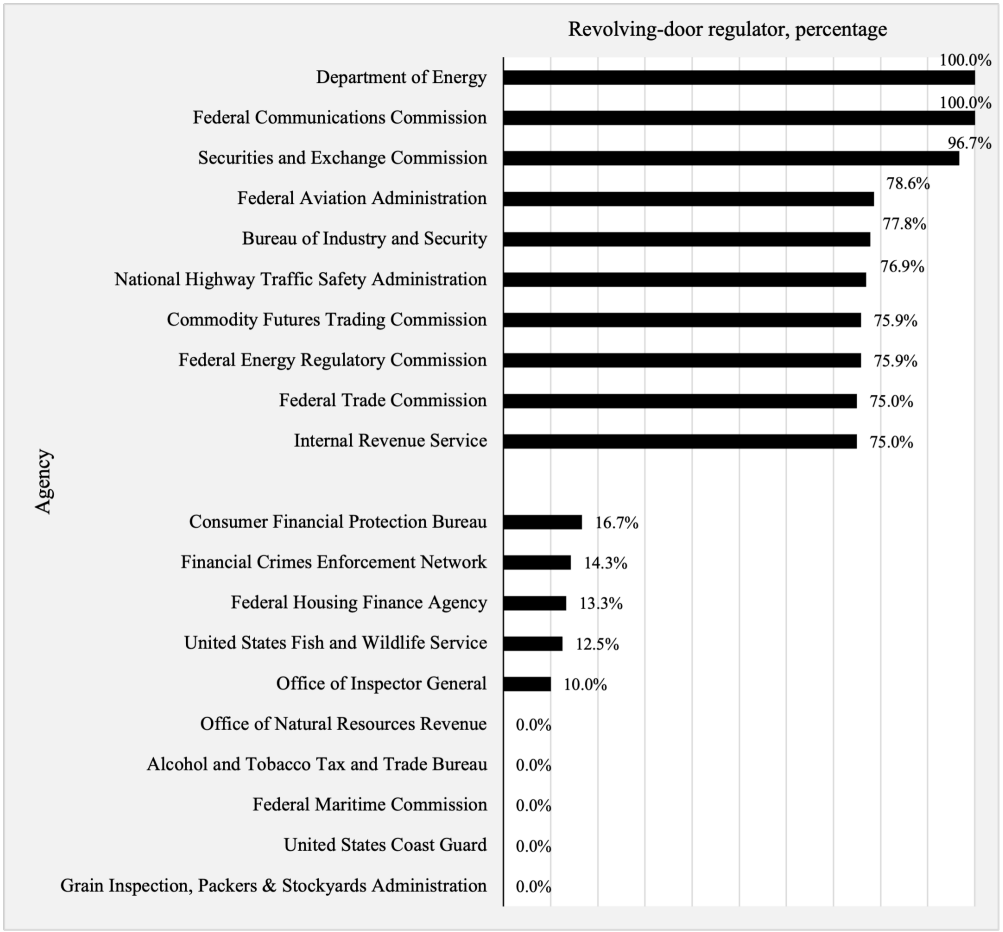


Table 1: **Key Characteristics of Top Federal Regulators**

Summary statistics for 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies between 2000 and 2022. Variable definitions are in Table A.1. See Section 2.1.

| Variable | Mean | P25 | Median | P75 | SD |
|---|---|---|---|---|---|
| **Regulator characteristics** | | | | | |
| Age appointed as top regulator | 53.63 | 47 | 54 | 60 | 8.765 |
| Tenure as top regulator, years | 4.053 | 2 | 3.583 | 5 | 3.083 |
| *Male* | 0.715 | 0 | 1 | 1 | 0.451 |
| *PartyDemocratic* | 0.47 | 0 | 0 | 1 | 0.499 |
| *PartyRepublican* | 0.458 | 0 | 0 | 1 | 0.498 |
| Advanced degree indicator | 0.871 | 1 | 1 | 1 | 0.344 |
| **Enforcement** | | | | | |
| $Enforcement^{\#}$ | 368.760 | 0.0 | 7.0 | 38.136 | 1508.220 |
| $Enforcement^{\$}$, millions | 171.060 | 0.0 | 2.301 | 36.746 | 970.329 |
| **Rulemaking quantity** | | | | | |
| *RuleQuantity* | 20.848 | 0.0 | 9.0 | 24.364 | 32.805 |
| $RuleQuantity^{reg}$ | 17.088 | 0.0 | 7.0 | 19.100 | 29.201 |
| $RuleQuantity^{dereg}$ | 3.856 | 0.0 | 0.0 | 6.0 | 5.979 |
| **Rulemaking complexity** | | | | | |
| *RuleLength*, millions | 0.408 | 0.041 | 0.147 | 0.433 | 0.739 |
| *RegOperators*, thousands | 1.598 | 0.171 | 0.602 | 1.761 | 2.974 |
| *LogicOperators*, thousands | 16.658 | 1.748 | 6.111 | 17.878 | 29.988 |
| **Regulatory productivity** | | | | | |
| *RuleQuantity* per employee | 0.009 | 0.000 | 0.003 | 0.009 | 0.019 |
| *RuleQuantity* per million dollars salary | 0.089 | 0.004 | 0.028 | 0.104 | 0.178 |
| $Enforcement^{\$}$ per employee, millions | 0.128 | 0.0 | 0.001 | 0.019 | 0.945 |
| $Enforcement^{\$}$ per dollar salary | 0.884 | 0.0 | 0.008 | 0.199 | 6.215 |
| **Real estate** | | | | | |
| Value at age 30, $ millions | 0.047 | 0.0 | 0.0 | 0.0 | 0.146 |
| Number of properties at age 30 | 0.140 | 0.0 | 0.0 | 0.0 | 0.364 |
| Value at age 65, $ millions | 2.107 | 0.389 | 1.146 | 2.233 | 3.496 |
| Number of properties at age 65 | 2.143 | 1.0 | 2.0 | 3.0 | 1.734 |

Table 2: **The Revolving Door among Top Regulators**

Summary statistics of career trajectories for 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies between 2000 and 2022. Variable definitions are in Table A.1. See Section 2.2.

| Variable | Mean | P25 | Median | P75 | SD |
|---|---|---|---|---|---|
| **Career trajectories** | | | | | |
| *RevolvingRegulator* | 0.479 | 0 | 0 | 1 | 1 |
| Private sector (before) | 0.688 | 0 | 1 | 1 | 0.463 |
| Private sector (after) | 0.64 | 0 | 1 | 1 | 0.48 |
| Private sector (before), years | 13.429 | 0 | 6 | 18.417 | 21.636 |
| Public sector (before), years | 16.018 | 7.25 | 14 | 24.292 | 11.588 |
| Switches (total) | 2.516 | 1 | 2 | 4 | 1.938 |
| **First job** | | | | | |
| First job - Private | 0.292 | 0.0 | 0.0 | 1.0 | 0.455 |
| First job - Public | 0.475 | 0.0 | 0.0 | 1.0 | 0.500 |
| **Presidential Turnovers** | | | | | |
| $PresTurnover$ | 0.168 | 0.0 | 0.0 | 0.0 | 0.374 |
| $PresTurnover^{co-partisan}$ | 0.062 | 0.0 | 0.0 | 0.0 | 0.241 |
| $PresTurnover^{non-co-partisan}$ | 0.069 | 0.0 | 0.0 | 0.0 | 0.253 |
| **Career after holding top position** | | | | | |
| Job ranking | 0.788 | 0.667 | 0.836 | 0.959 | 0.191 |
| Sales, $ millions | 10,194.6 | 9.2 | 100.0 | 1,286.0 | 48,185.6 |
| Number of employees | 17,729.6 | 50.0 | 375.0 | 3,911.0 | 101,430.3 |
| Sales-per-employee, $ millions | 0.91 | 0.16 | 0.26 | 0.49 | 6.55 |

