Have Corporations Polarized Politically Too? Evidence from U.S. Campaign Contributions Over Time

By Ethan Kaplan, Jorge Perilla, Andrew Sweeting, and Yidan Xu *

We measure partisan political polarization over time in the corporate sector. We measure polarization using a variance index. We find that different from public perceptions, corporate PACs have not become more partisan in their giving on aggregate or individually. Moreover, this is true across sectors of the economy. We compare these trends over time to the polarization of individual giving. Individuals also have not become more polarized over time. However, individuals, in contrast to corporations, have always been very polarized and thus there is less scope for an increase in the partisanship of individual campaign contributions. We do find that wealthy individuals are more bi-partisan but there was a rise in the partisanship of campaign contributions across states in the 2020 election. We make suggestions for future research including suggestions on how to measure other dimensions of corporate polarization which may be more salient to the public.
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I. Introduction

A large volume of literature has documented a substantial rise in partisan political polarization in legislatures over the past 50 years (McCarty, Poole and Rosenthal (2016); McCarty (2019)). This has been measured as increased segregation in voting patterns by political party. However, more recently it has also been measured as divergence in partisanship of speech (Gentzkow, Shapiro and Taddy (2019); Jensen et al. (2012)). Though initially, this rise was relegated mostly to national legislatures, in recent years, there has been a large rise in polarization in state legislatures as well (Grossmann (2023); Handan-Nader, Myers and Hall (2022)). Despite an initial debate on whether partisan polarization was relegated to politicians and not reflected in electorate (Abramowitz and Saunders (2008); Fiorina and Abrams (2008, 2012); Glaeser and Ward (2006)), there is now consensus in the academic community that partisan polarization has increased between citizens (Iyengar et al. (2019))[1].

Though the academic literature has explored legislative and voter polarization in great detail, less is known about the trends in corporate polarization. It is not immediately clear how to measure polarization for corporations. Corporations do not vote either in legislatures or in elections. One possible way to measure corporate polarization is to look at campaign contributions. Corporations are known for being strategic rather than ideological in their giving behavior. They often give to both sides of the aisle though, contrary to public opinion, not in the same race (Chamon and Kaplan (2013)). Nonetheless, as far as we are aware (1.) there has been less of an attempt to quantify the degree of polarization and (2.) we do not know how corporate polarization has changed over time.

There is reason to believe that corporate polarization has been increasing over time. On the one hand, there are increased criticisms of corporations considered to

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[1]It does not seem as though ideological polarization has increased over the past 50 years in the United States (Iyengar et al. (2019)). In this sense, the rise of polarization today is distinct from that in the 1930s.

be "woke" such as Disney, Apple, or Delta taking public positions and becoming more involved in politics (Ramaswamy (2021)). On the other hand, there are criticisms of corporations such as Hobby Lobby or My Pillow engaging in political activities in the form of strategic law suits (Horwitz (2014)).

In this paper, we intend to bring quantitative evidence to bear on whether corporations have become more polarized by looking at trends in corporate giving. In particular, following (Kaplan, Spenkuch and Sullivan (2022)), we use a variance index to compute the two-party variance in corporate contributions over time. This means that we first limit contributions to those going to Democrats and those going to Republicans. In other words, we exclude contributions to third party and independent candidates. After computing the probability (fraction) of corporate giving going to the Democrats, we compute the variance of corparate giving across parties. Since the variance of a Bernoulli random variable with probability of success p is given by $p(1-p)$, zero is the minimum possible value of the variance and 0.25 is its maximum possible value. We then exactly decompose the variance within and across sectors, within and across industry categories within sectors, and within and across individual Political Action Committees (PACs)[2]. We then visually display the aggregate variance decomposition over time of giving by corporations and show how it decomposes across and between sectors all the way down to the individual PAC level. We do this over 30 years of recent U.S. political history from 1990 through 2020.

