

Bureaucratic Politics in Targeted Trade Adjustment

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April 27, 2019

Abstract

Recognizing that trade can displace domestic workers and firms, governments have adopted a number of social insurance schemes. In the United States, eligibility for these benefits is made dependent on evidence that an individual worker was harmed by international trade. In this paper, I argue that the bureaucrats who examine and interpret this evidence have career incentives to distort decisions toward the partisan affiliation of the president. To identify this effect, I leverage variation in the 42 years of the Trade Adjustment Assistance (TAA) individual petition-level data (81,453 petitions) and career paths of the Office of Trade Adjustment Assistance (OTAA) investigators. I find evidence that the OTAA investigators are less likely to certify the TAA petitions, and more likely to delay the TAA investigations during the Republican presidencies. These partisan effects are detected when the bureaucrat is likely to face the largest career pressure, prior to obtaining a permanent appointment. Their partisan behavior evaporates after three years when appointments are no longer in question. These findings demonstrate how efforts to target compensation following trade liberalization can systematically politicize policy implementation.

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Trade liberalization generates both winners and losers; winners owning abundant factors earn more through exports but losers with scarce factors earn less via import competition. When governments open up their trade borders, their basic calculation is that trade openness creates majority of winners and minority of losers. International trade theory therefore prescribes governments compensating adjustment costs of trade losers with the gains from trade winners. Success of this redistributive policy is the key in persistence of embedded liberalism. Embedded liberalism, the post-1945 international economic regime “safeguarding and even aiding quest for domestic stability without triggering the mutually destructive external consequences that had plagued the interwar period,” requires effective domestic intervention (Ruggie, 1982; Steger, 2009).

Empirical studies show that governments have not been successful in maintaining the domestic stability through the redistributive policies. Regions that experienced surges in Chinese imports are facing more painful adjustment costs. People in these regions are exposed to higher chances of unemployment and reduced wages (David, Dorn and Hanson, 2013; Autor, Dorn and Hanson, 2016), drug abuse and suicide (Case and Deaton, 2017), and young population among them are disadvantaged in marriage market (Autor et al., 2018).

In the United States, Trade Adjustment Assistance (TAA) is a federal redistributive program with more than 50 years of history. The policy is designed to level the playing field for American workers by providing financial support and job training to unemployed workers who are adversely affected by international trade. Many policy evaluations and media reports on TAA continuously have doubted its effectiveness (Decker and Corson, 1995; Reynolds and Palatucci, 2012). With this knowledge some scholars point out that TAA does not actually help adjustment of workers but helps pro-trade legislators passing trade liberalization bills (Rickard, 2015). Politics surrounding distribution of TAA is supported by the recent findings that legislators can actually ex-ante control demands of TAA by elite framing (Kim and Pelc, N.d.), and can significantly influence allocation of its benefits by directly contacting the affiliated bureaucratic agency (Ritchie and You, 2018).

Above-mentioned legislators' influence on distribution of TAA benefits is limited in a sense that they cannot determine who is qualified for trade adjustment. Career bureaucrats working at the Office of Trade Adjustment (OTAA), on the other hand, have final authority in allocating benefits of trade adjustment. Often delegation to career bureaucrats in policy implementation is believed to reduce politicization from the legislature. The underlying logic behind this conventional wisdom is that legislators delegate to prevent logrolling (Lohmann and O'Halloran, 1994), and bureaucratic agencies hence can build reputation of legitimacy by credibly implementing policies (Carpenter, 2001). This conventional wisdom views bureaucrats as actors whose performance is uniform across their entire years of service. However, bureaucrats in fact might be more politically sensitive under particular conditions.

I argue that trade adjustment policy that takes the form of targeted compensation can be systematically politicized by bureaucrats at the stage of policy implementation. This is because bureaucrats who are not equipped with bureaucratic insulation care about political preferences of their superiors for the sake of permanent appointment. In the context of TAA, untenured bureaucrats who are interested in securing tenure have an incentive to use their discretion on policy implementation in a way that may find them favor with the Chief Executive (President). Early-career investigators in the Office of Trade Adjustment Assistance (OTAA) are not automatically granted with tenure from the beginning. They need to prove three years of creditable performance in order to acquire permanent appointment. In this paper, I test whether early-career bureaucrats in OTAA without tenure behave differently from senior bureaucrats under the same presidential control.

Among the various factors bureaucrats might consider vis-à-vis presidents, this paper focuses on a president's party affiliation. Bureaucrats' responsiveness to president's party affiliation is measured with two of their most noticeable discretions—determining TAA petition approval and setting administrative pace to reach such determinations. I offer an evidence that early-career OTAA bureaucrats less likely to certify TAA petitions and more likely to delay TAA investigations during Republican presidencies. Their partisan behavior

respectively disappears after 2.5 years and 2.0 years of service when they are about to obtain permanent appointment. This finding is novel in a sense that it shows how uncertainty of tenure drives bureaucrats to behave more political. Previous literature suggests the evidence of uncertainty in tenure leading to lower-quality bureaucratic performance. Here I explicate a different mechanism of how uncertainty in tenure drives bureaucrats to align more with preferences of the Chief Executive (President).

By fully taking advantage of the large sample size, in the remaining sections I conduct training set validation to test the possibility of model overfitting. In other words, only the testing set is used in the following analysis and the validity of the models are examined again in the testing set. The training and testing sets are randomly halved prior to the analysis. The training set validation reaffirms that the President's party affiliation remains to be a significant predictor of performance of early-career bureaucrats in the randomly halved testing set. Additionally, the Difference in Differences (DID) analysis on novice bureaucrats demonstrates that this finding is not driven by an alternative mechanism of novice bureaucrats being hired based on their partisan predispositions.

Targeted Trade Adjustment in the US

History and Politics

Trade adjustment in the US is unique in its target on individuals. Individuals who are supposedly hurt by trade have to file petitions¹ to claim that they are qualified to get trade adjustment benefits. This policy design is different from that of other countries such as European Social Fund (ESF). Contrary to TAA, ESF compensates all the workers in low-income regions. Its compensation is region-based, and only workers in a particular region

¹Petitioning through a labor union and a firm is also allowed, but individual petitioners comprise the biggest percentage of all the petitioner types. See *Appendix G*.

are eligible for such benefit (Claeys, Sapir et al., 2018).

The first TAA program was proposed in 1962 as a minority opinion of the Randall Commission report during the Eisenhower administration. The program was critical in garnering support for trade liberalization efforts from labor unions (James, 2007). It expanded after passage of the Trade Act of 1974. The eligibility criteria for TAA were loosened this time, allowing more workers to get TAA benefits. At the same time, the bureaucratic institution in charge of TAA changed from the Tariff Commission to the Department of Labor (Goldstein, 1988).² The program further expanded when the NAFTA (The North American Free Trade Agreement)-TAA program was added. The program expansion was to offer benefits to workers whose unemployment is specifically caused by trade with Mexico and Canada. The NAFTA-TAA program temporarily existed until the legislation of the Trade Act of 2002. The program was reauthorized and expanded by the American Recovery and Reinvestment Act in 2009. In addition to manufacturing workers, service and public sector workers became eligible to apply for the program. Most recently, TAA was reauthorized in 2015 under the Obama Administration.

TAA by its design is strongly associated with liberal ideology and attenuating anti-incumbent effect. Liberal politicians who cherish labor over capital in general have supported TAA to a greater extent than conservative politicians. Especially after the party realignment in 1960s, Republicans have formed a coalition with business corporations while Democrats have formed a coalition with labor unions. Reflecting these ideological as well as party divisions, Republicans have been generally less active in advocating TAA compared to Democrats. The study by Burgoon and Hiscox (2008) provides a voter-level evidence of TAA preference by political party; individuals who identify themselves as Democrats are

²Though TAA was rarely used before 1974, Presidents had more direct power to control TAA investigations in times when TAA investigations were administered by the Tariff Commission. Presidents had the final power to decide the petition determination result when the Tariff Commission votes are tied (Goldstein 1988, 210).

more likely to support TAA. The distributive nature of TAA also deters anti-incumbent effect. Margalit (2011) provides evidence that other things being equal, George W. Bush in his second term presidential election garnered more votes in regions with more TAA compensation. Similarly, Ritchie and You (N.d.) find that Donald Trump in 2016 presidential election secured less votes in regions with more TAA compensation.

Procedure

A group of three or more workers, an employer, a labor union or a state workforce official is eligible to file a TAA petition. In order for dislocated workers to get TAA benefits, they need to prove that foreign trade is “an important cause of their threatened or actual job loss or wage reduction” when filing a petition. Once the petition is filed, OTAA which is under Department of Labor decides whether the petition qualifies for TAA benefits. The OTAA investigators contact the workers’ firm, the customers of the firm, the petitioners, or the labor union to gather the necessary data needed for determination. After reviewing the petition, the OTAA certifiers decide whether to certify or deny the petition. OTAA bureaucrats base their decisions based on three kinds of data—the data on the company, national statistics on imports by industry, and data from customer survey. If certified, workers can get job training and unemployment allowances. Workers who are not satisfied with the determination can either request administrative reconsideration from OTAA or judicial review from the U.S. Court of International Trade.

Although the above-mentioned administrative procedure is straightforward, it is challenging to substantiate the direct causation between import penetration and unemployment given limited time and information. For example, it is technically difficult to distinguish trade liberalization from automation of factory facilities. The US General Accounting Office [currently renamed as “Government Accountability Office”] (GAO) report (GAO, 1992) illustrates this point:

Our review identified problems in all three areas of Labor’s investigations-company

data collection, analyses of trade statistics, and customer surveys. In many cases, the investigations were deficient in more than one area. Many of these deficiencies occur because the pressure to complete the investigation presses investigators to, as one Labor official stated, "... take whatever they can get to finish in 60 days."
- U.S. General Accounting Office, GAO-HRD-93-36 (Oct. 1992), page 3-4.