Table 3: **Uniqueness of Revolving Regulators**

This table compares revolving regulators, who worked in the private sector at least 6 consecutive months before and after their top regulatory position, to non-revolving regulators. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The right-hand side column shows the t-statistics for the tests of the differences in means. Statistical significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Revolving regulators differ systematically from their non-revolving peers: they are younger, more likely to be Republican, better educated, accumulate more real estate wealth over their careers, and oversee markedly higher enforcement and rulemaking activity. See Section 2.3.

| Variable | Revolving | Non-revolving | Δ | t-stat. |
|---|---|---|---|---|
| **Regulator characteristics** | | | | |
| *AgeTop*, years | 55.127 | 56.249 | -1.123 | -2.204** |
| Tenure as top regulator, years | 3.797 | 4.450 | -0.653 | -3.789*** |
| *Male* | 0.716 | 0.726 | -0.010 | -0.374 |
| *PartyDemocratic* | 0.335 | 0.559 | -0.224 | -7.490*** |
| *PartyRepublican* | 0.598 | 0.358 | 0.240 | 7.983*** |
| **Regulator educational backgrounds** | | | | |
| Advanced degree indicator | 0.907 | 0.830 | 0.077 | 3.866*** |
| SAT score - 25th percentile | 1284.942 | 1250.455 | 34.487 | 3.338*** |
| SAT score - 75th percentile | 1448.174 | 1415.562 | 32.612 | 3.949*** |
| Graduate institution ranking | 42.791 | 62.055 | -19.264 | -4.717*** |
| **Enforcement** | | | | |
| $Enforcement^{\#}$ (log) | 2.556 | 2.260 | 0.297 | 2.172** |
| $Enforcement^{\$}$ (log) | 12.309 | 9.729 | 2.580 | 5.788*** |
| **Rulemaking quantity** | | | | |
| *RuleQuantity* | 23.965 | 17.985 | 5.980 | 3.156*** |
| $RuleQuantity^{reg}$ | 19.483 | 14.889 | 4.594 | 2.722** |
| $RuleQuantity^{dereg}$ | 4.527 | 3.240 | 1.287 | 3.733*** |
| **Rulemaking complexity** | | | | |
| *RuleLength* above median | 0.583 | 0.424 | 0.160 | 5.575*** |
| *RegOperators* above median | 0.573 | 0.433 | 0.140 | 4.856*** |
| *LogicOperators* above median | 0.578 | 0.428 | 0.150 | 5.215*** |

| Variable | Revolving | Non-revolving | $\Delta$ | t-stat. |
|---|---|---|---|---|
| **Regulatory productivity** | | | | |
| *RuleQuantity* per employee | 0.010 | 0.007 | 0.003 | 2.172** |
| *RuleQuantity* per million dollars salary | 0.103 | 0.076 | 0.027 | 1.899* |
| Log $Enforcement^{\$}$ per employee | 6.910 | 5.180 | 1.740 | 4.860*** |
| Log $Enforcement^{\$}$ per dollar salary | 0.300 | 0.188 | 0.113 | 2.650** |
| **Real estate properties** | | | | |
| Value of real estate properties at age 30 | 0.051 | 0.043 | 0.008 | 0.479 |
| Value of real estate properties at age 65 | 2.992 | 1.357 | 1.634 | 4.173*** |

Table 4: **Revolving Regulators and Enforcement**

Results from estimating Equation 1. The unit of observation is regulator-year. $Enforcement^{\$}$ is the log of 1 plus the annual dollar amount of enforcement actions issued by the agency overseen by the top regulator. $Enforcement^{\#}$ is defined analogously with respect to the number of enforcement actions. $RevolvingRegulator = 1$ for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Agencies led by revolving regulators impose stricter enforcement, collecting far larger penalties and issuing more enforcement actions than agencies led by non-revolving regulators. See Section 3.1.

| **Outcome:** | $Enforcement^{\$}$ | | $Enforcement^{\#}$ | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| $RevolvingRegulator$ | 1.532*** | 1.768*** | 0.312** | 0.422*** |
| | [0.508] | [0.566] | [0.133] | [0.132] |
| $Male$ | | -0.464 | | -0.033 |
| | | [0.718] | | [0.133] |
| $PartyIndependent$ | | -0.267 | | 0.026 |
| | | [0.749] | | [0.227] |
| $PartyRepublican$ | | -0.736 | | -0.168 |
| | | [0.653] | | [0.152] |
| $AgeTop$ | | 0.0 | | 0.003 |
| | | [0.026] | | [0.007] |
| Year FE | x | x | x | x |
| Agency FE | x | x | x | x |
| Obs. | 1192 | 995 | 1192 | 995 |
| Adj. $R^2$ | 0.567 | 0.573 | 0.789 | 0.782 |
| Model | OLS | OLS | OLS | OLS |

Table 5: **Revolving Regulators and Rulemaking**

This table reports results from estimating Equation 1. The unit of observation is regulator-year. *RuleQuantity* is the three-tier relevance-weighted quantity of finalized rules published in the Federal Register by the regulator's agency during her tenure. $RuleQuantity^{reg}$ ($RuleQuantity^{dereg}$) is the analogous weighted quantities for rules classified as regulatory (deregulatory). Columns (4) to (6) examine rule complexity, measured by whether the rule exceeds the median length (words) or the number of logical and regulatory operators. *RevolvingRegulator* = 1 for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Revolving regulators issue more rules, and those rules are more complex across all text-based measures, compared to agencies led by non-revolving regulators. See Section 3.2.

| **Outcomes:** | Rule quantity | | | Rule complexity | | |
|---|---|---|---|---|---|---|
| | *RuleQuantity* | $RuleQuantity^{reg}$ | $RuleQuantity^{dereg}$ | *RuleLength* | *RegOperators* | *LogicOperators* |
| *RevolvingRegulator* | 0.141** | 0.174** | 0.056 | 0.452* | 0.489* | 0.596** |
| | [0.056] | [0.063] | [0.128] | [0.241] | [0.258] | [0.232] |
| *Male* | 0.104 | 0.093 | 0.115 | 0.316 | 0.532* | 0.388 |
| | [0.086] | [0.073] | [0.183] | [0.305] | [0.271] | [0.312] |
| *PartyIndependent* | 0.035 | 0.082 | -0.047 | -0.193 | -0.190 | -0.377 |
| | [0.113] | [0.109] | [0.208] | [0.583] | [0.555] | [0.570] |
| *PartyRepublican* | -0.093 | -0.113 | 0.030 | -0.188 | -0.297 | -0.275 |
| | [0.065] | [0.074] | [0.095] | [0.361] | [0.272] | [0.280] |
| *AgeTop* | 0.000 | -0.001 | 0.002 | -0.037** | -0.037*** | -0.026* |
| | [0.002] | [0.003] | [0.005] | [0.013] | [0.010] | [0.013] |
| Year FE | x | x | x | x | x | x |
| Agency FE | x | x | x | x | x | x |
| Obs. | 1006 | 1006 | 1006 | 758 | 768 | 726 |
| Adj. Pseudo $R^2$ | 0.655 | 0.648 | 0.341 | 0.301 | 0.293 | 0.308 |
| Model | Poisson | Poisson | Poisson | Logit | Logit | Logit |