Our main finding is that polarization of corporate giving has not systematically increased over time. Moreover, this is true across most sectors of the economy. Most PACs are very bipartisan in their corporate giving. To compare, we also compute the partisan variance of individual campaign contributions. The variance in individual campaign contributions has not increased over time. However, they behave very differently from corporations. Whereas most of the variance

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[2]Since direct contributions from firms or labor unions to political candidates or political parties are banned, corporations funnel their political contributions through legal entities known as Political Action Committees

in corporate giving is within PACs, most of the variance in individual giving is across individuals. In other words, corporate PACs tend to give relatively evenly to both sides of the political aisle whereas individuals tend to give only to one side. Borrowing terminology from (Grossman and Helpman (2001)), our findings are consistent with individuals operating according to an electoral motive for giving and corporations operating according to an influence motive. In other words, our findings are consistent with individuals giving to influence election outcomes but corporations contribution giving in order to gain access to politicians and gain influence over policy. As a result, whereas there has been substantial scope for an increase in the polarization of giving among corporations, that has not been the case for individuals.

One exception to the difference in behavior across firms and individuals is that large donors operate more like corporations. They give in a much more bipartisan fashion. We also have seen an increase in polarization for this group in the 2020 elections, primarily across different states. Large donors in some states increased their giving to Democrats while in other states, individuals moved to giving more to Republicans.

The paper proceeds as follows: in the next section, we present our methods; in Section III, we discuss the data we use; in Section IV, we present our main findings, and finally in Section V, we make suggestions for future research and conclude.

II.   Methods

This paper is descriptive. It computes the partisan variance of corporate as well as individual giving over time and decomposes it among sectors down to the level of the PAC for corporate contributions and geographically down to the citizen for individual contributions. We now describe our decomposition methods in brief.

Following (Kaplan, Spenkuch and Sullivan (2022)), we first compute the Democratic two-party partisan share of contributions:

(1)
$$C_{Share,D} = \frac{\sum_p C_{pd}}{\sum_p C_{pd} + \sum_p C_{pr}}$$

where $C_{Share,D}$ is the share in contributions of the Democrats, C_{pd} is the dollar value of a contribution from PAC p (or person p) to a Democrat and C_{pr} is the dollar of a contribution from PAC p (or person p) to a Republican. We then compute the variance of overall contributions:

(2)
$$V_c = C_{Share,D}(1 - C_{Share,D})$$

We similarly compute the variance of the partisan contribution share within each sector. We can subsequently compute the fraction of the variation that is across sectors by subtracting a weighted sum of sector-specific variances. The two sets of weights we will use are (1.) equal-weighted where every individual unit (a PAC or a person) gets equal weight; in that case the weights will be 'population shares'[3] and (2.) dollar-weighted where each individual is weighted by the fraction of total dollars that they contribution. Our decomposition can thus be noted as:

(3)
$$\underbrace{V(\bar{\mathbf{C}}_1, ..., \bar{\mathbf{C}}_p, ..., \bar{\mathbf{C}}_p)}_{\text{heterogeneity across sectors}} = \underbrace{V(\mathbf{x})}_{\text{overall heterogeneity}} - \underbrace{\sum_{c=1}^{C} \frac{n_c}{n} V(\mathbf{C}_p)}_{\text{heterogeneity within sectors}} = \sum_{c=1}^{C} \frac{n_c}{n} (v_c - v)^2.$$

Note that this equations suggests two ways to compute the across-sector share of the variance. We can compute it as a residual by computing the total variance and subtracting out the weighted sum of the individual within-sector variances.

[3]In the case of individuals, weighting will be by the population of voters; in the case of corporations, weighting will be by the number of firms

Alternatively, we can compute it directly as the variance in the within-sector variances. We can do this by computing the weighted means of the within-sector variances and then computing the variance of the variances.

Additionally note that each within-sector variance can further be decomposed (for example into individual PACs). The variance index can allow arbitrary finite levels of nested decomposition. After decomposing PAC contributions into sectors, we will further decompose them into industry categories which we refer to simply as categories. These categories are determined by opensecrets.org from whom we get the PAC contribution data. Finally, we will further decompose category contributions down to the individual level. Though we have been discussing the decomposition of contributions as broken down by sector, when we look at individual contributors, we will instead break them down by state, then further by zip-code before decomposing them down to the individual level.

