By Genevieve P. Kanter and Daniel Carpenter

DOI: 10.1377/hlthaff.2023.00418 HEALTH AFFAIRS 42, NO. 9 (2023): 1298-1303 ©2023 Project HOPE— The People-to-People Health Foundation, Inc.

Genevieve P. Kanter

Angeles, California.

(gkanter@usc.edu), University

of Southern California, Los

Daniel Carpenter, Harvard

University, Cambridge,

Massachusetts.

The Revolving Door In Health Care Regulation

Of people appointed to the Department of Health and Human Services between 2004 and 2020, 15 percent had been employed in private industry immediately before their appointment. At the end of their tenure, 32 percent exited to industry. The greatest net exits to industry were from the Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services.

revolving door between government and industry can render government agencies more vulnerable to regulatory capture.¹ Both exits to and entries from industry pose a problem for regulatory agencies such as the Department of Health and Human Services (HHS). The exit of government employees to industry may lead to pro-industry bias as employees with an eye to leaving make decisions favorable to private firms where they are hoping to get jobs. Government appointees who come from industry may be more sympathetic to industry interests and could create work environments more open to industry contact and influence.

We examined the revolving door—inflows from and exits to industry—of government appointees to HHS between 2004 and 2020. We

found that 15 percent of appointees had been employed in private industry immediately before their appointment (exhibit 1). At end of their tenure, 32 percent of appointees exited to industry. HHS offices with the highest rates of net exits to industry (that is, exits minus entries) included the Centers for Disease Control and Prevention (CDC), the Office of the Deputy Secretary, the Centers for Medicare and Medicaid Services (CMS), and the Food and Drug Administration (FDA). At the CDC, although only 8 percent of appointees came from industry, 54 percent exited to industry positions, resulting in a net exit rate of 46 percentage points. More than half of the appointees at the CDC, CMS, and the Office of the Deputy Secretary exited to industry employment.

EXHIBIT 1

Shares of industry entries and exits among 2004–20 presidential appointees, all Department of Health and Human Services (HHS) offices and offices with high net exit rates



SOURCE Authors' analysis of data from the United States Government Policy and Supporting Positions (Plum Book). **NOTES** CDC is Centers for Disease Control and Prevention. Deputy Secretary is Office of the Deputy Secretary. CMS is Centers for Medicare and Medicaid Services. FDA is Food and Drug Administration. OASH is Office of the Assistant Secretary for Health. ASL is Assistant Secretary for Legislation.

Given the high rates of exit to industry, we can infer that there is value added to HHS positions that makes appointees attractive to industry.

Study Data And Methods

To identify HHS appointees, we used the United States Government Policy and Supporting Positions, also known as the Plum Book.² Published every four years, after each presidential election, the Plum Book lists all positions in the federal government that are open to noncompetitive appointment to help incoming administrations identify positions they need to fill. It also identifies the current occupant of each position.

Using the Plum Book for all available years between 2004 and 2020 (that is, 2004, 2008, 2012, 2016, and 2020), we collected the names of all HHS employees occupying noncompetitive appointed positions. Some positions can be filled by either political appointees or career civil servants. When career civil servants occupied these positions, they were not named in the Plum Book and were excluded from our sample. The final sample consisted of people appointed during the first and second terms of President George W. Bush, the first and second terms of President Barack Obama, and the administration of President Donald Trump.

We manually searched LinkedIn for profiles matching Plum Book appointee names with mention of the appointee's HHS position. We then reviewed each profile to identify that appointee's employer or employers in the two years before their HHS appointment and the two years after their appointment. If information was missing for an appointee, we conducted an internet search for press releases, organizational announcements, and website biographies.

We classified employers as belonging to one of six different sectors: government, industry, nonprofit organization, academic organization, health care provider, or self-employment/no employment. "Government" included any part of the legislative, executive, and judicial branches, including congressional offices and committees, and state and local governments. Employers that were for-profit entities were classified as industry. If an appointee's profile did not specify an employer during the two-year pre and post windows, we classified the sector as selfemployment/no employment.