Bureaucratic Appointment

Tool of Presidential Control

Presidents strategically use their appointment powers to consolidate their powers in the government (Moe, 1985; Wood and Waterman, 1991). This tendency is especially apparent among newly elected presidents. They adopt appointment heuristics to hire loyal over competent bureaucrats (Krause and O'Connell, 2016). Empirically this results in lower bureaucratic performances of political appointees in comparison to that of career bureaucrats (Lewis, 2007; Gallo and Lewis, 2011). Sometimes presidents strategically hire political appointees to change agency environment. The change in agency environment then shifts ideal point of a bureaucratic agency which then influences performance of subordinate career bureaucrats (Clinton et al., 2012). For example, a bureaucrat with more extreme political ideology can be politically appointed to offset influence of agency stakeholders (Bertelli and Feldmann, 2006). Presidents can control bureaucratic performance not only through budget but also through politically appointing top officials in each bureaucratic agency.

Uncertainty in Tenure

Federal government employees are hired either permanently or temporarily. Permanent employees are generally hired under career conditional appointment that requires three years

of “substantially continuous creditable service” for permanent appointment.³ A career-conditional employee becomes a career employee automatically on completion of the service requirement for career tenure.⁴ This type of appointment is for competitive service positions where individuals must go through a competitive hiring process consisting of a written test and an evaluation on education background or related experience.⁵ A TAA investigator, the type of bureaucrat examined in this paper, is also hired through career conditional appointment.

The effect of uncertain tenure is known to negatively influence quality of bureaucratic performance. Miller (2014), for instance, finds that bureaucrats hired by recess appointment perform worse than non-recess appointees and careerists. She explains that uncertain tenure of recess appointment discourages the appointees to commit credibly to organizational strategies. At the same time, members of Congress viewing these appointees as illegitimate administrators further hinders them to yield higher performance. Narrowing down to educational policy Hess (2011) illustrates how desire of superintendents to improve professional reputation within their three-year tenure leads them to implement erratic and inconsistent urban school reform policies. In the Comparative politics literature, especially in the Chinese bureaucracy literature, career incentives is also introduced as one of the government’s tools to motivate career-minded bureaucrats. Existing studies show that the Chinese Communist Party had used career incentives of local bureaucrats to induce local economic growth (Li and Zhou, 2005) and to manifest political radicalism during the China’s Great Leap Famine (Kung and Chen, 2011).

³Part 315.201, title 5, Code of Federal Regulations (CFR)

⁴Part 315.202, title 5, Code of Federal Regulations (CFR)

⁵See USA Jobs, <https://www.usajobs.gov/Help/working-in-government/appointments/>

Theory and Hypotheses

Presidents have the power to control bureaucracy through appointment and budget allocation. Presidents have the authority to appoint the Secretary of Labor who has discretion in hiring and laying off TAA investigators. Presidents can also pressure Office of Management and Budget (OMB) to reflect their policy priorities when OMB drafts the budget for OTAA. They can redirect federal spending through transferring funds, conditional on the Congress's approval. If presidents indirectly control bureaucracy through appointment and budget, a bureaucratic agency will respond to changes in incumbent presidency. Bureaucrats who constitute the agency will also respond to the changed ideological preference of the bureaucratic agency. Unless bureaucrats wish to quit their jobs, they would use their discretions in a way that promotes their career interests.

First, I argue that president's party affiliation influences bureaucratic performance. Democratic party at least as a heuristic captures the liberal policy goal of TAA (Burgoon and Hiscox, 2008)—enhancing the welfare of dislocated workers. This means under the Republican presidencies, the government agency would be more reluctant in distributing the program benefits to its people. Therefore, I conjecture that *OTAA bureaucrats are less likely to certify TAA petition during Republican presidencies (H1a)*. Reluctance to distribute TAA benefits under Republican presidencies would also appear in the pace of bureaucrats conducting petition investigations. Scholars have found that pace of bureaucratic decision-making is a distinct discretion of bureaucrats (Potter, 2017; Provost and Teske, 2009; Carpenter, 2003). If bureaucrats can strategically control the decision-making pace, I predict that *OTAA bureaucrats delay determination of TAA petitions during Republican presidencies (H1b)*.

Second, I argue that such influence of president's party affiliation is conditional on early-career bureaucrats. This means that *especially early-career bureaucrats are less likely to certify TAA petitions (H2a), and more likely to delay petition investigations during Republican presidencies (H2b)*. OTAA bureaucrats are hired under career-conditional appointment. This hiring track gives permanent career appointment to employees who complete one-year

probationary period and a total of three years of continuous creditable service. If early-career bureaucrats are aware of the fact that their two-year performance is subject to tenure evaluation, they are incentivized to behave more responsively to president's party affiliation until they acquire permanent appointment. By using president's party affiliation as a heuristic, early-career bureaucrats can hedge risks associated with potential penalty from conducting unskilled investigations. This mechanism is clearly different from existing theory of low-quality bureaucratic performance under uncertain tenure. Whereas the existing theory would predict that early-career bureaucrats regardless of the President's party affiliation would underperform, my theory predicts that their quality of performance reflects the President's party affiliation.

Data and Empirical Strategy

I measure discretion of OTAA bureaucrats in two ways: TAA petition certification and bureaucratic delay in TAA determinations. I submitted Freedom of Information Act (FOIA) requests to the U.S. Department of Labor in order to acquire the data on each TAA petition and its determination. The dataset that I received from the Department of Labor contains information on 81,453 petitions administered from 1975 to 2017. Each petition is recorded based on the company name (the petitioners' employer) and its address (including zip code). In addition to employer information, the dataset contains detailed information on the determination result of TAA petitions as well as the date when TAA investigations were initiated and concluded. I use the former as the measurement of TAA petition certification, and the latter as the measurement of bureaucratic delay. I also identify bureaucratic performance of each bureaucrat by tracking the last name of a TAA investigator ⁶ in each TAA petition.

⁶I cleaned out last names of TAA investigators referring (Hyman, 2018)'s correction. For example, "BROWNE" and "BORWN" in the dataset were corrected as "BROWN."

TAA Petition Certification

Model Specification

I use a logit regression to estimate the likelihood of TAA petition certification. The dependent variable is the result of TAA petition determination, either certification or denial. Among 81,453 petitions, 44,409 petitions (54.5%) were certified. I use the randomly halved dataset for the purpose of training set validation. In the training set, there are 40,212 TAA petitions with 21,972 of them (54.6%) being certified.

The independent variable is the interaction term between the president’s party and TAA investigator’s length of service. The president’s party affiliation is an indicator variable distinguishing Republican (=1) and Democratic (=0) presidents. My dataset has a variation of five Republican (Jerald Ford, Ronald Reagan, George H.W. Bush, George W. Bush, Donald Trump) and three Democratic (Jimmy Carter, Bill Clinton, Barack Obama) presidents. Among all the petitions from year 1975 to year 2017, 54.3% (21,849 petitions) of them were filed during Republican presidencies, and 45.3% (18,237 petitions) were filed during Democratic presidencies. TAA investigator’s length of service is a factor variable that divides TAA investigator’s total days of service by six months (180 days). This is calculated by subtracting the days passed from the investigator i administering his or her first TAA petition to the same investigator initiating TAA investigation in petition i . I re-label the length of service longer than four years as “above,” thereby making the factor variable consisting of total nine categories. The baseline of the model is the first six-month of investigator’s length of service (“Investigator-1-6months”). Transformation to a nine-chunk categorical variable is to accommodate possible non-linear relationship between investigator’s length of service and bureaucratic performance.⁷

The other covariates I include in the model are Department of Labor’s annual budget

⁷The robustness check on different cutoffs on length of service (one year, three year) is provided in the appendix.

authority, unemployment rate, estimated of affected workers per petition, and fixed effects for company and investigator. More formally, I introduce the following model of a TAA petition i of company c that is handled by a bureaucrat (investigator) b :

$$\begin{aligned} \text{Logit}(\text{Certify} = 1)_{icb} = & \beta_1 * (\text{RepPresident} * \text{ServiceLength})_{icb} + \\ & \beta_2 * (\text{RepPresident})_{icb} + \beta_3 * (\text{ServiceLength})_{icb} + \Gamma * X_{icb} + \alpha_{ib} + \alpha_{ic} + \epsilon_{icb} \end{aligned} \quad (1)$$

Department of Labor’s budget is included to control bureaucratic discretion in certifying TAA petitions in accordance with budget increase. Rather than the data on actual money spent by the agency, I use the data of the agency’s budget authority which is announced prior to the fiscal year to avoid a posterior explanation. One unit in the budget authority variable equals to one billion USD. I also include the national yearly unemployment rate from the Bureau of Labor Statistics to address possible correlations with both the petition certification (dependent variable) and Republican presidencies (independent variable). National unemployment rate is used over local unemployment rate because all the decision-makings of TAA petition are centralized at the OTAA headquarter in Washington D.C. If the OTAA investigators are pressured to certify more TAA petitions due to high unemployment rate in either the Republican or the Democratic Administration, national over local unemployment rate would be a more likely reference. I also account for estimated number of affected workers per petition to control for the possible influence of petition size on determination result. One unit of the estimated worker variable is equivalent to 100 workers. Petitioner type—workers, company, labor union, state, unidentified—is controlled, recognizing the previous literature that TAA petitions filed by labor unions significantly increases the likelihood of petition approval (Magee, 2001).