Table 6: **Revolving Regulators and Regulatory Productivity**

This table reports regressions of regulatory productivity on an indicator for revolving regulators. The unit of observation is regulator-year. The dependent variables are (i) the rulemaking productivity score per employee (Column 1) and per dollar salary (Column 2), and (ii) the log annual dollar amount of enforcement actions per employee (Column 3) and per dollar salary (Column 4). *RevolvingRegulator* = 1 for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. Standard errors (in brackets) are heteroskedasticity consistent. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Revolving regulators generate higher enforcement productivity and modestly higher rulemaking productivity, indicating that they mobilize agency resources more intensively than their non-revolving peers. See Section 3.3.

| **Outcome:** | *RuleQuantity* | | $Enforcement^{\$}$ | |
|---|---|---|---|---|
| | Per employee | Per dollar salary | Per employee | Per dollar salary |
| Column | (1) | (2) | (3) | (4) |
| *RevolvingRegulator* | 0.268** | 0.262** | 1.200** | 0.084* |
| | [0.096] | [0.083] | [0.424] | [0.048] |
| *Male* | 0.037 | 0.011 | -0.483 | -0.092* |
| | [0.114] | [0.129] | [0.507] | [0.051] |
| *PartyIndependent* | 0.388 | 0.387 | 0.297 | -0.034 |
| | [0.264] | [0.285] | [0.525] | [0.082] |
| *PartyRepublican* | -0.282* | -0.199 | -0.712 | 0.007 |
| | [0.176] | [0.169] | [0.633] | [0.055] |
| *AgeTop* | 0.021* | 0.025* | -0.009 | 0.002 |
| | [0.012] | [0.014] | [0.019] | [0.002] |
| Year FE | x | x | x | x |
| Agency FE | x | x | x | x |
| Obs. | 502 | 497 | 584 | 579 |
| Adj. (Pseudo) $R^2$ | 0.864 | 0.847 | 0.666 | 0.430 |
| Model | Poisson | Poisson | OLS | OLS |

Table 7: **Revolving Door Moves and Presidential Turnovers**

The sample includes the career histories of regulators prior to their appointment to top regulatory positions. The unit of observation is individual-year. In Columns 1-2, the outcome equals one for any move from the private sector to the public one during the year or vice-versa. $PresTurnover = 1$ in the year when an incoming Republican President replaces an incumbent Democratic President or vice-versa. In Columns 3-4 (5-6), the outcome equals one for a move from the private sector to the public one (from the public sector to the private one) during the year. $PresTurnover^{co-partisan} = 1$ ($PresTurnover^{non-co-partisan} = 1$) in presidential turnover years where the incoming President comes from the same (other) political party that the regulator supports. See variable definitions in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Career moves across the public and private sectors spike during presidential turnovers, with regulators disproportionately entering government when co-partisan presidents take office and exiting when non-co-partisans arrive. See Section 4.1.

| **Outcome:** | Revolving door move | | From private to public | | From public to private | |
|---|---|---|---|---|---|---|
| Column | (1) | (2) | (3) | (4) | (5) | (6) |
| $PresTurnover$ | 0.623*** | 0.620*** | | | | |
| | [0.145] | [0.139] | | | | |
| $PresTurnover^{co-partisan}$ | | | 1.279*** | 1.309*** | | |
| | | | [0.181] | [0.186] | | |
| $PresTurnover^{non-co-partisan}$ | | | | | 0.621*** | 0.689*** |
| | | | | | [0.240] | [0.237] |
| Age | 0.040*** | 0.052*** | 0.062*** | 0.077*** | 0.008* | 0.013** |
| | [0.007] | [0.008] | [0.007] | [0.009] | [0.004] | [0.005] |
| $Male$ | 0.226 | | 0.176 | | 0.225 | |
| | [0.175] | | [0.155] | | [0.262] | |
| $PartyIndependent$ | 0.121 | | 0.218 | | 0.218 | |
| | [0.435] | | [0.428] | | [0.382] | |
| $PartyRepublican$ | 0.036 | | 0.004 | | 0.097 | |
| | [0.154] | | [0.141] | | [0.208] | |
| First Job FE | x | | x | | x | |
| Birth Cohort FE | x | | x | | x | |
| Agency FE | x | | x | | x | |
| Regulator FE | | x | | x | | x |
| Obs. | 6342 | 6753 | 6342 | 6736 | 5944 | 4592 |
| Adj. Pseudo $R^2$ | 0.024 | -0.027 | 0.039 | -0.057 | -0.029 | -0.136 |
| Model | Logit | Logit | Logit | Logit | Logit | Logit |

Table 8: **Revolving Door and the Business Cycle**

**Panel A. First Job.** This table studies the relation between regulators' first job and the economic conditions at the time they enter the labor market. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022, and the unit of observation is a regulator. The dependent variables equal one if a regulator starts her career in the private sector, public sector, a nonprofit, or academia, respectively. *RecessionRegulator* = 1 if the regulator entered the labor market during a recession. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by birth cohort. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Regulators who enter the labor market during recessions are more likely to start in the public sector and less likely to begin in nonprofits. See Section 4.2.

| **Outcome: First job** | Private sector | Public sector | Nonprofit | Academia |
|---|---|---|---|---|
| *RecessionRegulator* | -0.724 | 0.494* | -4.640*** | 0.903 |
| | [0.661] | [0.273] | [1.210] | [1.116] |
| Controls | x | x | x | x |
| Birth Cohort FE | x | x | x | x |
| Agency FE | x | x | x | x |
| Obs. | 227 | 232 | 67 | 102 |
| Adj. Pseudo $R^2$ | -0.097 | -0.117 | -0.125 | -0.156 |
| Model | Logit | Logit | Logit | Logit |

**Panel B. revolving regulators.** This table studies the relation between revolving regulators and the economic conditions at the time they enter the labor market. The unit of observation is regulator. The dependent variables are $RevolvingRegulator = 1$ for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. $PrivateSector^{before}$ ($PrivateSector^{after}$) is an indicator for regulators who worked in the private sector for more than 6 consecutive months before (after) their top regulatory position. $RecessionRegulator = 1$ if the regulator entered the labor market during a recession. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by birth cohort. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Regulators who enter the labor market during recessions are less likely to have private sector experience before reaching top office but more likely to move into the private sector afterward. See Section 4.2.