We calculated overall industry inflow and exit rates, as well as inflow and exit rates by political party of the appointing president, appointment level, and HHS office (that is, agency or department).We modeled exit to industry using logistic regression. Additional details on data, sector classifications, and methodological rationale are in online appendix A1.³

One limitation of the study was that it focused on appointees to HHS and did not include labor flows to and from industry that might have occurred among nonappointed civil servants. It therefore did not capture all levels of the revolving door that might have taken place.

A second limitation was that the industry sector classification did not include nonprofit employers that may represent or be funded by industry interests. Our findings should therefore be viewed as an underestimate of industry flows. See appendix A1 for a more detailed discussion of this issue and a sensitivity analysis.³

Study Results

We were able to obtain two-year pre- and postappointment employment histories for 95 percent (766 of 807) of people appointed during the 2004–20 sample period (appendix A2).³ We found employment histories for 100 percent of presidential appointments, 96 percent of seniorlevel appointments, and 92 percent of other appointed staff.

Almost half of appointees (49 percent) came from another position in government before their Plum Book HHS appointment (appendix A3).³ Smaller shares came from the nonprofit sector (20 percent) and industry (15 percent).

Postappointment employment patterns, however, were strikingly different. Thirty-two percent of appointees exited to industry (table A3.1 in appendix A3),³ reflecting a 17-percentage-point net increase (exhibit 2). In contrast, government experienced a net loss of 29 percentage points.

Exit rates to industry did not differ substantially by appointment characteristics (tables A4.1 and A4.2 in appendix A4).³ A greater share of people appointed by a Republican president came from industry (18 percent appointed by a Republican president versus 11 percent appointed by a Democratic president), but net rates of industry exit were similar. Industry entries

EXHIBIT 2

Net change (exits minus entries) in the share of 2004–20 presidential appointees to the Department of Health and Human Services entering from and exiting to each sector



SOURCE Authors' analysis of data from the United States Government Policy and Supporting Positions (Plum Book), LinkedIn, press releases, and website biographies.

and exits did not differ by how senior the level of appointment was.

There was large variation in industry inflows across HHS offices. Rates of inflow from industry ranged from 0 percent to 32 percent (exhibit 3).

When we analyzed the predictors of an appointee's exit to industry, we found that exit to industry was predicted by a change in administration and prior employment in industry (appendix A5).³ Some HHS offices had very high probabilities and odds of exit to industry, controlling for appointment characteristics, prior industry employment, and time trend (exhibit 4 and appendix A5).³ Offices with the highest predicted probabilities of industry exit were the CDC (57 percent), CMS (54 percent), and the Office of the Deputy Secretary (53 percent).

Discussion

In the first comprehensive study of the revolving door in the regulation of health care, we found that one-third of HHS appointees between 2004 and 2020 exited to industry. Compared with other sectors (for example, government, nonprofit, and academia), industry accounted for the greatest share of exits. This HHS industry exit rate is somewhat higher than that reported for appointees at the Department of Defense, which was the only other agency for which we could find revolving-door estimates (32 percent versus 28 percent).⁴

Rates of industry exit varied across HHS offices, ranging from 0 percent to more than 50 percent. Offices with the highest unconditional exit rates to industry were the CDC (54 percent), the Office of the Deputy Secretary (55 percent), CMS (53 percent), and the FDA (38 percent). Although much attention has focused on the revolving door at the FDA,^{5,6} our findings show that industry flows affect many parts of HHS and many industry sectors. Exiting staff went to not only biopharmaceutical and device manufacturers, but also health insurers, information and communication technology firms, real estate firms with medical property portfolios, and consulting firms.

Net industry exits did not vary by the party of the appointing president, although Republican presidents were more likely to appoint people directly from industry. The probability of industry exit was higher when there was a change in administration. This could be because many government options may be closed to existing appointees for partisan reasons when there is a regime change.

Although the flow of labor from government to industry appears robust, the flow in the opposite direction—from industry to government—is more muted, although still substantial. On average, 15 percent of appointees were employed by industry immediately before appointment. Industry inflows varied by HHS office, ranging from 0 percent to 32 percent.