Companies that have been subject to TAA petitions for more than 30 times in the dataset are fixed (total 51 companies). This controls bureaucratic performance affected by lobbying of a number of firms. These firms, anticipating their frequent usage of TAA, may also be equipped with better resources to help their workers prepare for petition filing. Among the

51 firms fixed in the model, many of them are manufacturing firms in automobile industry (General Motors, Chrysler, Ford), information technology industry (International Business Machines, Hewlett Packard), and in oil industry (Exxon Mobil, Chevron). In addition to the company fixed-effect, investigators that have administered more than ten TAA petitions are fixed. This takes into account influence of an investigator's individual leniency on TAA petition certification. Investigators with less than ten TAA petitions are dropped, with the assumption that they are temporary contract workers.⁸ In total there are 207 investigators are fixed in the model.

Result1

Consistent with *H1a*, I find that Republican presidencies are associated with a lower likelihood of OTAA bureaucrats certifying TAA petitions (Table 1). The analysis shows that even after controlling for unemployment, President's partisanship influences the bureaucratic decision-making. Without the interaction terms, having a Republican president lowers the log-odds of TAA petition certification by 0.188 (column 1). Its effect size gets bigger to -0.195 when adding the company-fixed effect (column 2).

The effect of president's party on TAA petition certification markedly increases when adding the interaction term with the investigator's length of service. With the baseline of the first six-month of investigator's length of service, the Republican presidency lowers the log-odds of TAA petition certification by 0.411 (column 3), which its log-odds is twice bigger than the coefficient sizes in column 1 and 2. Even after fixing major companies that have been subject to TAA petitions, the coefficient size remains roughly the same (column 4). The coefficient size of national unemployment rate is no longer statistically significant

⁸With the training set data I calculated an investigator's average investigating time per petition, which is 18 days. This number is calculated by total number of cases an investigator administered in his entire career divided by his total length of service. I set ten TAA petitions as the threshold of selecting investigators with the assumption that less than six month ($18 \times 10 = 180$ days) of service is temporary.

once introducing the interaction terms. This result confirms that bureaucrats who are newly recruited are distinctively responsive to president's party affiliation (*H2a*).

Interestingly, the interaction term of the investigator's length of service in six-month interval reveals the timing when bureaucrats pursue neutrality over responsiveness. In column 3, the interaction term coefficient turns positively significant from "Rep* Investigator-sixm-6" in both column 3 and 4. This implies that after the investigators stay in office for more than 2.5 years, their certification decision is far less influenced by president's party affiliation. The consistently positive and significant coefficients in later periods of investigator's length of service indicate that the bureaucratic insulation from responsiveness to president's party affiliation requires 2.5 years of seniority. This timing coincides with the timeline which OTAA bureaucrats are granted with tenure upon creditable performance.

Bureaucratic Delay

Model Specification

I use an OLS regression to estimate bureaucratic delay in TAA petition determination. To measure bureaucratic delay, I first calculate the days elapsed from the beginning of TAA investigation to the announcement of petition determination. The range of investigation in the dataset is huge, ranging from 1 day to 1,490 days. I subset the TAA petitions that required more than 60 days to reach final determination, coding these as delayed petitions. I set 60 days as the threshold of bureaucratic delay because multiple state government TAA brochures⁹ as well as the government reports stipulate that the OTAA releases its final determination of the TAA petitions within 60 days. 17,086 petitions out of 40,212 petitions (42.5%) experienced more than 60 days of TAA investigations. As a comparison, I addi-

⁹See TAA brochures of 1. State Government of Michigan http://www.michigan.gov/documents/Trade_Adj_094_25141_7.pdf. 2. State Government of Nebraska: <https://dol.nebraska.gov/EmploymentAndTraining/EmployerResources/LayoffsAndDownsizing/TradeAdjustmentAssistance>.

tionally run the regression with total petitions. The independent variable is the interaction term between president’s party affiliation and the investigator’s length of service. I use the identical measures of president’s party and the investigator’s length of service from the previous analysis. Descriptively, TAA investigations are most delayed during the two Republican presidencies—the Reagan administration (164.14 days on average) and the Trump administration (123.62 days on average). In average, OTAA required 85.13 days to determine TAA petitions during Republican presidencies, and 83.13 days during Democratic presidencies.

While keeping most of the covariates (budget, unemployment rate, estimated number of affected workers per petition) from the petition certification model, I add OTAA workload in the bureaucratic delay model. Additionally, I use an indicator variable on service sector TAA petition in addition to the company, investigator-fixed effects. The formal representation of the model on a TAA petition i of company c that is handled by a bureaucrat (investigator) b is:

$$\begin{aligned} (\text{BureaucraticDelay})_{icb} = & \beta_1 * (\text{RepPresident} * \text{ServiceLength})_{icb} + \\ & \beta_2 * (\text{RepPresident})_{icb} + \beta_3 * (\text{ServiceLength})_{icb} + \Gamma * X_{icb} + \alpha_{ib} + \alpha_{ic} + \epsilon_{icb} \end{aligned} \quad (2)$$

I fix OTAA workload because more workload in a bureaucratic agency may pressure bureaucrats to work more efficiently. OTAA workload is calculated by counting the number of petitions that OTAA determined in a single month. For example, if a TAA petition is determined on January 20, 1980, OTAA workload is calculated as the number of total TAA determinations that OTAA administered during January of 1980. Service sector petitions are distinguished from production sector petitions in order to control possible bureaucratic delay due to sectoral differences as well as their possible correlation with Republican presidencies.

Result2

Testing the bureaucratic delay model upholds both $H1b$ and $H2b$. Holding all other variables constant, OTAA investigators in average delay TAA investigations by 13.43 more days during

Republican presidencies (Table 2, column 1). Restricted to the petitions with the delayed determinations, OTAA investigators postpone determination by 42.77 more days during Republican presidencies (column 4). Consistently significant and positive coefficients imply that president's party affiliation affects the speed of TAA petition determination.

The interaction term between the Republican presidency and investigator's length of service enunciates that during the Republican presidencies, early-career bureaucrats delay TAA to a greater degree than senior bureaucrats (Figure 1). The coefficient size of the Republican presidency in column 2 amplifies to 82.842, meaning that investigators who have been in office less than six months delay TAA determinations 6.2 times longer than bureaucrats of average seniority. The result is consistent (82.91 days) after adding the company-fixed effects (column3). As shown in the model of column 5 and 6, its effect is even further magnified to 119.747 days, 119.812 days respectively, when restricting the analysis to delayed TAA determinations. Together with the previous analysis, this finding leads to the conclusion that early-career investigators are particularly attentive to president's party affiliation.

Analogous to the TAA petition certification model, the bureaucratic delay model discloses the timing of bureaucratic insulation. The coefficient size of the interaction term becomes negatively significant from "Rep* Investigator-sixm-4" in both column 2 and 3, and from "Rep* Investigator-sixm-5" in both column 5 and 6. This means bureaucrats' pace of TAA determination is less affected by political party of the president once they stay in office longer than 1.5 (in total cases) or 2 years (in delayed cases). This threshold also falls within the three-year tenure evaluation period of OTAA bureaucrats.

Training Set Validation

In this section, I test the regression models by making predictions with the testing set. This process is to ensure that the results in Table 1 and Table 2 are driven by minimal overfitting.

The testing set consists of 41,241 observations, and it is randomly halved from the dataset of 81,453 observations. Before validating the training set, I did not make any modification in the testing set. The result supports all the hypotheses (Appendix J and K). Consistent with my theoretical predictions, investigators are less likely to certify TAA petitions, and they slow down their pace of TAA determinations during Republican presidencies. Compared to investigators with average seniority, early-career bureaucrats are more prone to be affected by Republican presidencies, both in terms of TAA petition certification and speed of decision-making.

Testing Alternative Mechanism: Partisan Recruitment

Partisan recruitment theory is one alternative explanation to the theory that novice bureaucrats reflect president’s party affiliation in their decision-making for permanent appointment: bureaucrats are selected to be partisan at the stage of recruitment. If this alternative theory is right, novice bureaucrats, restricted to their early career, would “constantly” reflect their partisan preference in their performance. On the other hand, if novice bureaucrats do care about getting a permanent position, they would adapt their behavior in accordance with the change of external environment, namely change of administration.

Below model specification is to discern whether the pattern of novice bureaucratic performance in TAA petition i (Y_i), namely petition certification and length of bureaucratic delay, is driven by partisan recruitment or conditional tenure. The analysis here is restricted to a TAA petition i administered by a novice bureaucrat—a bureaucrat who was in office less than six month since his or her first TAA petition investigation.

$$Y_i = \beta_1 * (\text{HDem} * \text{Rep})_i + \beta_2 * (\text{HDem})_i + \beta_3 * (\text{Rep})_i + \beta_4 * (\text{MService})_i + \beta_5 * (\text{HDem} * \text{MService})_i + \epsilon_i \quad (3)$$

The main variable of interest is $\text{HDem} * \text{Rep}$, the interaction term between the indicator

variable of whether a bureaucrat is hired by Democratic president (HDem) and the indicator variable of whether a bureaucrat is working for the Republican president at the time of TAA investigation (Rep). If this coefficient rejects the null ($H_0: \text{HDem} * \text{Rep} = 0$), this upholds the tenure theory. If the coefficient fails to reject the null, the result supports the partisan recruitment theory. The second interaction term ($\text{HDem} * \text{MService}$) is a covariate controlling possible heterogeneous effect of months of service (MService) over the political party that hired a bureaucrat (HDem). This difference in differences (DID) design allows to examine whether there is a steeper change in bureaucratic performance when there is a change from “Democratic to Republican administration” over “Republican to Democratic administration”. The result (Table 3) upholds the tenure theory: the statistically significant coefficient of -0.164 in the certification model (column 1) 98.866 in the bureaucratic delay model (column 2) indicate that novice bureaucrats who are hired at the latter period of Democratic presidency are more likely to perform “Republican” under the changed Republican administration.