| **Outcome:** | $RevolvingRegulator$ | $PrivateSector^{before}$ | $PrivateSector^{after}$ |
|---|---|---|---|
| $RecessionRegulator$ | 0.278 | -0.680* | 0.644* |
| | [0.234] | [0.382] | [0.332] |
| Controls | x | x | x |
| Birth Cohort FE | x | x | x |
| Agency FE | x | x | x |
| Obs. | 254 | 208 | 218 |
| Adj. Pseudo $R^2$ | -0.090 | -0.171 | -0.047 |
| Model | Logit | Logit | Logit |

**Panel C. Recession Regulators and Real Estate Acquisitions.** This table studies the relation between real estate ownership and the economic conditions at the time regulators enter the labor market. The unit of observation is a regulator. The dependent variables in Columns (1) and (2) measure the value of regulators' real estate properties at the ages of 30 and 65, respectively. *RecessionRegulator* = 1 if the regulator entered the labor market during a recession. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by birth cohort. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Regulators who enter the labor market during recessions own less real estate at age 30, but these gaps disappear by age 65. See Section 4.2.

| **Outcome:** | Value of real estate at age 30 | Value of real estate at age 65 |
|---|---|---|
| Column | (1) | (2) |
| *RecessionRegulator* | -0.030* | -0.089 |
| | [0.016] | [0.417] |
| Controls | x | x |
| Birth Cohort FE | x | x |
| Agency FE | x | x |
| Obs. | 277 | 277 |
| Adj. $R^2$ | 0.212 | 0.070 |
| Model | OLS | OLS |

Table 9: **Revolving Door and Real Estate Properties**

This table provides estimates from regressions investigating the relationship between revolving regulators and real estate property ownership. The unit of observation is regulator. The dependent variables measure the market value of real estate properties owned by top regulators at the ages of 30 and 65. *RevolvingRegulator* = 1 for regulators that worked in the private sector more than 6 consecutive months before and after their top regulatory position. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by birth cohort. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Revolving regulators start their careers with systematically less real estate wealth but surpass non-revolving peers by retirement, accumulating more properties and substantially higher asset values over the life cycle. See Section 4.3.

| **Outcome:** | Value of real estate at age 30 | Value of real estate at age 65 |
|---|---|---|
| Column | (1) | (2) |
| *RevolvingRegulator* | -0.010 | 0.454* |
| | [0.013] | [0.202] |
| Controls | x | x |
| Birth Cohort FE | x | x |
| Agency FE | x | x |
| Obs. | 299 | 299 |
| Adj. $R^2$ | 0.140 | 0.091 |
| Model | OLS | OLS |

Table 10: **Revolving Door and Subsequent Career Outcomes**

This table provides estimates from regressions investigating the relationship between regulators' revolving door moves and subsequent job outcomes. The unit of observation is individual-year. The dependent variable is Job ranking, defined as one minus the frequency of the regulator's job title relative to the firm's total number of employees in a given year. The main independent variable, Cumulative number of switches, is the total number of moves across the private and public sectors before a given year. The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Regulators who revolve more frequently secure more senior private sector positions, consistent with a career development mechanism in which repeated transitions translate into higher-status roles. See Section 4.4.

| **Outcome:** | Job ranking | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Cumulative switches | 0.048*** | 0.052*** | 0.036*** | 0.031*** |
| | [0.009] | [0.015] | [0.008] | [0.007] |
| Career length | | 0.005 | 0.007*** | 0.009*** |
| | | [0.003] | [0.001] | [0.002] |
| Lifetime switches | | 0.003 | -0.001 | -0.001 |
| | | [0.003] | [0.002] | [0.001] |
| *Male* | | | -0.017 | -0.060 |
| | | | [0.024] | [0.046] |
| Regulator FE | x | | | |
| First job FE | | | x | |
| Agency FE | | | | x |
| Decade FE | | | | x |
| Obs. | 983 | 983 | 914 | 914 |
| Adj. $R^2$ | 0.232 | 0.781 | 0.355 | 0.621 |

Table 11: **Regulatory Activity and Future Firm Performance**

The sample consists of 406 top federal regulators, covering 1,388 regulator-years across 50 executive branch agencies from 2000 to 2022. The outcome variable is the quartile ranking of the annual sales-per-employee ratio of the firms they work for after stepping down from the top regulatory position. The unit of observation is a firm. The explanatory variables capture the regulator's activity while serving in their top position, prior to joining the firm: enforcement intensity, the quantity of rulemaking overall and regulatory versus deregulatory, and three measures of rule complexity. Controls include age, gender, and political affiliation. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%. Regulators who enforce more strictly or issue more significant and more complex rules are subsequently hired by better-performing firms. See Section 4.4.

| **Outcome:** | Sales-per-employee ranking | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Explanatory:** | $Enforcement^{\$}$ | $Enforcement^{\#}$ | $RuleQuantity$ | $RuleQuantity^{reg}$ | $RuleQuantity^{dereg}$ | Rule length | Regulatory operator | Cyclomatic complexity |
| Coefficient | 0.034* | 0.086** | 0.016* | 0.024** | -0.030 | 0.403*** | 0.081 | 0.010*** |
| Std. Error | (0.017) | (0.034) | (0.008) | (0.009) | (0.025) | (0.089) | (0.051) | (0.002) |
| Controls | x | x | x | x | x | x | x | x |
| Year FE | x | x | x | x | x | x | x | x |
| Agency FE | x | x | x | x | x | x | x | x |
| Obs. | 733 | 733 | 733 | 733 | 733 | 733 | 733 | 733 |
| Adj. $R^2$ | 0.189 | 0.185 | 0.181 | 0.183 | 0.179 | 0.197 | 0.189 | 0.200 |
| Model | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |

Table 12: **Benefits for Employers: Rulemaking**

In Panel A, we report abnormal returns of firms around the announcement of economically significant rules, if the current executive of the regulatory agency was formerly employed by the firm. We use cumulative abnormal returns (CAR) and buy-and-hold abnormal returns (BHAR). Announcement date is defined as the publication of the final rule in the *Federal Register*. Event windows are in trading days. In Panel B, the outcome is the abnormal return of all firms around the announcement of economically significant rules. $PrevEmployer = 1$ if the current executive of the regulatory agency was formerly employed by the firm. All specifications include rule fixed effects and firm-year fixed effects. In both panels, standard errors (in brackets) are heteroskedasticity consistent. Significance levels: * = 10%, ** = 5%, *** = 1%. Firms connected to a regulator experience significantly higher abnormal stock returns around major rule announcements. See Section 4.5.

