Voters Reward All Incumbents When They Benefit From Industrial Policy

Amelia Malpas* Leah Stein* David Struhs*

October 2024

Abstract

Do incumbent politicians gain electoral benefits when investments target private firms in congressional districts? While such investments can stimulate job creation and economic activity, voters might not attribute these benefits to politicians unless their role in securing the investment is clear. We explore this dynamic using the CHIPS Act and 2024 election results, investigating whether voters reward politicians regardless of whether they voted for the legislation. Using a differences-in-differences model at the county level, we find that vote shares for both the incumbent presidential party and House members, regardless of party affiliation, increase compared to the previous cycle. This is true even in counties where the incumbent party indicates voters may have philosophical opposition to industrial policy and other government intervention.

clear; perhaps write visible?

I know this is pre-data; but perhaps add amount of observations, main numerical result, etc

^{*}PhD Students, Harvard University

1 Introduction

The CHIPS Act, a significant industrial policy initiative of 2022 designed to bolster the domestic semiconductor industry, is the largest industrial policy in decades. Using this policy, we investigate whether incumbent politicians gain electoral advantages from investments targeting private firms within their congressional districts. A primary goal of the CHIPS Act is to revitalize U.S. semiconductor manufacturing and reduce dependency on foreign supply chains. By channeling substantial federal funding into semiconductor manufacturing, it sought to drive innovation and economic growth across various regions. We analyze the effects of the CHIPS Act on the 2024 election results to determine if voters attribute these economic benefits to politicians—even those who didn't directly support the policy. Using a differences-in-differences model at the county level, we find an increase in vote shares for both the incumbent presidential party and House members, regardless of party affiliation, compared to the previous election cycle.

2 Hypotheses

We plan to test the following hypotheses:

Hypothesis 1: Voters in areas that receive federal funding will increase presidential vote share for the incumbent presidential party.

Hypothesis 2: Voters in areas that receive federal funding will reward the incumbent Representative party by increasing vote share for the party's Representative candidate.

3 Data

We test our hypotheses in the context of the CHIPS and Science Act of 2022 (CHIPS). As discussed in the introduction, CHIPS was passed to encourage domestic semiconductor production. As a result, many areas in the United States received substantial federal funding to build or expand semiconductor manufacturing capabilities. In Figure 1, we show the congressional districts that received CHIPS funding since the Act was passed. We also show the Democratic vote share for each district in the 2020 election and whether the district's Representative voted for or against the CHIPS Act.

As show in Figure 1, 17 locations have received CHIPS funding so far. There is an even distribution in the political leanings of the districts that received CHIPS funding. In other words, both Democratic and Republican districts received funding from the Democratic presidential administration. Approximately half of Republican-leaning districts that received funding are also represented by a Member of Congress that voted *against* the CHIPS Act.

Because the CHIPS Act was passed in 2022, we test the effect of receiving CHIPS funding on presidential vote share between 2020 and 2024. We use county-level presidential vote share returns from the MIT Election Lab. We identify which counties received CHIPS funding from the Biden Administration Investment Tracker.

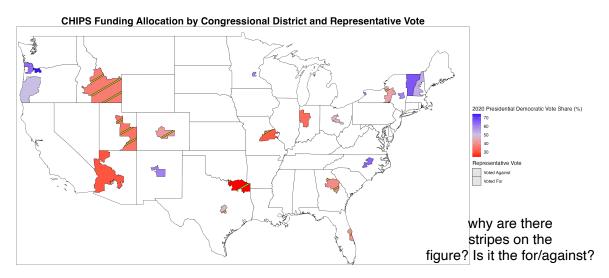


Figure 1: Congressional districts that have received CHIPS funding. Data from the Semi-conductor Industry Association, recoded by authors.

4 Empirical Model

We estimate our model with a standard two-way fixed effect model:

$$Y_{ist} = \alpha + \beta D_{it} + \gamma_s + \lambda_t + \varepsilon_i \tag{1}$$

For this exercise, we measure our outcome with three different units of observation: county, commuting zone, and media market. In each specification, i is the given unit we are testing. For example, when i is a county, we are comparing the outcome in counties that did receive CHIPS funding with counties that did not receive CHIPS funding within the same state. For the other units of observation, we use commuting zones or media markets (described above).

In Equation 1, Y_{ist} is the Democratic vote share in unit i in state s in year t. D_i is an indicator for whether the unit of observation i received CHIPS funding in year t. We also include state (γ) and year (λ) fixed effects.

5 Results

We find that units that received CHIPS funding increase their Democratic presidential vote share by 14 percentage points. We find similar results when we use other units of treatment, such as commuting zones and media markets.

 \circ

FE: year

FE: chips cz

FE: chips mm

 $FE: chips_mm:chips_cz$

Unit of Observation: Commuting Zone ${\rm CZ} \ge {\rm MM}$ Media Market County County (1)(2)(3)(4)(5)(Intercept) 31.771(0.426)Received CHIPS Funding 18.09513.968 13.6659.28410.063 (2.838)(2.840)(2.992)(2.886)(3.047)Num.Obs. 2536 2536 25362536 2536 R20.0270.2610.2710.2620.275R2 Adj. 0.0270.2560.2660.2560.269R2 Within 0.0210.0190.0080.010R2 Within Adj. 0.0200.0090.019 0.008 AIC $20\,981.4$ $20\,315.8$ 20284.3 $20\,317.2$ $20\,274.6$ BIC $20\,993.1$ $20\,426.8$ $20\,434.0$ $20\,403.0$ $20\,401.0$ RMSE15.1313.18 13.10 13.18 13.06 Std.Errors by: county fips by: county fips by: county_fips by: county_fips by: county_fips FE: state Χ Χ Χ Χ Χ Χ Χ Χ

Χ

Χ

Χ

Χ

Χ

Table 1: Difference-in-Difference Estimates for Democratic Presidential Vote Share

6 Data Challenges

One of our goals is to understand how voters respond to the incumbent Representative when their area receives CHIPS funding. However, we have had trouble identifying and analyzing "within-district" vote shares and were not able to produce the estimates yet. In our next iteration, we will attempt to use precinct-level vote shares to understand "within-district" variation.

- 7 Discussion
- 8 Conclusion