Conclusion

Governments under embedded liberalism have designed and implemented domestic policies to balance benefits from free trade and domestic stability. In this paper I show that the policy design of providing targeted compensation to individuals can lead bureaucrats to become more political under certain conditions. Especially uncertainty of their tenure can drive them to behave more politically at the stage of policy implementation. Using 42 years of individual petition-level data (81,453 petitions), I show that the president’s party influences TAA petition determination results as well as the bureaucratic pace to reach such determinations. Specifically, TAA petitions are more rigorously certified and are delayed more during Republican presidencies. Within bureaucrats, early-career bureaucrats who have been in office less than two years are found out to be the most sensitive to political responsiveness

to presidents. I additionally test that this result is not driven by partisan recruitment of bureaucrats. Untenured bureaucrats who are hired at the end of the Democratic presidency, compared to their peers who are hired at the beginning of the Republican presidency, behave more Republican-like when the Republican president sits in office.

This study has important implications on international political economy and bureaucracy literature in the following two ways. First, efficiency in provision of trade adjustment can be damaged even at the stage of policy implementation by the way policy is designed. Targeted compensation is advantageous in providing assistance directly to individuals who are in need of the assistance, but as a trade-off bureaucrats can behave more politically utilizing the discretion of discerning who the target should be. Second, this study revisits the conventional assumption of constant bureaucratic performance in the bureaucracy literature. Through within-comparison of each bureaucrat, I find that early-career bureaucrats are distinctively responsive to President's party affiliation, for the time period that highly overlaps with their review periods in achieving permanent appointment. Heterogeneous performance of bureaucrats with and without certainty of tenure is consistent with the existing literature, but this study provides a fine-grained theory and empirics on the origin and direction of heterogeneity. Potentially, this result has a broad applicability to multiple bureaucratic agencies that hire permanent employees through career conditional appointment.

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Tables

Table 1: Logit Regression on TAA Petition Certification

	Dependent Variable: Certification of TAA Petitions (1= Certified)			
	(1)	(2)	(3)	(4)
Rep President (Rep)	-0.188*** (0.034)	-0.195*** (0.034)	-0.411*** (0.096)	-0.406*** (0.097)
Investigator-7-12months			-0.181** (0.083)	-0.157* (0.084)
Investigator-13-18months			-0.080 (0.104)	-0.134 (0.107)
Investigator-19-24months			-0.128 (0.122)	-0.115 (0.124)
Investigator-25-30months			-0.090 (0.125)	-0.137 (0.127)
Investigator-31-36months			-0.162 (0.125)	-0.183 (0.128)
Investigator-37-42months			0.276* (0.155)	0.241 (0.157)
Investigator-43-48months			-0.167 (0.134)	-0.250* (0.140)
Investigator-older			0.349*** (0.086)	0.311*** (0.087)
DOL budget(billion USD)	0.0002 (0.001)	0.0003 (0.001)	-0.001 (0.001)	-0.0005 (0.001)
National Unemployment	-0.035** (0.017)	-0.041** (0.017)	-0.0004 (0.018)	-0.013 (0.018)
Est.Num.Workers (100 wks)	0.175*** (0.011)	0.184*** (0.011)	0.178*** (0.011)	0.186*** (0.011)
Petitioner-Company	0.824*** (0.056)	0.769*** (0.058)	0.824*** (0.060)	0.763*** (0.061)
Petitioner-State	0.145**	0.082	0.073	0.010

	(0.065)	(0.066)	(0.069)	(0.070)
Petitioner-unidentified	-0.233*** (0.052)	-0.209*** (0.052)	-0.288*** (0.052)	-0.263*** (0.053)
Petitioner-Union	0.262*** (0.060)	0.229*** (0.062)	0.247*** (0.064)	0.210*** (0.065)
Petitioner-Workers	0.269*** (0.052)	0.204*** (0.053)	0.258*** (0.055)	0.190*** (0.057)
Rep*Investigator-7-12months			0.134 (0.112)	0.128 (0.113)
Rep*Investigator-13-18months			-0.167 (0.134)	-0.088 (0.137)
Rep*Investigator-29-24months			0.150 (0.152)	0.164 (0.154)
Rep*Investigator-25-30months			-0.021 (0.158)	0.070 (0.160)
Rep*Investigator-31-36months			0.441*** (0.164)	0.466*** (0.166)
Rep*Investigator-37-42months			0.425** (0.191)	0.470** (0.193)
Rep*Investigator-43-48months			0.759*** (0.182)	0.793*** (0.187)
Rep*Investigator-older			0.298*** (0.106)	0.270** (0.107)
Constant	0.524* (0.303)	1.749*** (0.431)	0.519* (0.312)	1.803*** (0.437)

InvestigatorFE	Yes	Yes	Yes	Yes
CompanyFE	No	Yes	No	Yes
Observations	35,452	35,452	35,452	35,452
Log Likelihood	-21,968.140	-21,696.150	-21,841.850	-21,591.330
Akaike Inf. Crit.	44,368.290	43,926.290	44,147.710	43,748.660

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2: OLS Regression on Bureaucratic Delay

	Dependent Variable: Length of Bureaucratic Delay			
	(1)	(2)	(3)	(4)
Rep President (Rep)	13.4*** (1.1)	82.9*** (2.9)	42.8*** (2.3)	119.8*** (5.6)
Investigator-7-12months		-3.8 (2.5)		-15.6*** (4.0)
Investigator-13-18months		27.6*** (3.2)		9.2 (5.7)
Investigator-19-24months		28.0*** (3.8)		-0.4 (6.9)
Investigator-25-30months		31.5*** (3.9)		26.6*** (7.1)
Investigator-31-36months		25.5*** (3.9)		27.4*** (8.0)
Investigator-37-42months		11.7** (4.7)		-13.2 (9.8)
Investigator-43-48months		25.4*** (4.4)		-7.7 (7.8)
Investigator-older		71.6*** (2.6)		53.3*** (4.6)
DOL budget (billion USD)	-0.7*** (0.03)	-0.2*** (0.03)	-1.0*** (0.1)	-0.5*** (0.1)
National Unemployment	22.9*** (0.6)	16.9*** (0.6)	23.9*** (1.1)	12.8*** (1.1)
Est.Num Worker (100 Worker)	3.1*** (0.3)	2.7*** (0.3)	0.8 (0.6)	0.6 (0.5)
OTAA Workload (10 case)	0.1* (0.04)	0.3*** (0.04)	0.6*** (0.1)	0.7*** (0.1)
Service Sector	13.1*** (1.5)	11.2*** (1.5)	15.1*** (2.8)	10.2*** (2.7)
Petitioner-Comp	-4.8** (1.9)	-32.2*** (1.9)	31.1*** (4.1)	-9.9** (4.2)
Petitioner-State	15.8*** (2.2)	-10.4*** (2.2)	49.3*** (4.5)	10.3** (4.6)
Petitioner-Unidentified	-10.7*** (1.7)	-1.8 (1.6)	-14.0*** (2.6)	0.9 (2.6)
Petitioner-Union	11.2*** (2.1)	-15.0*** (2.1)	45.3*** (4.3)	6.3 (4.3)
Petitioner-Workers	7.2*** (1.8)	-18.7*** (1.8)	39.4*** (3.7)	1.7 (3.8)
Rep*Investigator-7-12months		18.3*** (3.4)		17.2*** (6.3)
Rep*Investigator-13-18months		-2.1 (4.2)		4.8 (7.8)
Rep*Investigator-19-24months		-19.8***		17.6*

		(4.8)		(9.3)
Rep*Investigator-25-30months		-40.7***		-36.6***
		(5.0)		(9.7)
Rep*Investigator-31-36months		-36.8***		-71.4***
		(5.1)		(10.2)
Rep*Investigator-37-42months		-21.3***		-38.5***
		(5.8)		(11.7)
Rep*Investigator-43-48months		-47.5***		-69.2***
		(5.8)		(10.2)
Rep*Investigator-older		-109.7***		-135.7***
		(3.2)		(6.2)
Constant	-34.4***	-32.9***	-8.4	51.3*
	(12.8)	(12.5)	(28.1)	(26.9)
InvestigatorFE	Yes	Yes	Yes	Yes
CompanyFE	Yes	Yes	Yes	Yes
N	35,384	35,384	14,226	14,226
R ²	0.4	0.4	0.3	0.4
Adjusted R ²	0.4	0.4	0.3	0.4

*p < .1; **p < .05; ***p < .01

Table 3: Testing Alternative Hypothesis: Partisan Recruitment

	<i>Dependent variable: Bureaucratic Performance (Y_i)</i>	
	Certified (1 = YES)	Bureaucratic Delay (Days)
	(1)	(2)
HDem	-0.011 (0.034)	54.413*** (4.470)
Rep	-0.096* (0.050)	49.791*** (6.493)
MService	0.005 (0.007)	-0.035 (0.895)
HDem*Rep	-0.164*** (0.058)	98.866*** (7.624)
HDem*MService	-0.003 (0.009)	-0.686 (1.185)
Constant	0.579*** (0.026)	40.148*** (3.388)
Observations	3,926	3,921
R ²	0.022	0.399
Adjusted R ²	0.021	0.398
Residual Std. Error	0.491 (df = 3920)	64.382 (df = 3915)
F Statistic	17.625*** (df = 5; 3920)	519.361*** (df = 5; 3915)