**Panel A:** Connected firms

| **Estimation:** | CAR | | | BHAR | | |
|---|---|---|---|---|---|---|
| **Event window:** | [-1,1] | [-2,2] | [-3,3] | [-1,1] | [-2,2] | [-3,3] |
| **Mean:** | 0.112 | 0.656** | 0.953** | 0.195 | 0.759** | 0.933** |
| | [0.212] | [0.311] | [0.429] | [0.232] | [0.365] | [0.451] |
| Obs. | 441 | 441 | 441 | 441 | 441 | 441 |

**Panel B:** All firms

| **Estimation:** | CAR | | | BHAR | | |
|---|---|---|---|---|---|---|
| **Event window:** | [-1,1] | [-2,2] | [-3,3] | [-1,1] | [-2,2] | [-3,3] |
| *PrevEmployer* | 0.223 | 0.569* | 0.914** | 0.294 | 0.663* | 0.922** |
| | [0.238] | [0.339] | [0.472] | [0.246] | [0.381] | [0.486] |
| Rule FE | x | x | x | x | x | x |
| Firm-Year FE | x | x | x | x | x | x |
| Obs. | 7,388,541 | 7,387,619 | 7,386,729 | 7,388,541 | 7,387,619 | 7,386,729 |
| Adj. $R^2$ | 0.041 | 0.060 | 0.069 | 0.040 | 0.060 | 0.069 |

Table 13: **Benefits for Employers: Enforcement**

**Panel A. Former employee now serving as top regulator.** This table reports regressions of enforcement outcomes on an indicator for whether a firm employs a former regulator in a top position. The unit of observation is firm-year. The dependent variables are the log dollar amount of enforcement actions (Panel A) and the log number of enforcement actions (Panel B). The unit of observation is the firm-year. Standard errors (in brackets) are heteroskedasticity consistent. Significance levels: * = 10%, ** = 5%, *** = 1%. When a firm has a former employee in a top regulatory post, it faces significantly fewer enforcement actions and lower total penalties than in other years. See Section 4.5.

| **Outcome:** | $Enforcement^{\$}$ | | | | $Enforcement^{\$}$ | | | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| *PrevEmployer* | -1.438*** | -1.405*** | -1.456*** | -1.466*** | -0.211*** | -0.128* | -0.205*** | -0.206*** |
| | [0.442] | [0.473] | [0.462] | [0.467] | [0.061] | [0.077] | [0.060] | [0.060] |
| Firm FE | x | | x | x | x | | x | x |
| Year FE | | x | x | x | | x | x | x |
| Agency FE | | | | x | | | | x |
| Obs. | 2599 | 2599 | 2599 | 2599 | 2599 | 2599 | 2599 | 2599 |
| Adj. $R^2$ | 0.303 | 0.032 | 0.334 | 0.333 | 0.738 | 0.005 | 0.749 | 0.748 |
| Model | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |

**Panel B. Former top regulator now employed by the firm.** This table reports OLS regressions of log annual dollar amount of enforcement actions on measures of regulator productivity, enforcement strictness, and rule complexity. The unit of observation is the firm-year, restricted to firm-years where a firm employs a revolving regulator. All specifications include agency and year fixed effects. Standard errors are clustered at the firm level. Firms hiring regulators with a history of stricter enforcement or more complex rulemaking experience low enforcement intensity. See Section 4.5.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| **Rulemaking** | | | | | | |
| Quantity | -0.003 | | | | | |
| | [0.003] | | | | | |
| **Enforcement** | | | | | | |
| Dollar amount of actions | | -0.370*** | | | | |
| | | [0.123] | | | | |
| Number of actions | | | -2.689** | | | |
| | | | [1.212] | | | |
| **Complexity** | | | | | | |
| Rule length | | | | -0.235* | | |
| | | | | [0.127] | | |
| Regulatory operator | | | | | -0.097*** | |
| | | | | | [0.033] | |
| Cyclomatic complexity | | | | | | -0.006* |
| | | | | | | [0.003] |
| Agency FE | x | x | x | x | x | x |
| Year FE | x | x | x | x | x | x |
| Obs. | 3035 | 3035 | 3035 | 3035 | 3035 | 3035 |
| Adj. $R^2$ | 0.093 | 0.094 | 0.096 | 0.093 | 0.093 | 0.093 |
| Model | OLS | OLS | OLS | OLS | OLS | OLS |

# Appendix

## A.1 Literature Review

In this section, we review the literature on the revolving door. Several theories highlight different mechanisms and therefore predict different regulatory behaviors. The classic view of regulatory capture emphasizes that regulators improve their future financial and employment prospects by promoting regulation, deregulation, or inaction that benefits firms from which they expect to benefit themselves (Stigler (1971); Peltzman (1976); Eckert (1981); Shleifer and Vishney (1993); Laffont and Tirole (1991); Zingales (2017)). A related view is that regulators accumulate bureaucratic capital – such as knowledge, contacts, and familiarity with procedures – that later enhances their market value (Brezis (2023)). This mechanism suggests that regulators may increase regulatory complexity to heighten the value of their accumulated capital. In contrast, other work emphasizes competence and signaling. Under this view, regulators pursue future private sector opportunities by demonstrating skill and toughness while in office, which in turn allows agencies to attract high-quality employees despite relatively low wages (Che (1995); Salant (1995); Bar-Isaac and Shapiro (2011)).

Taken together, these theoretical perspectives yield overlapping and at times contradictory predictions. Capture theories imply that regulators may act leniently, reducing enforcement or granting favors appealing to future employers. Bureaucratic capital and competence theories instead suggest that regulators may intensify their activity – pursuing more cases, drafting more complex rules, or signaling toughness – to build reputational or informational assets. Both channels predict that regulators' future private opportunities shape their conduct in office, but they diverge on whether the effect is to weaken or strengthen regulatory effort. This tension has motivated a growing empirical literature.

Empirical studies indeed provide evidence on both sides. Some find behavior consistent with regulators favoring future employers. For example, Tabakovic and Wollmann (2018) show that U.S. patent examiners grant more and lower-cited patents to firms that later hire them. . Kalmenovitz, Vij, and Xiao (2022) find that SEC attorneys file more enforcement actions after becoming subject to stricter post-employment restrictions, suggesting that the prospect of diminished revolving door value curtails leniency. Heese (2022) document fewer enforcement actions among German firms after they appoint incumbent regulators to their boards, while Katic and Kim (2024) find that U.S. Department of Agriculture approvals are accelerated before officials join those firms.

In contrast, other work shows regulators intensifying activity. Lucca, Seru, and Trebbi (2014) document that banking regulators are more likely to exit to the private sector during periods of strict enforcement, and Agarwal et al. (2014) find that states with stricter banking regulators see higher regulator outflow. Similarly, deHaan et al. (2015) show that SEC attorneys who later enter the private sector pursue more aggressive enforcement, and Hendricks, Landsman, and Peña-Romera (2022) find that audit firms hire former PCAOB staff in response to negative inspection reports.

Consistent with the knowledge and bureaucratic capital views, firms often benefit from hiring regulators. Studies find improved risk management (Shive and Forster (2016)), reduced enforcement costs (Correia (2014)), and preferential access to procurement contracts (Emery and Faccio (2020)). Related research has extended beyond government officials,

documenting similar revolving door dynamics among analysts (Cohen, Frazzini, and Malloy (2012); Cornaggia, Cornaggia, and Xia (2016); Kempf (2020)) and auditors (Geiger, North, and O'Connell (2005); Geiger, Lennox, and North (2008); Bhattacharjee and Brown (2018)).