Kaplan, Spenkuch and Sullivan (2022) show that this variance index is the unique (up to linear transformation) index which satisfies seven axioms: (1.) *Normalization*: the value of the index is zero when all inputs to the index are identical, (2.) *Translation Invariance*: adding a constant to all inputs to the index does not alter the index, (3.) *Anonymity*: permuting two inputs to the index leaves the value of the index unchanged, (4.) *Population Independence*: Doubling the inputs to the index by adding a second copy of each element of the index leaves the value of the index unchanged, (5.) *Continuity*: The index is a continuous function of its inputs, (6.) *Spread Responsiveness*: Adding to a higher-valued input to the index while subtracting from a lower-valued input to the index weakly increases the value of the index, and (7.) *Decomposability*: For any partition of the index into two components, it is possible to express the value of the index as a weighted sum of the values of the index for the two elements of the partition.

III. Data

Our campaign contribution data for individuals comes from the Federal Election Commission and only contains contributions for federal elections. For each contribution, the data contains exact name of donor, address of donor including zip-code, name and political party of the recipient of the contribution, and date of the contribution. We include both contributions to candidates as well as to Democratic and Republican party organizations. We exclude contributions to third party and independent candidates as well as to third party political parties. However, these amount to less than 1% of total contributions. We note that federal election law mandates that political campaigns must report when an individual gives more than $200 in contributions over an electoral cycle. However, smaller amounts may be omitted. In practice, some campaign have historically reported all contributions and others have omitted small contributions. In recent years, with the rise of party-initiated online portals for making political donations (Act Blue and Win Red), most small donations are now made online. Act Blue started in the mid-2000s but only took off starting in 2014. Win Red made its first appearance for the 2020 electoral cycle. Since both Act Blue and Win Red have increased reporting of small donors, this could potentially lead to trends over time in measured polarization just due to the increase in reporting. However, since we find no trend in individual contributions except for large donors for whom reporting has not changed as a result of the rise of online contributions, we are not concerned about reporting issues.

There is one other type of campaign contribution by individuals that does not get captured in our data: independent expenditures. Independent expenditures are expenditures made by individuals in favor of a candidate but made subject to limitations in coordination with the campaign or political parties. These are made by very wealthy individuals who may, for example, pay out-of-pocket for a political advertisement supporting a candidate. After the 2010 Citizens United v. FEC decision by the Supreme Court and the subsequent 2010 Speech Now

v. FEC decision made by the D.C. district court, individuals have been allowed to contribute unlimited amounts of money in support of a candidate as long as they do not give the money to the candidate or to a political party and as long as they follow some guidelines limiting coordination with the political campaign. Unfortunately, there is no way for us to track this now very large source of effective campaign contributions. Nonetheless, we do not see a large change in our results from 2008 to 2012 when limitations on independent expenditures were dramatically relaxed.

For corporate contributions, we use the data from FEC (Federal Election Commission) processed by opensecrets.org. Opensecrets processes and cleans the data making them much easier to use. Among other things, they standardize classification of sectors. These contributions data contain amounts given by PAC and recipient, date of the contribution, and industry. Non-reporting is less of an issue for corporations except for individuals contributions by owners and managers which we do not observe with the data that we have[4].

IV.   Results

In this section we present our results. They consist of plotting the components of our decomposition of the variance of partisan shares in campaign contributions for both individuals and for firms over time from 1990 through 2020. We begin by showing the raw time series, broken down into contributions by individuals and contributions by PACs. The data are displayed in Figure 1.