Note:

*p<0.1; **p<0.05; ***p<0.01

Figures

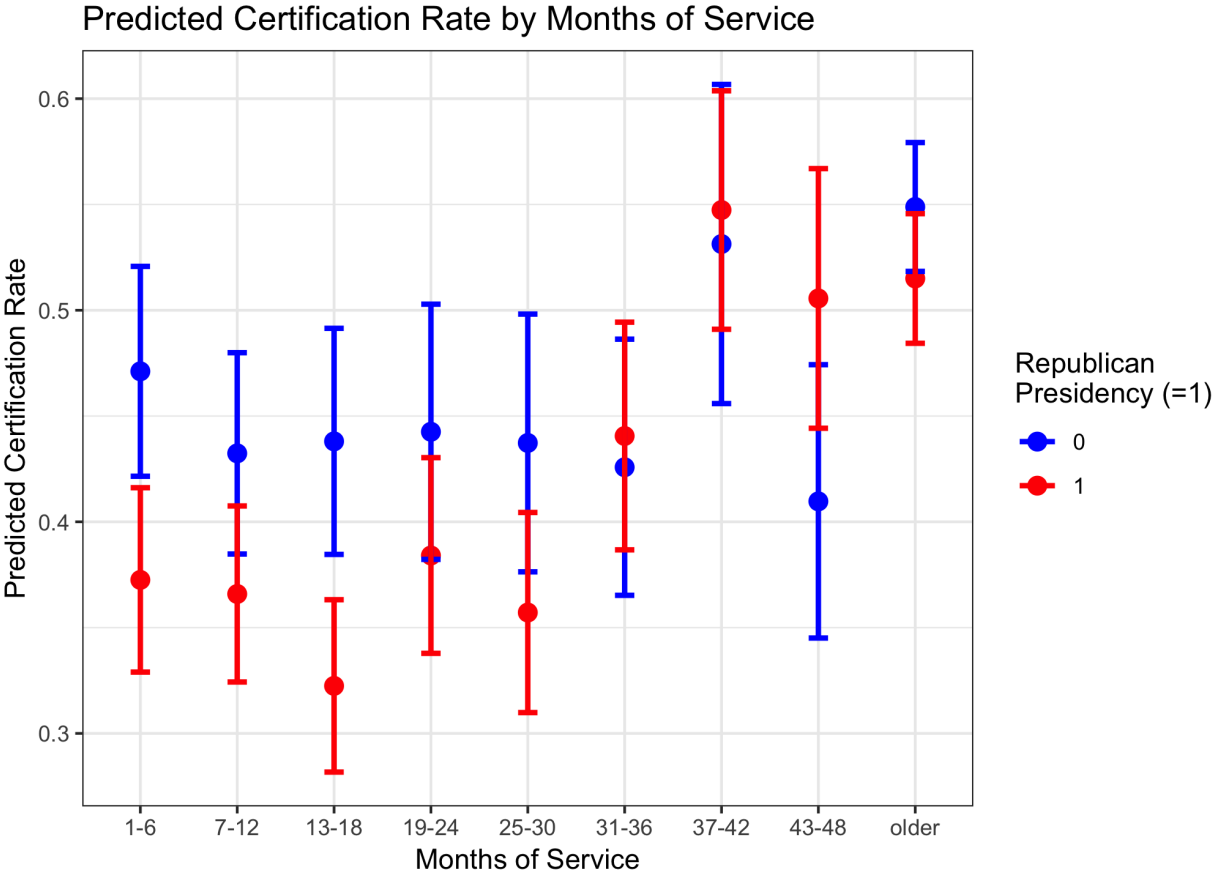


Figure 1: Predicted TAA Certification Rate by Bureaucrats' Length of Service

Note: Mean values fixed on annual budget of the Department of Labor, national unemployment rate, and estimated number of affected workers

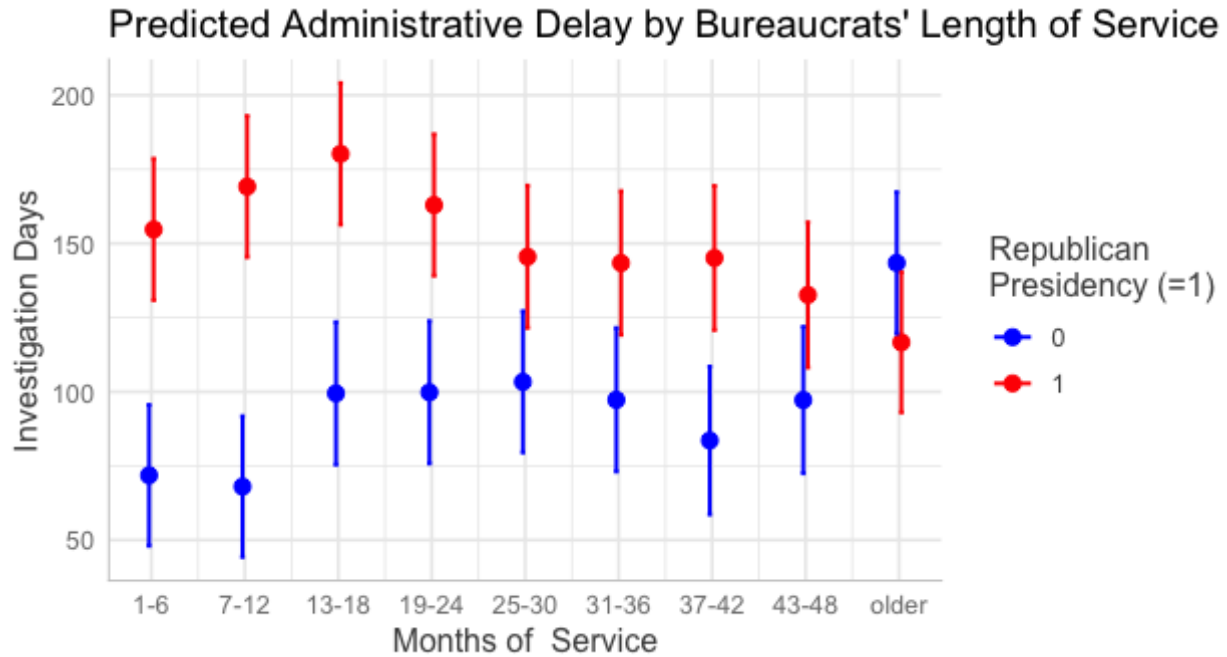


Figure 2: Predicted Administrative Delay by Bureaucrats' Length of Service

Note: Mean values fixed on annual budget of the Department of Labor, national unemployment rate, estimated number of affected workers, and the Office of Trade Adjustment Assistance monthly workload

Online Appendixes

Appendix A Descriptive Statistics

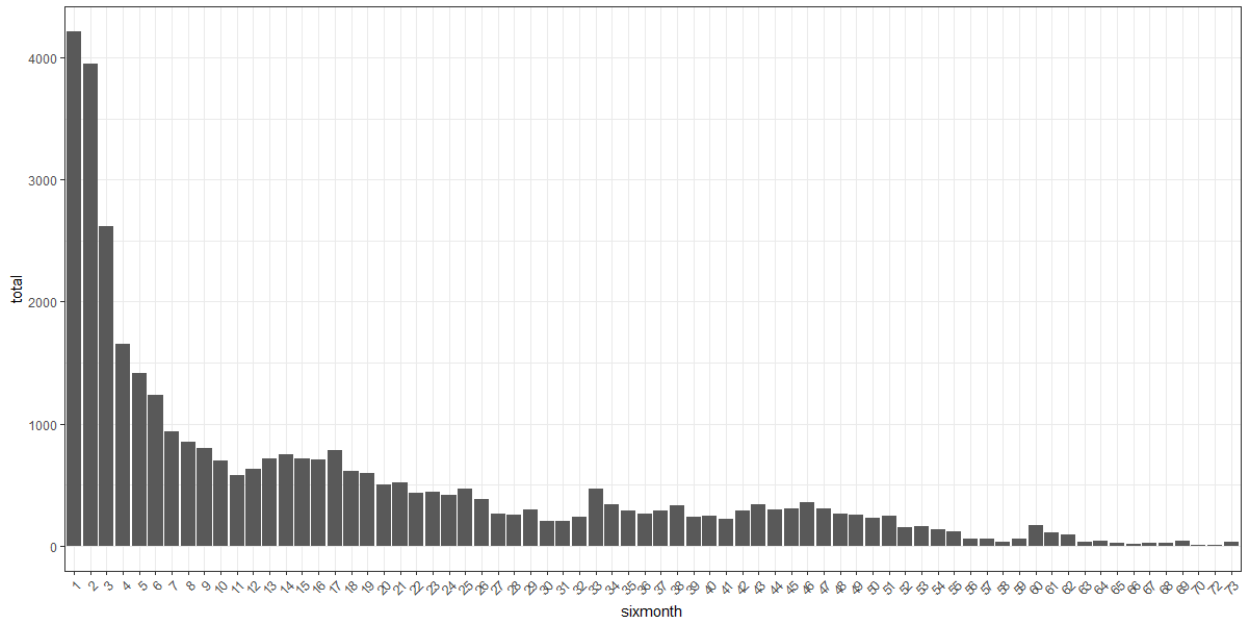
Table A1: Summary Statistics (Training Set)