## A.2 Sample CV

In Figure A.1, we provides screenshots of resumes submitted by three top federal regulators in Congressional hearing transcripts. The first example is for Christopher Cox, nominated to chair the Securities and Exchange Commission (Document: S. Hrg. 109-253 - Nominations Of: Christopher Cox Roel C. Campos, Annette L. Nazareth Martin J. Gruenberg, John C. Dugan and John M. Reich, p52-53). The second example is for James Christopher Giancarlo, nominated to chair the Commodity Futures Trading Commission (Document: S. Hrg. 113-555 - Commodity Futures Trading Commission Nominations of Timothy G. Massad, Sharon Y. Bowen and J. Christopher Giancarlo, p91). The third example is for Robert Allan Sturgell, nominated to lead the Federal Aviation Administration (Document: S. Hrg. 110-1150 - Nominations to the Federal Aviation Administration and the U.S. Department of Transportation, p16-17).

## A.3 Variable Definitions

### A.3.1 Political and Economic Variables

To capture political incentives, we construct indicator variables based on presidential election cycles. $PresTurnover$ equals one in years when the presidency changes party (i.e., a Republican President replaces a Democrat or vice versa). We further distinguish between *co-partisan turnovers* ($PresTurnover^{co-partisan}$), where the incoming President belongs to the regulator's affiliated party, and *non-co-partisan turnovers* ($PresTurnover^{non-co-partisan}$), where the incoming President belongs to the opposite party. These measures allow us to study whether regulators' career moves respond systematically to political realignments. To capture economic conditions at labor market entry, we define $RecessionRegulator$ as an indicator equal to one if the regulator entered the labor market during an NBER recession year. This variable is based on the official business cycle dating of the National Bureau of Economic Research. It allows us to test whether adverse macroeconomic shocks at the beginning of one's career have long-lasting effects on career trajectories and revolving door behavior.

### A.3.2 Post-Government Career Outcomes

We measure the seniority of post-government private sector positions using a novel *Job ranking* variable, defined as one minus the frequency of a job title relative to the total number of employees at the firm in a given year. The intuition is straightforward: job titles that are rare within a firm (e.g., Chief Executive Officer) correspond to higher-ranking positions, while common titles (e.g., Associate Counsel) indicate lower-ranking positions. This measure enables us to compare the seniority of positions across firms that differ substantially in

organizational structure and nomenclature. In addition, we proxy for firm performance by combining information from Compustat and Mergent Intellect. For each firm-year, we calculate *Sales per employee*, defined as the ratio of annual net sales to the number of employees. This ratio provides a standardized measure of firm productivity and organizational strength, and serves as an outcome variable when examining whether regulators' career trajectories lead them to better firms.

### A.3.3 Employer Benefits

To investigate whether regulators generate value for their employers, we construct two sets of firm-level variables. First, we measure the stock market reaction to rule announcements by regulators using standard event-study methods. Specifically, we compute *cumulative abnormal returns (CAR)* and *buy-and-hold abnormal returns (BHAR)* over short windows surrounding the publication dates of significant rules, benchmarking stock returns against market models estimated from CRSP data. Second, we study whether firms employing ex-regulators receive more favorable enforcement treatment. For each firm-year, we calculate both the total dollar amount and the number of enforcement actions imposed on the firm, using data from the Violation Tracker database. We then link these enforcement outcomes to the employment histories of our sample regulators to test whether firms benefit from having former employees in top regulatory positions.

Figure A.1: **Corporate Employment by Industry**

This figure provide sample CVs of Christopher Cox, nominated to chair the Securities and Exchange Commission; James Christopher Giancarlo, nominated to chair the Commodity Futures Trading Commission; and Robert Allan Sturgell, nominated to lead the Federal Aviation Administration.

**STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES**

**Name:** Cox (Last) Christopher (First) (Other)

**Position to which nominated:** Chairman, Securities and Exchange Commission

**Date of nomination:** June 2, 2005

**Date of birth:** 16 October 1952 (Day) (Month) (Year) **Place of birth:** St. Paul, MN

**Marital Status:** married **Full name of spouse:** Rebecca Gernhardt Cox

**Name and ages of children:**

Charles Christopher Cox, 12
Kathryn Carter Cox, 11
Kevin Martin Cox, 6

**Education:**

| Institution | Dates attended | Degrees received | Dates of degrees |
|---|---|---|---|
| Harvard Law School | 9/73-6/77 | J.D. | June 1977 |
| Harvard Business School | 9/74-6/77 | M.B.A. | June 1977 |
| Univ. of Southern California | 9/70-6/73 | B.A. | June 1973 |

**Honors and awards:** List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

During 17 years in Congress, I have received many awards for public service. In addition, I have received many honorary memberships, the most significant of which are listed in response to the next question. The following awards relate, in whole or in part, to my activities prior to election to Congress in 1988:

- Order of Gediminas (highest honor by Republic of Lithuania to a non-citizen), for support of freedom in the Baltics
- USC Distinguished Alumnus Award
- Hames Alumni Honors Award, St. Thomas Academy

**Memberships:** List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

| Organization | Office held (if any) | Dates |
|---|---|---|
| Chapman University | Trustee | 1993-present |
| National Endowment for Democracy | Director | 2003-present |
| Pacific Club | Member | 1997-present |
| Mount Vernon Country Club | Member | 2000-present |

## 3. Employment

**(A) List all of your employment activities, including unemployment and self-employment. If the employment activity was military duty, list separate employment activity periods to show each change of military duty station. Do not list employment before your 18th birthday unless to provide a minimum of two years of employment history.**

| Type of Employment (Active Military Duty Station, National Guard/Reserve, USPHS Commissioned Corps, Other Federal employment, State Government (Non-Federal Employment), Self-employment, Unemployment, Federal Contractor, Non-Government Employment (excluding self-employment), Other | Name of Your Employer/ Assigned Duty Station | Most Recent Position Title/Rank | Location (City and State only) | Date Employment Began (month/year) (check box if estimate) | Date Employment Ended (month/year) (check box if estimate) (check "present" box if still employed) |
|---|---|---|---|---|---|
| Non-Government Employment | GFI Group Inc. | Executive Vice President | New York, NY | May, 2001 Est ☐ | Present Est ☐ |
| Non-Government Employment | Fenics Ltd. | Executive Vice President | New York, NY | April 2000 Est ☐ | May 2000 Est ☐ |
| Non-Government Employment | Brown Raysman Millstein Felder & Steiner LLP | Law Partner | New York, NY | Sept 1997 Est ☐ | April 2000 Est ☐ |
| Non-Government Employment | Giancarlo & Gleiberman | Law Partner | New York, NY | Jan 1992 Est ☐ | Sept 1997 Est ☐ |
| Non-Government Employment | Curtis Mallet-Provest, Colt & Mosle | Associate Attorney | New York, NY | Oct. 1985 Est ☐ | Dec. 1991 Est ☐ |
| Non-Government Employment | Mudge Rose LLP | Associate Attorney | New York, NY | Sept 1984 | Oct. 1985 |

**(B) List any advisory, consultative, honorary or other part-time service or positions with federal, state, or local governments, not listed elsewhere.**

| Name of Government Entity | Name of Position | Date Service Began (month/year) (check box if estimate) | Date Service Ended (month/year) (check box if estimate) (check "present" box if still serving) |
|---|---|---|---|
| Borough of Haworth (NJ), Board of Adjustment | Member (unpaid) of non-partisan municipal board; appointed by Mayor (Democrat) | Jan 2004 Est ☐ | Dec. 2012 Est ☐ Present ☐ |
| | | Est ☐ | Est ☐ Present ☐ |

RÉSUMÉ OF ROBERT A. STURGELL

**Education**

University of Virginia School of Law, J.D. 1994; Dillard Fellow; Virginia Trial Lawyers' Trial Advocacy Award.