Figure 1 is based upon the sample we use in the paper. We therefore exclude contributions to third party as well as independent candidates. A few facts are worth noting. First, growth in contributions has been rapid. Even excluding

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[4]In order to separate out contributions by managers and owners from other individual contributors, we would need lists of owners and managers attached to firms and PACs. For managers, this is potentially obtainable from 10K forms if a firm is publicly tradable. However, it would not generally be feasible for closely held firms. Since data on owners of firms is not in general available, particularly for publicly traded firms, it would be extremely difficult to come up with measures of the contribution behavior of owners except in a limited number of circumstances where ownership is publicly known.

contributions for the 2020 elections, for which individual contributions roughly doubled relative to either of the previous elections, contributions roughly quadrupled from the year 2000 to the year 2016. Moreover, the rate of growth in contributions made by individuals was similar to that for PACs. Second, though the rate of growth for PAC contributions was much higher than that for individual contributions in the 1990s, rates of growth have converged since 2000. Third, as a consequence of the more rapid PAC growth in the 1990s, PAC contributions were larger in total than individual contributions throughout most of the period of our sample. There was near full convergence in contributions for the 2020 general election, probably due to the high level of mobilization by both Democrats and Republicans. Fourth, the total amount of contributions totalled around 12 billion dollars (8 billion in PAC contributions and 4 in individual contributions) in the election years 2016 and 2018 and around 16 billion in 2020, split evenly by type of contribution.

A. *Corporate Contributions*

Intuitively, our index achieves its minimum at zero. This would only happen if all PACs contributed only to one side in which case there would be no variance in the fraction of dollars going to the Democrats (or Republicans). The variance index achieves its maximum at 0.25; 0.25 is the theoretical maximum for our index given that a Bernoulli probability distribution maximizes its variance at 0.25.In this case, the aggregate probability and thus fraction of a dollar going to the Democrats is the same as for the Republicans. We then break down this variance into sub-components. To make things simple, suppose we directly decomposed to the level of the PAC. At one extreme, if every PAC contributed equally to the Republicans and Democrats, the variance within each PAC would be at the maximum, 0.25, and the variance across PACs would thus be null. This would reflect highly bipartisan PACs. The opposite extreme would be if every PAC gave only to one party in which case there would no variance in giving across parties

Figure 1. : Aggregate Contributions by Individuals and PACs Over Time

Donations from individuals and PACs to Democrats and Republicans
(Millions of dollars)
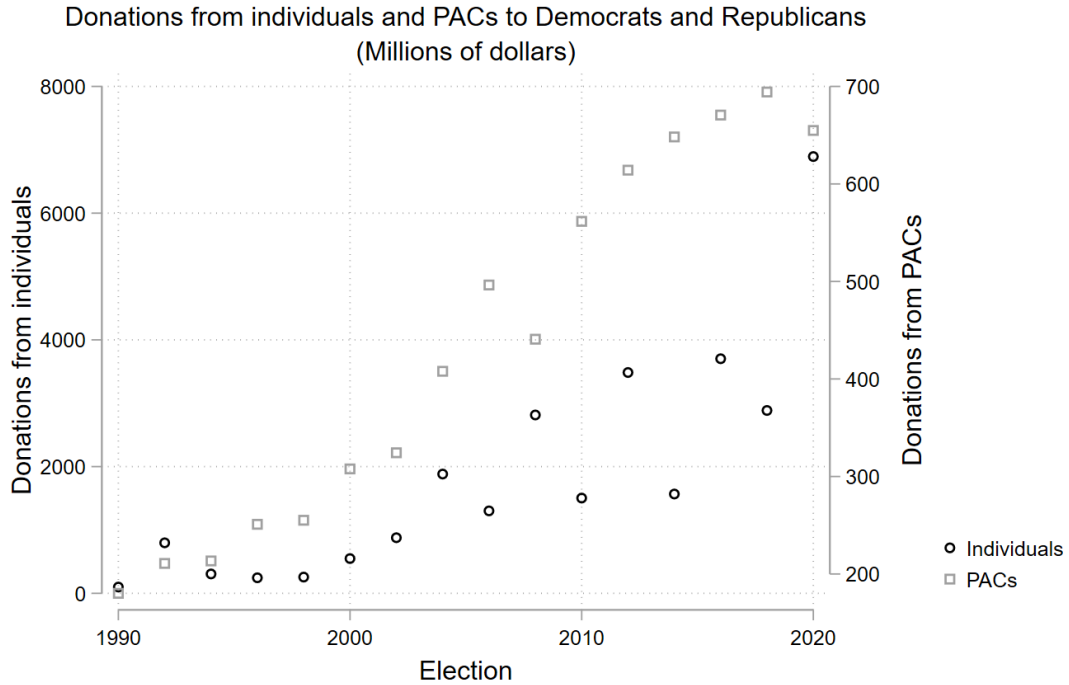
within each PAC and all of the variation would be across PACs. This would reflect highly partisan PACs. For numbers in between, comparing the fraction of the variation between relative to within PACs will tell us how much the degree to which contributions are bipartisan because PACs are bipartisan as opposed to PACs are partisan but there are PACs on each side the political aisle.