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Certified (1=Yes)	35,986	0.6	0.5	0	0	1	1
Investigation Days	35,817	82.1	87.9	1.0	31.0	92.0	1,246.0
Republican President	35,885	0.6	0.5	0.0	0.0	1.0	1.0
DOL budget (billion USD)	35,885	57.5	41.2	16.8	32.0	65.2	179.2
National Unemployment	35,831	6.6	2.2	2.3	5.0	7.8	17.8
Est.Num.Workers (100 wks)	35,452	0.8	1.2	0.0	0.1	0.9	10.0
OTAA workload (10case)	35,986	21.2	10.8	1.6	13.4	26.1	65.2
Service Sector	35,986	0.1	0.3	0	0	0	1

Table A2: Summary Statistics (Testing Set)

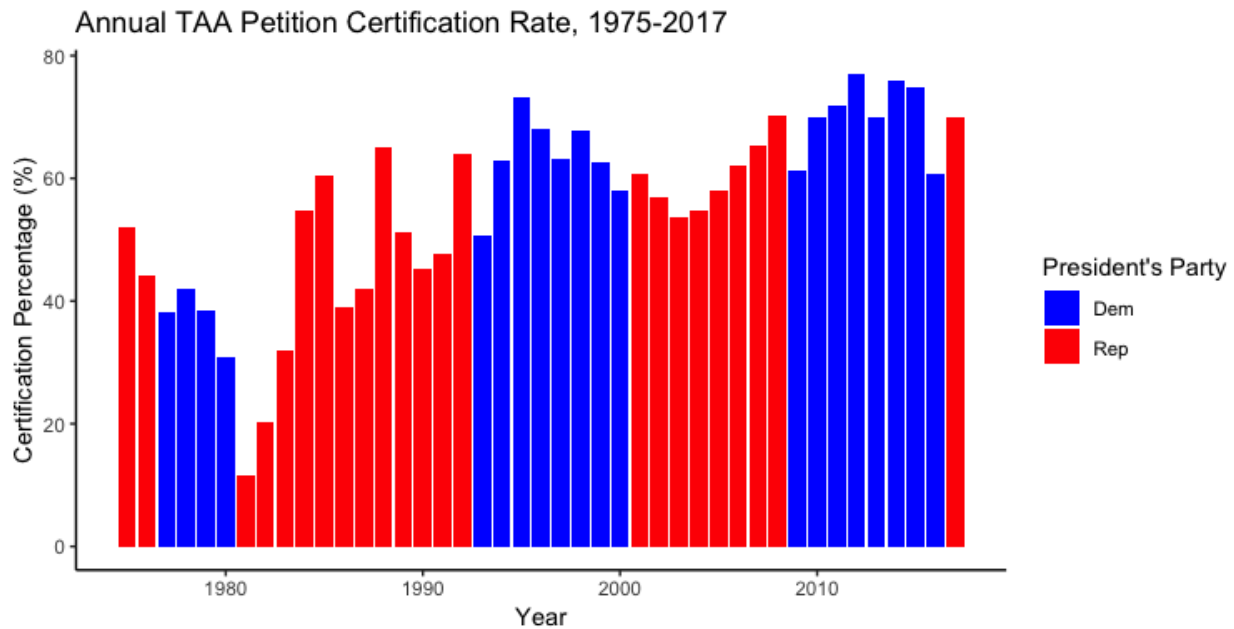
Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Certified (1=Yes)	36,944	0.6	0.5	0	0	1	1
Investigation Days	36,773	82.6	89.1	1.0	32.0	92.0	1,490.0
Republican President	36,851	0.6	0.5	0.0	0.0	1.0	1.0
DOL budget (billion USD)	36,851	57.4	41.2	16.8	32.0	65.2	179.2
National Unemployment	36,851	6.4	1.6	4.0	5.1	7.4	9.7
Est.Num.Workers (100 wks)	36,383	0.8	1.2	0.0	0.1	0.9	10.0
OTAA workload (10case)	36,944	21.2	10.8	1.6	13.4	26.2	65.2
Service Sector	36,944	0.1	0.3	0	0	0	1

Appendix B Bureaucrat's Length of Service in Six-month Chunks



Note: “Total” in the y-axis means the total number of TAA petition. The right way to interpret the first bar would be “over 4000 TAA petitions are administered by TAA bureaucrats whose length of service is less than six months at the time of petition investigation.” Based on training set.

Appendix C TAA Petition Certification Rate by Year

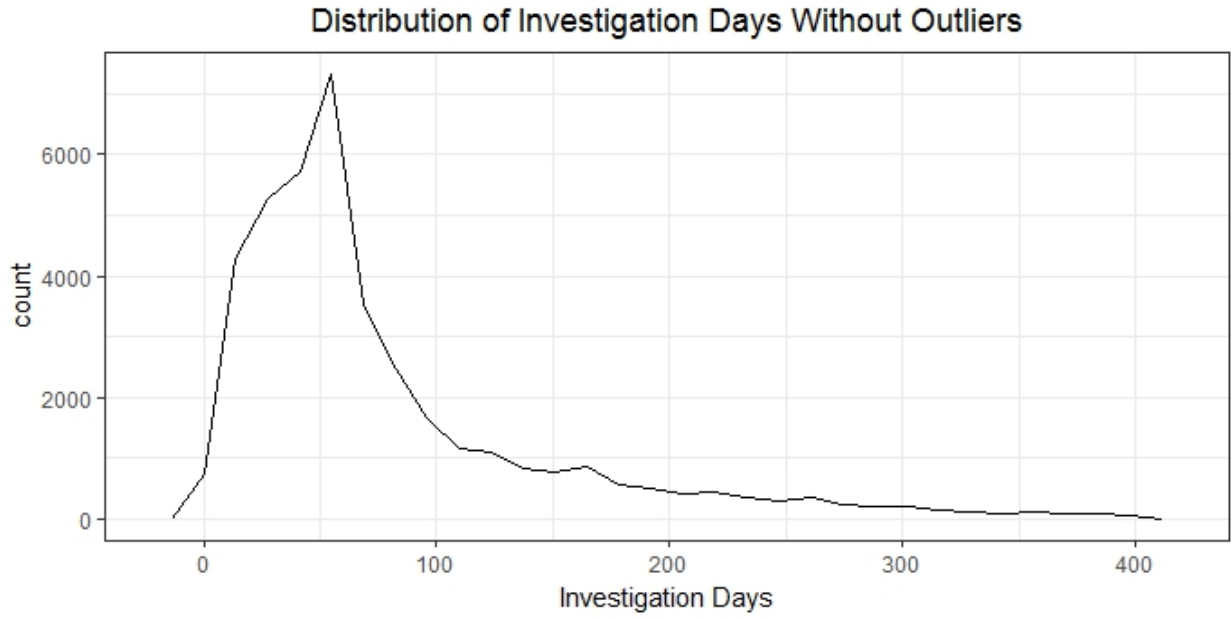


Appendix D TAA by Administration

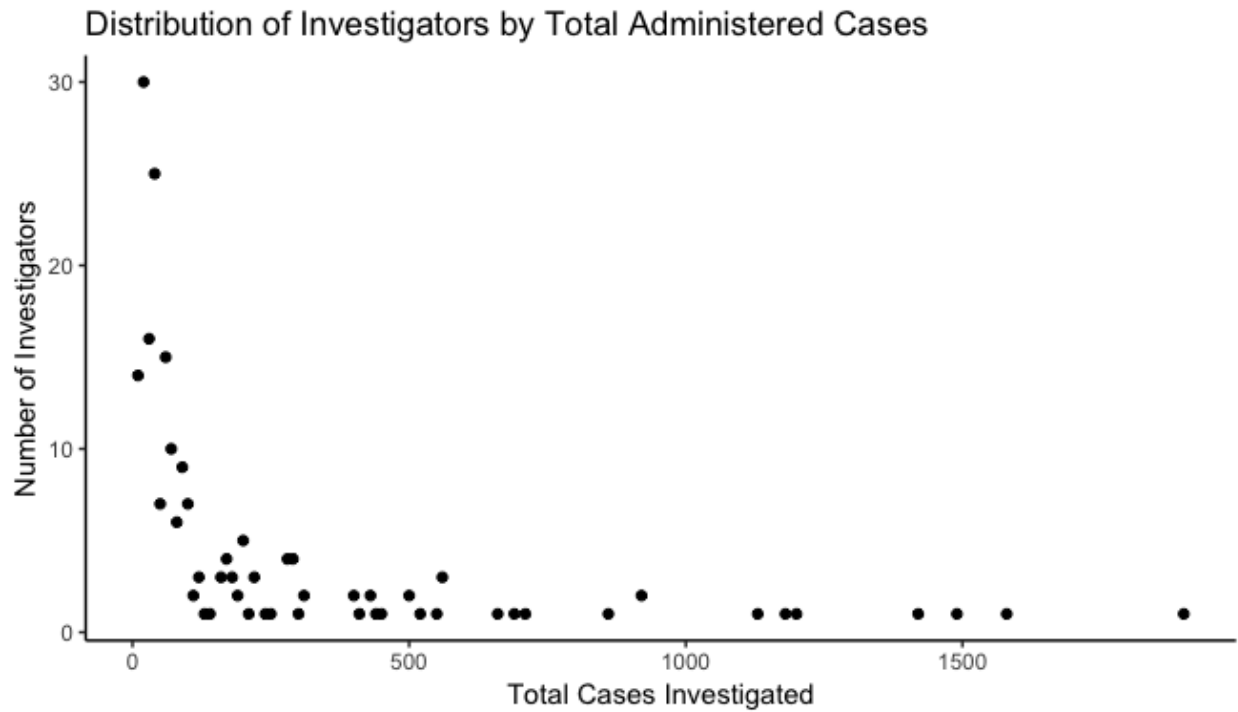
President	Terms	Total.Petition	Certified	Avg.Inv.Days	First_11months
Gerald Ford	1974-1977	1,218	587	85.2	No TAA in 1974
Jimmy Carter	1977-1981	8,898	3,244	98.5	136.64
Ronald Reagan	1981-1989	12,950	4,749	164.1	253.74
George H.W. Bush	1989-1993	8,015	4,225	59.9	59.67
Bill Clinton	1993-2001	13,063	8,248	52.4	69.02
George W. Bush	2001-2009	21,158	12,507	44.7	67.81
Barack Obama	2009-2017	14,955	10,196	101.7	63.02
Donald Trump	2017-	953	653	123.6	123.62

Note: The dataset used in this research has first 11 months of TAA petition data for the Trump Administration. The column on average bureaucratic delay in first eleven month (days) is added to compare the average bureaucratic delay in the first 11 months under the Trump Administration with other previous Administrations. Based on training set.