Given the high rates of exit to industry, we can infer that there is value added to HHS positions that makes appointees attractive to industry. This value could derive from policy expertise, extended professional networks, or prestige. However, there is concern that some added value

EXHIBIT 3



Shares of 2004–20 presidential appointees with industry employment before appointment to the Department of Health and Human Services (HHS), by HHS office

SOURCE Authors' analysis of data from the United States Government Policy and Supporting Positions (Plum Book), LinkedIn, press releases, and website biographies. **NOTES** AHRQ is Agency for Healthcare Research and Quality. IHS is Indian Health Service. OCR is Office for Civil Rights. ASFR is Assistant Secretary for Financial Resources. OIG is Office of Inspector General. ASPR is Assistant Secretary for Preparedness and Response. CDC is Centers for Disease Control and Prevention. NIH is National Institutes of Health. OASH is Office of the Assistant Secretary for Health. Secretary is Office of the Secretary. IEA is Office of Intergovernmental and External Affairs. ASL is Assistant Secretary for Legislation. HRSA is Health Resources and Services Administration. ASPE is Assistant Secretary. ICA is Food and Drug Administration. Deputy Secretary is Office of the Deputy Secretary. ACF is Administration for Children and Families. ONC is Office of the National Coordinator for Health Information Technology. ACL is Administration for Community Living. ASA is Assistant Secretary for Administration. CMS is Centers for Medicare and Medicaid Services. OGA is Office for Global Affairs. SAMHSA is Substance Abuse and Mental Health Services Administration. ASPA is Assistant Secretary for Public Affairs. OGC is Office of the General Counsel.

could come from the potential influence that these appointees can exert on former colleagues postdeparture, or from favorable actions taken before departure, that could compromise agency decision making.

These pre- and postdeparture risks are not easy to address. There are federal laws and regulations governing conflict-of-interest issues arising from the revolving door.^{6,7} For example, 18 US Code Section 207 imposes a one-to-two-year cooling-off period on former executive branch officials, prohibiting them from lobbying the federal government on behalf of private organizations. Laws restricting postdeparture activities, however, tend to be narrowly written. They focus primarily on the former employee's activities as a representative of private parties vis-à-vis the government. They also tightly circumscribe

EXHIBIT 4

Predictors of exit to industry of 2004–20 presidential appointees following service in the Department of Health and Human Services (HHS)

Predictors	Predicted probability (%)	95% CI	Logistic model p value
Party of appointing president Democratic Republican	33 30	27, 39 25, 35	Ref 0.474
Change in administration No Yes	25 36	19, 31 30, 41	Ref 0.025
Prior industry employment No Yes	30 41	26, 34 31, 50	Ref 0.036
Level of appointment Presidential appointment Senior executive service or senior-level appointment Schedule C appointment	35 29 34	22, 48 23, 34 28, 40	Ref 0.414 0.866
Agency Centers for Disease Control and Prevention Centers for Medicare and Medicaid Services Office of the Deputy Secretary Office of the National Coordinator for Health Information	57 54 53	31, 84 42, 66 31, 75	0.001 <0.001 0.001
Technology Food and Drug Administration Administration for Community Living	49 41 40	20, 78 24, 58 14, 66	0.011 0.003 0.030
Assistant Secretary for Public Affairs Office of the General Counsel Office of the Assistant Secretary for Health	38 35 33	24, 52 17, 53 18, 48	0.003 0.022 0.024
Assistant Secretary for Planning and Evaluation Assistant Secretary for Legislation Office of the Secretary	32 31 28	17, 47 17, 45 19, 36	0.029 0.032 0.030

SOURCE Authors' analysis of data from the United States Government Policy and Supporting Positions (Plum Book), LinkedIn, press releases, and website biographies. **NOTES** N = 736. Predicted probabilities for selected predictors are reported. The full set of coefficients from the logistic regression predicting exit to industry is reported in appendix A5 (see note 3 in text). The reported p value is the value associated with the coefficient for that predictor from the regression model. Variables in the logistic model used to predict exit to industry included whether the appointing president was a Republican, whether there was a change in administration the year after the publication of the Plum Book appointment list, whether the person had immediate prior employment in industry, the level of appointment, a linear time trend, and binary indicators of each HHS office. The sample excluded HHS offices with fewer than 10 appointed people in the 2004-20 sample period: the Agency for Healthcare Research and Quality, Health Resources and Services Administration, Indian Health Service, Assistant Secretary for Financial Resources, and Office of Inspector General.

matters requiring a cooling-off period.