We present two variants of the variance index: PAC-weighted and dollar-weighted. The PAC-weighted is unweighted given that the data is reported at the PAC level. The PAC-weighted index is interpretable as the variation in partisan giving for the average PAC. The dollar-weighted index is interpretable as the variation in partisan giving for the average dollar. To the degree the two yield different results, the dollar-weighted index reflects the behavior of larger PACs to

a much greater degree.

We now show our main results, focusing first on corporate contributions through PACs. We begin by showing Figure 2. Surprisingly, corporate contributions have not become more polarized over time[5]. When we look at the PAC-weighted decomposition where each PAC gets equal weight, we see a number of salient facts. First, the decomposition sums almost exactly to 0.25 in all years. This means that corporations as a whole gives roughly equally to Democrats and Republicans. Second, all the components of the decomposition are flat over time. This means that the fraction of the variation in corporate giving attributable to differences across sectors, across industries within sectors, across categories within industries, across PACs within categories, and within PACs are very stable over time. Third, the vast majority of the variation is within individual PACs. This means that most PACs give relatively evenly to both sides and that there is very little variation across categories, industries or even sectors in how evenly PACs give to both parties.

We now turn to the dollar-weighted decomposition. Here we see that from 1996 onwards, there is an essentially even split of contributions between Democrats and Republicans. There is more variation across PACs than in the individually-weighted results. This means that large PACs are more partisan and more heterogeneously partisan than small PACs. One particularly salient difference between the dollar-weighted and individually weighted results is the large rise in the within-PAC fraction of the variation. The nadir of within-PAC variation is 0.15 (about 60% of total variation) in 1996 and the peak is around 0.2 in 2020. Thus, large-dollar PACs have been historically more partisan than smaller-dollar PACs. However, different from small-dollar PACs, they have been becoming *less* not more partisan over time. These results are shown below in Figure 3.

We additionally show the decompositions individually for each of 12 sectors:

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[5]In the Appendix, we show our estimates have not become noisier due to a decline in the number of contributors. The number of contributions has increased over time and the number of contributors has remained remarkably stable.