Appendix E Distribution by Investigation Days

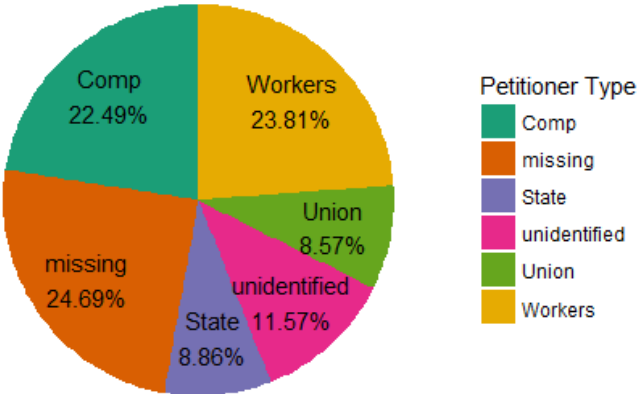


Appendix F Distribution of Bureaucrats by Total Cases



Appendix G Petitioner Type

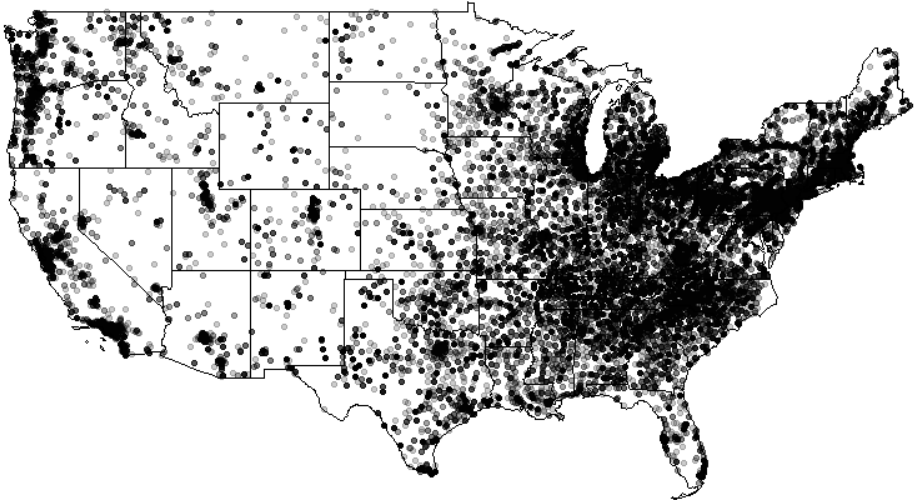
Distribution of Petitioner Type (%)



Note: The TAA petition data of earlier periods identify petitioners with unexplained numbers such as “1” or “333” rather than with petitioner type. I re-labeled these numbers as “unidentified,” to distinguish these records from missing values.

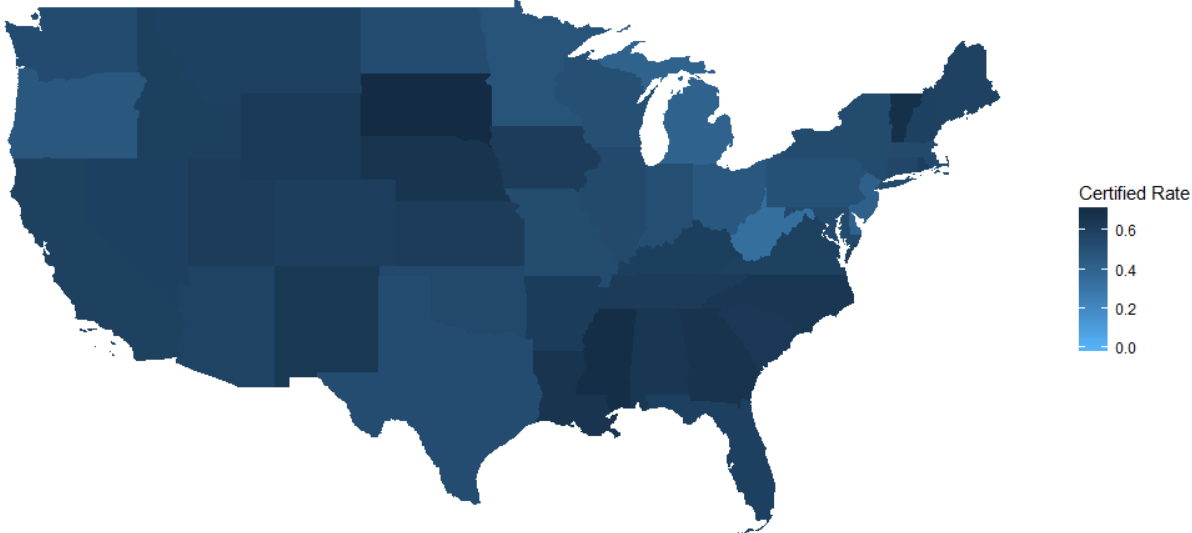
Appendix H TAA Petition Map

TAA Petitions by City, Year 1975-2017 (N= 76,762)



Appendix I TAA Petition Certification Map, State-Level

Rate of TAA Certification, Year 1975-2017 (N = 76,762)



Appendix J Training Set Validation–Petition Certification

	DV: TAA Petition Certification (1=Certified)			
	(1)	(2)	(3)	(4)
Rep President (Rep)	−0.122*** (0.034)	−0.108*** (0.034)	−0.261*** (0.097)	−0.259*** (0.097)
Investigator-7-12months			−0.228*** (0.086)	−0.240*** (0.086)
Investigator-13-18months			0.058 (0.103)	0.058 (0.104)
Investigator-19-24months			0.343*** (0.129)	0.324** (0.130)
Investigator-25-30months			0.182 (0.119)	0.142 (0.120)
Investigator-31-36months			0.108 (0.126)	0.074 (0.127)
Investigator-37-42months			0.267 (0.165)	0.258 (0.169)
Investigator-43-48months			0.073 (0.133)	0.005 (0.140)
Investigator-older			0.375*** (0.086)	0.289*** (0.087)
DOL budget (million USD)	0.0003 (0.001)	−0.0000 (0.001)	−0.001 (0.001)	−0.001 (0.001)
National Unemployment	−0.031* (0.017)	−0.028* (0.017)	−0.001 (0.018)	−0.005 (0.018)
Est.Num.Workers (100 wks)	0.157*** (0.010)	0.171*** (0.010)	0.161*** (0.010)	0.173*** (0.010)
Petitioner-Company	0.865*** (0.056)	0.848*** (0.058)	0.868*** (0.059)	0.856*** (0.061)
Petitioner-State	0.259*** (0.066)	0.233*** (0.067)	0.202*** (0.070)	0.189*** (0.071)

Petitioner-unidentified	-0.195*** (0.050)	-0.134*** (0.051)	-0.231*** (0.051)	-0.179*** (0.052)
Petitioner-Union	0.353*** (0.061)	0.352*** (0.062)	0.349*** (0.064)	0.356*** (0.065)
Petitioner-Workers	0.355*** (0.052)	0.325*** (0.053)	0.348*** (0.055)	0.327*** (0.057)
Rep*Investigator-7-12months			0.058 (0.114)	0.082 (0.115)
Rep*Investigator-13-18months			-0.110 (0.133)	-0.100 (0.134)
Rep*Investigator-19-24months			-0.311** (0.156)	-0.295* (0.157)
Rep*Investigator-25-30months			-0.453*** (0.153)	-0.372** (0.154)
Rep*Investigator-31-36months			0.301* (0.164)	0.365** (0.166)
Rep*Investigator-37-42months			0.313 (0.202)	0.290 (0.205)
Rep*Investigator-43-48months			0.536*** (0.178)	0.635*** (0.184)
Rep*Investigator-older			0.222** (0.106)	0.228** (0.107)
Constant	0.779** (0.321)	1.676*** (0.439)	0.600* (0.331)	1.625*** (0.446)

InvestigatorFE	Yes	Yes	Yes	Yes
CompanyFE	No	Yes	No	Yes
Observations	36,060	36,060	36,060	36,060
Log Likelihood	-22,398.960	-22,103.410	-22,279.680	-22,006.620
Akaike Inf. Crit.	45,241.930	44,756.820	45,035.360	44,595.240