United States Naval Academy, B.S. 1982.

Graduated with Distinction, Resources Management (GPA 3.82, Rank 8/1037).

USNA Alumni Association Award for the outstanding midshipman graduate.

Participant, Varsity Lacrosse (2 Years).

Anne Arundel Community College, 1982.

Completed 25 credit hours in Financial Accounting courses.

**Experience**

Federal Aviation Administration (2002 to present).

Acting Administrator (Sep. 2007 to present).

Directs the operations of the Federal Aviation Administration and acts as principal advisor to the Secretary of Transportation on civil aviation matters and air transportation.

Deputy Administrator (2003 to present).

Joins the Administrator in heading the agency that regulates and advances the safety of the Nation's airways, airports and operates the world's largest air traffic control system. Directly responsible for the day-to-day operations of the agency's 46,000 personnel and $14 billion annual budget, as well as its capital programs and modernization efforts.

Air Traffic Organization Chief Operating Officer (Acting) (2007 to present).

Table A.1: **Variable Definitions**

Definition of all variables used in this paper.

| **Variable** | **Description** |
|---|---|
| **Regulator characteristics:** | |
| *AgeTop*, years | Age in years when the regulator works as top regulator |
| *PartyDemocratic* | An indicator that equals to one if the regulator's party affiliation is The Democratic Party while taking the top regulatory position |
| *PartyRepublican* | An indicator that equals to one if the regulator's party affiliation is The Republican Party while taking the top regulatory position |
| *PartyIndependent* | An indicator that equals to one if the regulator's party affiliation is Independent while taking the top regulatory position |
| Gender indicator | An indicator that equals to one if the regulator is male and zero if the regulator is female |
| Tenure as top regulator, years | Total number of years the regulator works as top regulator |
| **Regulator educational backgrounds:** | |
| SAT score – 25th percentile | The 25th percentile SAT score of admitted applicants in the regulator's undergraduate institution in 2023 |
| SAT score – 75th percentile | The 75th percentile SAT score of admitted applicants in the regulator's undergraduate institution in 2023 |
| Advanced degree indicator | An indicator that equals to one if the regulator holds an advanced degree |
| Graduate institution ranking | The ranking of the regulator's graduate institution in 2023 |
| **Regulator career trajectory:** | |
| *RevolvingRegulator* | An indicator that equals to one if the regulator has more than 6 months' consecutive private sector working experience before taking the top regulatory position and after stepping down from it. |

| Variable | Description |
|---|---|
| Private sector experience before top regulatory position | An indicator that equals to one when the regulator has more than 6 months' consecutive private sector working experience before taking the top regulatory position |
| Private sector experience after top regulatory position | An indicator that equals to one when the regulator has more than 6 months' consecutive private sector working experience after taking the top regulatory position |
| Tenure in private sector before top regulatory position, years | Total number of years the regulator works in the private sector before taking the top regulatory position |
| Tenure in government sector before top regulatory position, years | Total number of years the regulator works in the government sector before taking the top regulatory position |
| Number of switches, before top regulatory position | Number of switches the regulator makes between the private and public sector before taking the top regulatory position |
| Number of switches, total | Number of switches the regulator makes between the private and public sector over her entire career |
| Age for the first switch, years | Age in years when the regulator makes the first switch between the private and public sector |
| Age appointed as top regulator, years | Age in years when the regulator is appointed as top regulator |
| Job ranking | 1 – the number of employees holding the position / the total number of employees within the company in the year |
| Cumulative number of switches | The cumulative number of switches the regulator makes between the private and public sector by the year |
| Career length, years | The number of years since the regulator's entry into the labor market |
| **Regulator early experience:** | |
| First job – Private | An indicator that equals to one when the regulator's first job is in the private sector |
| First job – Government | An indicator that equals to one when the regulator's first job is in the government sector |

| Variable | Description |
|---|---|
| First job – Non-profit | An indicator that equals to one when the regulator's first job is in a non-profit organization |
| First job – Academic | An indicator that equals to one when the regulator's first job is in academic |
| **Political Turnovers:** | |
| $PresTurnover$ | An indicator variable that equals one in the year when an incoming Republican President replaces an incumbent Democratic President or vice-versa |
| $PresTurnover^{co-partisan}$ | An indicator variable that equals one in presidential turnover years where the incoming President comes from the same political party that the regulator supports |
| $PresTurnover^{non-co-partisan}$ | An indicator variable that equals one in presidential turnover years where the incoming President comes from the other party |
| **Enforcement strictness:** | |
| $Enforcement^{\#}$ | Annual number of federal enforcements actions given with penalty amounts above \$5,000 |
| $LogEnforcement^{\#}$ | Log (1 + $Enforcement^{\#}$) |
| $Enforcement^{\$}$, \$ millions | Annual dollar amount of federal enforcement actions given with penalty amounts above \$5,000 |
| $LogEnforcement^{\$}$ | Log (1 + $Enforcement^{\$}$) |
| **Rulemaking quantity:** | |
| Annual number of rules | Annual number of final rules published in the Federal Register by the regulator's agency |
| $RuleQuantity$ | Relevance-weighted sum of all final rules published in the Federal Register by the regulator's agency, which equals to 3*(number of Economically Significant rules and Other Significant rules) + 2*(number of Substantive, Nonsignificant rules) + 1*(number of Routine and Frequent rules and Informational/Administrative/Other rules); Relevance level obtained from the Unified Agenda of Federal Regulatory and Deregulatory Actions using RIN (Regulation Identifier Number) |

| Variable | Description |
|---|---|
| $RuleQuantity^{reg}$ | Relevance-weighted sum of only regulatory final rules published in the Federal Register by the regulator's agency; Regulatory identifier obtained by fine-tuned Legal BERT model |
| $RuleQuantity^{dereg}$ | Relevance-weighted sum of only deregulatory final rules published in the Federal Register by the regulator's agency; Deregulatory identifier obtained by fine-tuned Legal BERT model |
| **Rulemaking complexity:** | |
| Rule length | Total number of words in final rules published in the Federal Register by the regulator's agency |
| Rule length above median | An indicator that equals to one when regulations made by the regulator has length greater than the median length of all regulations |
| Regulatory operators | Total number of regulatory operators in final rules published in the Federal Register by the regulator's agency |
| Regulatory operators above median | An indicator that equals to one when regulations made by the regulator has quantity greater than the median quantity of all regulations |
| Cyclomatic complexity | Total number of logical operators in final rules published in the Federal Register by the regulator's agency |
| Cyclomatic complexity above median | An indicator that equals to one when regulations made by the regulator has cyclomatic greater than the median cyclomatic of all regulations |
| **Firm characteristics:** | |
| Sales, $ millions | Net sales (sale) in millions of dollars |
| Employees | Number of employees |
| Sales-per-employee, $ millions | Net sales (sale) in millions of dollars / number of employees |
| Quartile ranking by sales-per-employee | Quartile ranking of firms based on the sales-per-employee ratio where regulators worked as executives, board of directors, or board of advisors after stepping down from the top regulatory position |
| **Real estate properties:** | |

| Variable | Description |
|---|---|
| Value of real estate properties at age 30, $ millions | Market value of real estate property acquisitions by a regulator at the age of 30; Market value obtained from buying price on deed records adjusted by inflation-adjusted Case-Shiller Home Price Index |
| Number of real estate properties at age 30 | Number of real estate property acquisitions by a regulator at the age of 30 |
| Value of real estate properties at age 65, $ millions | Market value of real estate property acquisitions by a regulator at the age of 65; Market value obtained from buying price on deed records adjusted by inflation-adjusted Case-Shiller Home Price Index |
| Number of real estate properties at age 65 | Number of real estate property acquisitions by a regulator at the age of 65 |
| **Business cycles:** | |
| *RecessionRegulator* | An indicator that equals to one when the regulator enters the labor market during a recession |
| Recession year | An indicator that equals to one when the year either includes the trough of a business cycle or fully falls into a recession period |