Figure 2. : Variance of PAC Contributions: Individual-Weighted
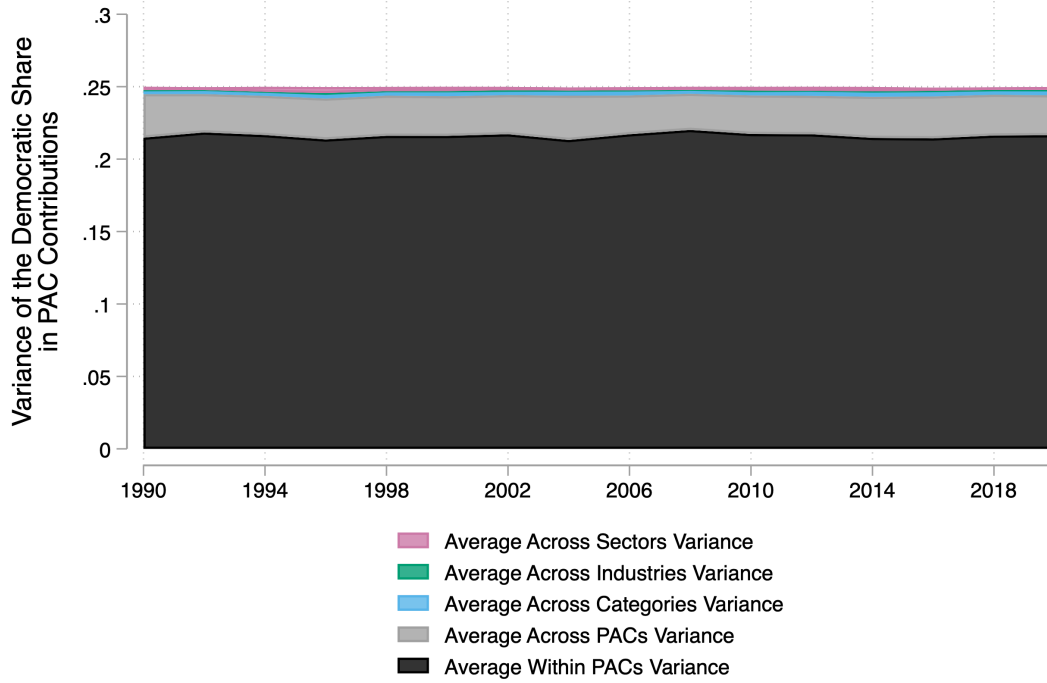
Agriculture, Communications, Construction, Defense, Energy, Finance, Health, Labor, Lawyers and Lobbyists, Miscellaneous Business, Transportation and Other. Labor here refers to labor unions and thus is not a sector in the traditional sense. We show dollar-weighted decomposition figures individually for each of these sectors in Appendix A.

We note that most industries give relatively evenly to both sides of the aisle. We can see this because the aggregate variances are 0.25 for most industries meaning that the aggregate probability of contributing to a Democrat is 50%.

One exception to this bipartisan pattern of giving is the labor sector, comprised of labor unions which tends to give predominantly to Democrats. Even labor, however, has become more bipartisan over time. In 2020, labor reached its peak

Figure 3. : Variance of PAC Contributions: Dollar-Weighted
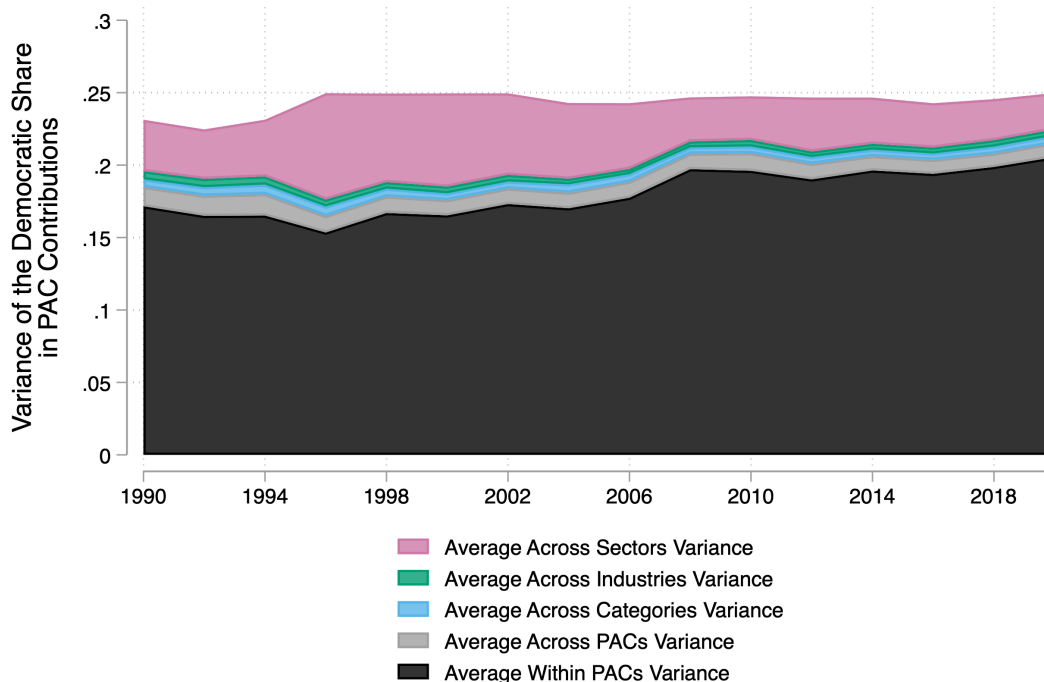
of 0.12; this is a large rise given that in 1994, it reached its nadir of 0.04. The growth in the aggregate variance reflects a greater fraction of union contributions going to the Republican party.