To reduce predeparture risks, 5 Code of Federal Regulations Section 2635.603 and 18 US Code Section 208 require that executive branch employees seeking private employment recuse themselves from work affecting prospective employers. As a practical matter, however, employees who are looking for jobs have little incentive to be forthcoming to supervisors and coworkers about their search activities. Indeed, employees may reasonably fear reprisals if they disclose that they are hoping to leave. So it is unclear if these recusal requirements are enforced or enforceable.

Some mechanisms of industry influence might not be easily regulated. Repeated interactions with the same people (for example, regular meetings between agency and firm representatives) can foster group identification and facilitate "cultural capture."⁸ Congenial relationships developed at one's former employment, whether at a private firm or at a government agency, do not vanish when one changes jobs and sectors. These prior relationships can facilitate informal interactions and kindle emotional ties, exerting soft influence on agency decision making.

Note that the mere existence of a revolving door is not surprising or necessarily problematic. There is a persistent differential between government pay rates and private-sector compensation, particularly in growth areas such as biopharmaceuticals and information technology. Younger workers may want exposure to a range of work settings before committing to a particular career path, and experienced workers may seek new professional challenges. Furthermore, government-industry labor flows can facilitate the information flows that can improve agency performance and companies' understanding of regulatory expectations.

The sheer scale of the revolving door that we have identified, however, is troubling and merits further scrutiny. The risks posed to the functioning of and public trust in HHS warrants study into how these government-industry flows are affecting agency decision making, especially in offices with the highest net exit rates. Where there exist vulnerabilities, analysis can focus on how current laws and regulations can be refined or better enforced. Given the complexity and subtlety of mechanisms of industry influence, regulation of the revolving door will require innovative legal and regulatory strategies.

Earlier findings from this research were presented at the University of Pennsylvania Department of Medical Ethics and Health Policy Bioethics Seminar in Philadelphia, Pennsylvania, October 25, 2022. The authors thank Alexander O'Donnell for his excellent assistance with data collection. To access the authors' disclosures, click on the Details tab of the article online.

NOTES

- 1 Bó ED. Regulatory capture: a review. Oxf Rev Econ Policy. 2006;22(2): 203–25.
- 2 Government Publishing Office. United States Government Policy and Supporting Positions (Plum Book) [Internet]. Washington (DC): GPO; [last updated 2020 Dec; cited 2023 Jul 12]. Available from: https://www.govinfo.gov/ collection/plum-book?path=/GPO/ United%20States%20Government %20Policy%20and%20Supporting

%20Positions%20%2528Plum%20 Book%2529

- **3** To access the appendix, click on the Details tab of the article online.
- **4** Luechinger S, Moser C. The value of the revolving door: political appointees and the stock market. J Public Econ. 2014;119:93–107.
- 5 Bien J, Prasad V. Future jobs of FDA's haematology-oncology reviewers. BMJ. 2016;354:i5055.
- 6 Karas L. FDA's revolving door:
- reckoning and reform. Stan L Policy

Rev. 2023;34(1):1-66.

- 7 Maskell J. Post-employment, "revolving door," laws for federal personnel. Washington (DC): Congressional Research Service; 2014 Jan 7. (Report No. R42728).
- 8 Kwak J. Cultural capture and the financial crisis. In: Carpenter D, Moss DA, editors. Preventing regulatory capture: special interest influence and how to limit it. New York (NY): Cambridge University Press; 2014. p. 71–98.