Table A.2: **List of Agencies**

List of all 50 executive agencies in our sample.

| **Agency** | **Department** |
|---|---|
| Agricultural Marketing Service | Department of Agriculture |
| Alcohol and Tobacco Tax and Trade Bureau | Department of the Treasury |
| Bureau of Industry and Security | Department of Commerce |
| Bureau of Safety and Environmental Enforcement | Department of the Interior |
| Centers for Medicare & Medicaid Services | Department of Health and Human Services |
| Commodity Futures Trading Commission | Independent |
| Consumer Financial Protection Bureau | Independent |
| Consumer Product Safety Commission | Independent |
| Department of Education | Department of Education |
| Department of Energy | Department of Energy |
| Department of Housing and Urban Development | Department of Housing and Urban Development |
| Drug Enforcement Administration | Department of Justice |
| Employee Benefits Security Administration | Department of Labor |
| Environmental Protection Agency | Independent |
| Equal Employment Opportunity Commission | Independent |
| Federal Aviation Administration | Department of Transportation |
| Federal Communications Commission | Independent |
| Federal Deposit Insurance Corporation | Independent |
| Federal Election Commission | Independent |
| Federal Energy Regulatory Commission | Independent |
| Federal Housing Finance Agency | Independent |
| Federal Maritime Commission | Independent |
| Federal Motor Carrier Safety Administration | Department of Transportation |
| Federal Railroad Administration | Department of Transportation |
| Federal Reserve | Independent |
| Federal Trade Commission | Independent |
| Financial Crimes Enforcement Network | Department of the Treasury |
| Food and Drug Administration | Department of Health and Human Services |
| Food Safety and Inspection Service | Department of Agriculture |
| Grain Inspection, Packers & Stockyards Administration | Department of Agriculture |
| Internal Revenue Service | Department of the Treasury |
| International Trade Commission | Independent |
| Mine Safety and Health Administration | Department of Labor |
| National Credit Union Administration | Independent |

| Agency | Department |
|---|---|
| National Highway Traffic Safety Administration | Department of Transportation |
| National Labor Relations Board | Independent |
| National Oceanic and Atmospheric Administration | Department of Commerce |
| Nuclear Regulatory Commission | Independent |
| Occupational Safety & Health Administration | Department of Labor |
| Office for Civil Rights | Department of Health and Human Services |
| Office of Federal Contract Compliance Programs | Department of Labor |
| Office of Foreign Assets Control | Department of the Treasury |
| Office of Inspector General | Department of Health and Human Services |
| Office of Natural Resources Revenue | Department of the Interior |
| Office of the Comptroller of the Currency | Department of the Treasury |
| Pipeline and Hazardous Materials Safety Administration | Department of Transportation |
| Securities and Exchange Commission | Independent |
| United States Coast Guard | Department of Homeland Security |
| United States Fish and Wildlife Service | Department of the Interior |
| Wage and Hour Division | Department of Labor |

Table A.3: **Revolving Door Moves and Presidential Turnovers: All Appointments**

This table is identical to , except that we focus on the regulator's appointments prior to their ascension to the top regulatory position.

| **Outcome:** | Revolving door move | | From private to public | | From public to private | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| $PresTurnover$ | 0.717*** | 0.740*** | | | | |
| | [0.128] | [0.118] | | | | |
| $PresTurnover^{co-partisan}$ | | | 1.309*** | 1.377*** | | |
| | | | [0.183] | [0.181] | | |
| $PresTurnover^{non-co-partisan}$ | | | | | 1.172*** | 1.181*** |
| | | | | | [0.149] | [0.151] |
| Age | 0.032*** | 0.035*** | 0.025*** | 0.026*** | 0.036*** | 0.041*** |
| | [0.006] | [0.005] | [0.006] | [0.005] | [0.006] | [0.006] |
| $Male$ | 0.077 | | 0.119 | | 0.010 | |
| | [0.117] | | [0.145] | | [0.108] | |
| $PartyIndependent$ | 0.136 | | 0.368 | | 0.002 | |
| | [0.288] | | [0.321] | | [0.288] | |
| $PartyRepublican$ | 0.156 | | 0.059 | | 0.038 | |
| | [0.289] | | [0.104] | | [0.287] | |
| First Job FE | x | | x | | x | |
| Birth Cohort FE | x | | x | | x | |
| Agency FE | x | | x | | x | |
| Regulator FE | | x | | x | | x |
| Obs. | 8093 | 10854 | 8007 | 8689 | 8093 | 9709 |
| Adj. Pseudo $R^2$ | 0.021 | -0.015 | 0.008 | -0.091 | 0.014 | -0.073 |

Table A.4: **Revolving Door and the Business Cycle – Additional**

This table studies the relation between revolving door moves and aggregate economic conditions. The dependent variable equals one if the regulator moves from the private sector to the public sector in a given year. The main independent variable, Recession year, is an indicator variable that equals one in years of either business cycle troughs or NBER recessions. The sample includes 1,338 top federal regulators from 50 executive branch agencies during the period 2000-2022. Variable definitions are in Table A.1. The standard errors (in brackets) are heteroskedasticity consistent and clustered by agency. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%.

| **Outcome:** | Move from private to government | | | |
|---|---|---|---|---|
| Column | (1) | (2) | (3) | (4) |
| Recession year | 0.309*** | 0.375** | 0.422*** | 0.441*** |
| | [0.105] | [0.156] | [0.149] | [0.131] |
| Age | | 0.043*** | 0.060*** | 0.080*** |
| | | [0.005] | [0.003] | [0.004] |
| *Male* | | -0.115 | 0.022 | |
| | | [0.110] | [0.189] | |
| First job - Non-profit | | -0.138 | -0.639*** | |
| | | [0.214] | [0.154] | |
| First job - Private | | 0.596*** | 0.463*** | |
| | | [0.075] | [0.077] | |
| First job - Academic | | -0.009 | 0.041 | |
| | | [0.275] | [0.217] | |
| Birth Cohort FE | | | x | |
| Agency FE | | | x | |
| Regulator FE | | | | x |
| Obs. | 8828 | 8062 | 7850 | 6736 |
| Adj. Pseudo $R^2$ | 0.001 | 0.030 | 0.023 | -0.074 |