In contrast, a few sectors have become more partisan on average over time. All three follow a similar pattern of bipartisanship in the 2008 and 2010 elections when Obama was elected and in the first election after Obama was elected. These three sectors are: Agribusiness, Construction, and Energy of Natural Resources. To a smaller degree, there is some evidence of increased partisanship in the Transportation industry and the industry categorized as Miscellaneous[6]

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[6] "Miscellaneous Business", as classified by the Federal Election Commission includes beer, wine, food and beverages, business services, retail sales, and a few other manufacturing-related industries. "Other" includes the education and non-profit sectors.

Figure 4. : Variance of Labor Contributions: Dollar-Weighted
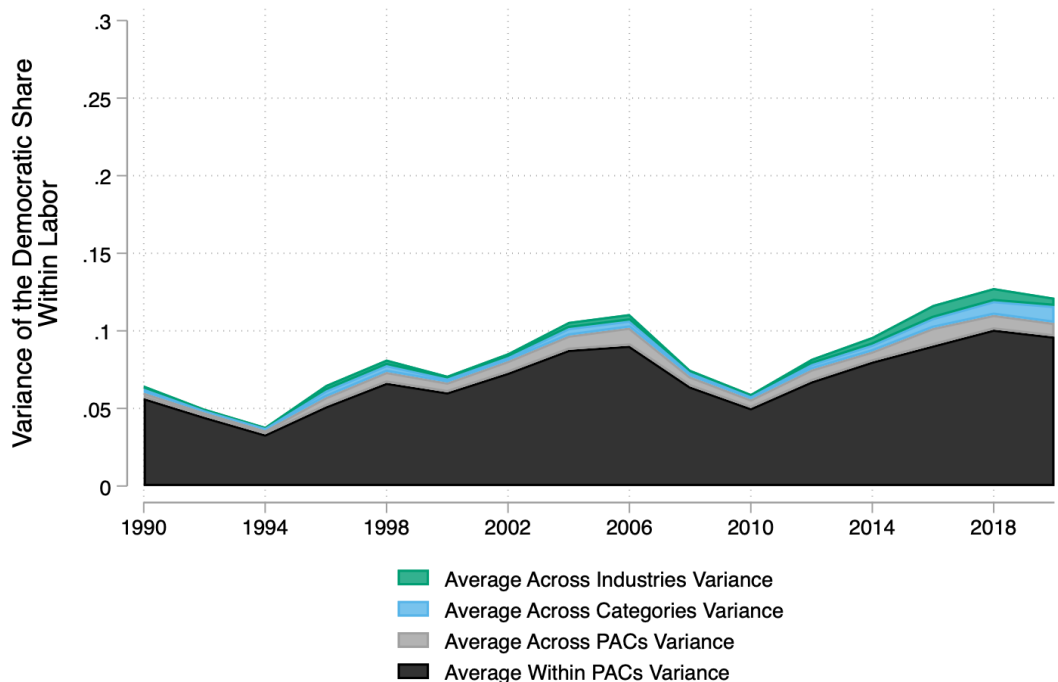
In Figure 5, we show the dollar-weighted decomposition for the Energy and Natural Resources sector, which tends to contribute more to the Republican party currently. Back in the early, 1990s, the energy sector was completely bipartisan and most of the variation was within PAC so that most large PACs were also quite bipartisan in their contribution behavior. Interestingly, the energy sector had a brief period of bipartisan giving in the 2008 and 2010 elections after having been more partisan since the 1996 election and then returned to a more partisan pattern of giving starting in 2012. In particular, from the beginning of our series in 1990 until 1994, the partisan contribution variance in the Energy and Natural Resources industry was at the maximum variance of 0.25. It then fell but has been rising in 2018 and again in 2020. It is currently at 0.22. The residual and