Note:

*p<0.1; **p<0.05; ***p<0.01

Appendix K Training Set Validation–Bureaucratic Delay

	DV: Legnth of Bureaucratic Delay			
	(1)	(2)	(3)	(4)
Rep President (Rep)	13.0*** (1.1)	86.8*** (3.0)	41.6*** (2.3)	112.0*** (5.5)
Investigator-7-12months		0.3 (2.7)		-13.6*** (4.5)
Investigator-13-18months		20.0*** (3.3)		0.0 (5.8)
Investigator-19-24months		24.5*** (4.1)		-6.3 (7.5)
Investigator-25-30months		37.7*** (3.8)		24.7*** (6.8)
Investigator-31-36months		36.8*** (4.0)		53.1*** (8.2)
Investigator-37-42months		14.1*** (5.2)		-0.6 (10.7)
Investigator-43-48months		20.8*** (4.3)		-19.1** (7.8)
Investigator-older		67.0*** (2.7)		46.2*** (4.8)
DOL budget (billion USD)	-0.7*** (0.03)	-0.3*** (0.03)	-1.1*** (0.1)	-0.6*** (0.1)
National Unemployment	23.6*** (0.6)	17.8*** (0.6)	24.3*** (1.1)	14.0*** (1.1)
Est.Num.Workers (100 wks)	3.4*** (0.3)	3.2*** (0.3)	2.0*** (0.6)	1.7*** (0.5)
OTAA Workload (10 case)	0.1*** (0.04)	0.3*** (0.04)	0.6*** (0.1)	0.8*** (0.1)
Service Sector	14.8*** (1.5)	12.7*** (1.5)	17.2*** (2.9)	10.2*** (2.7)
Petitioner-Company	-4.8** (2.0)	-28.2*** (2.0)	25.3*** (4.2)	-0.8 (4.2)
Petitioner-State	19.8*** (2.3)	-2.8 (2.3)	47.1*** (4.7)	20.4*** (4.6)
Petitioner-unidentified	-10.6*** (1.7)	-1.1 (1.6)	-18.0*** (2.7)	-0.8 (2.6)
Petitioner-Union	11.0*** (2.2)	-11.8*** (2.2)	37.2*** (4.4)	11.3*** (4.3)
Petitioner-Workers	8.0*** (1.8)	-14.6*** (1.8)	34.8*** (3.8)	8.8** (3.7)
Rep*Investigator-7-12months		3.2 (3.6)		6.3 (6.5)
Rep*Investigator-13-18months		-0.5		25.5***

		(4.2)		(7.8)
Rep*Investigator-19-24months		-22.5***		22.3**
		(5.0)		(9.5)
Rep*Investigator-25-30months		-62.0***		-56.6***
		(4.9)		(9.3)
Rep*Investigator-31-36months		-58.4***		-93.5***
		(5.3)		(10.6)
Rep*Investigator-37-42months		-31.9***		-43.9***
		(6.4)		(12.6)
Rep*Investigator-43-48months		-53.0***		-52.6***
		(5.7)		(10.0)
Rep*Investigator-older		-111.0***		-124.4***
		(3.4)		(6.1)
Constant	-37.2***	-64.0***	11.7	32.2*
	(13.3)	(10.2)	(27.8)	(17.3)
InvestigatorFE	Yes	Yes	Yes	Yes
CompanyFE	Yes	Yes	Yes	Yes
N	35,984	35,984	14,586	14,586
R ²	0.4	0.4	0.3	0.4
Adjusted R ²	0.4	0.4	0.3	0.4

*p < .1; **p < .05; ***p < .01

Appendix L Robustness Check: Different Cut-offs on Length of Service

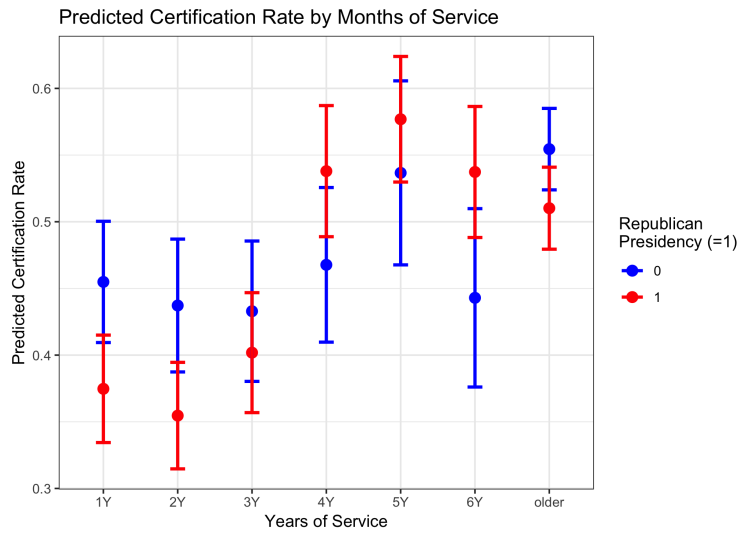


Figure L1: Predicted Certification Rate, Cutoff of One Year (X axis: 1Year-6Year, Older)

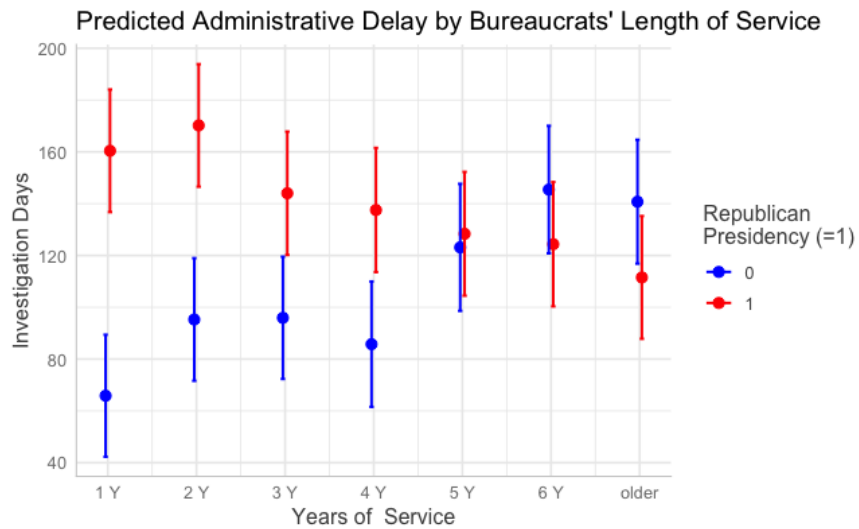


Figure L2: Predicted Bureaucratic Delay, Cutoff of One Year (X axis: 1Year-6Year, Older)

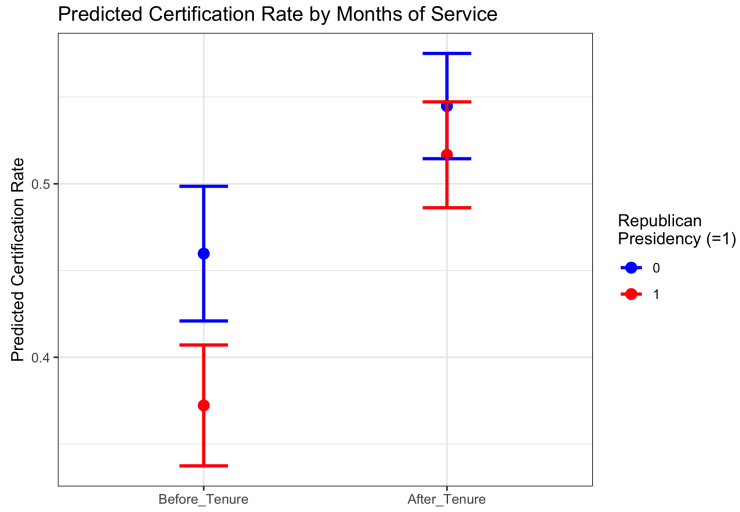


Figure L3: Predicted Certification Rate, Before and After Three Year

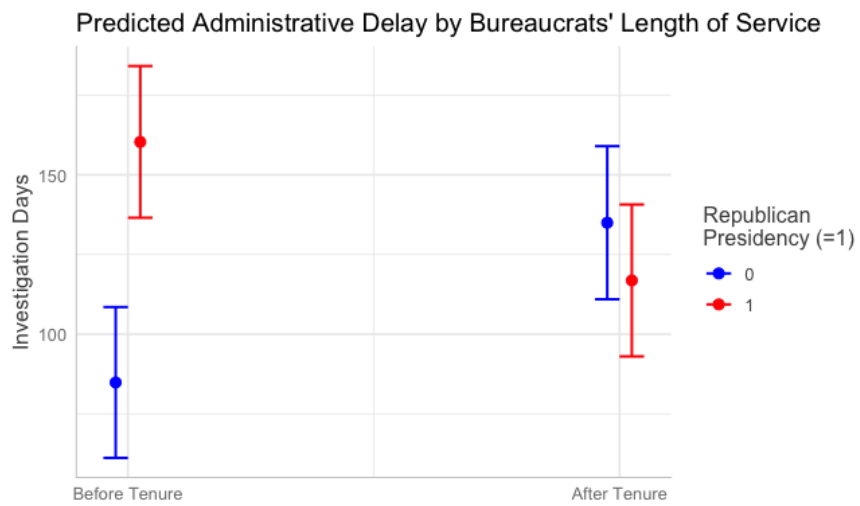


Figure L4: Predicted Bureaucratic Delay, Before and After Three Year