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sizable "Other" sector has also become more bipartisan over time.

Figure 5. : Variance of Energy of Natural Resources Contributions: Dollar-Weighted
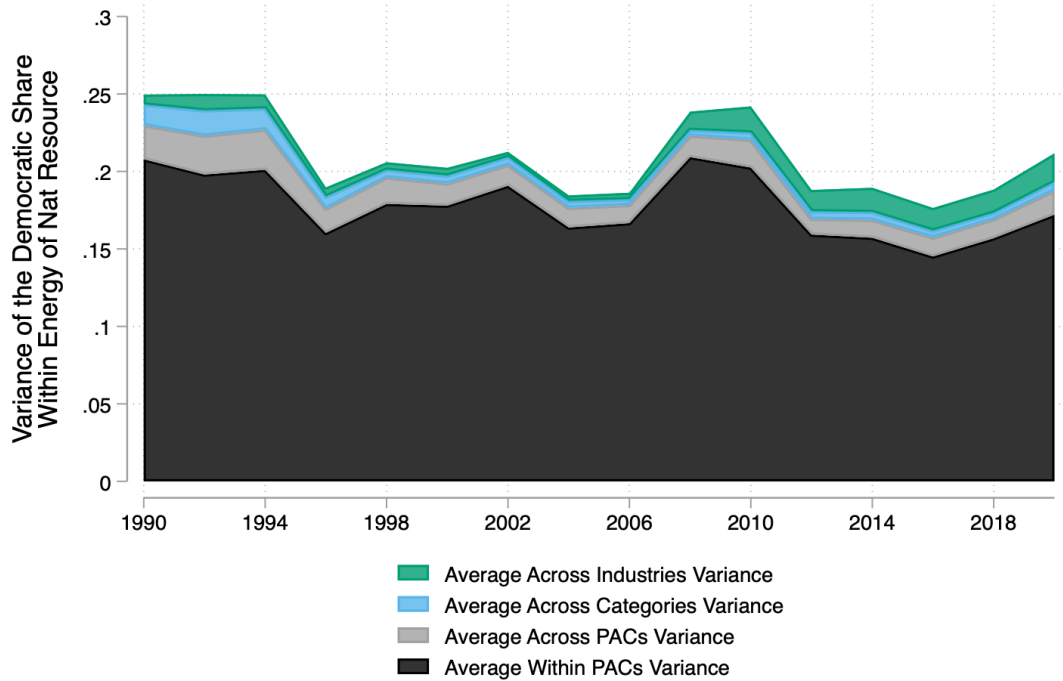

Mainly, most PACs within the industry have become more partisan over time. We can see this because the main decline is in the within PAC component of the variance. In fact, the across industry component of the variance has slightly increased, probably reflecting the rise of renewable energy firms who favor the Democrats.

Looking within the Energy and Natural Resource sector, the Oil and Natural Gas Industry has gone from a dollar-weighted variance of over 0.24 to around 0.1 over the past 30 years. The decline, again, is largely from the within PAC component, reflecting a broad decline across PACs in the bipartisanship of giving.

These results are in Figure 6. The Mining industry, also within the Energy and Natural Resources sector, has experienced a very similar increase in partisanship. We show these results in the Appendix.

Figure 6. : Variance of Oil and Natural Gas Contributions: Dollar-Weighted
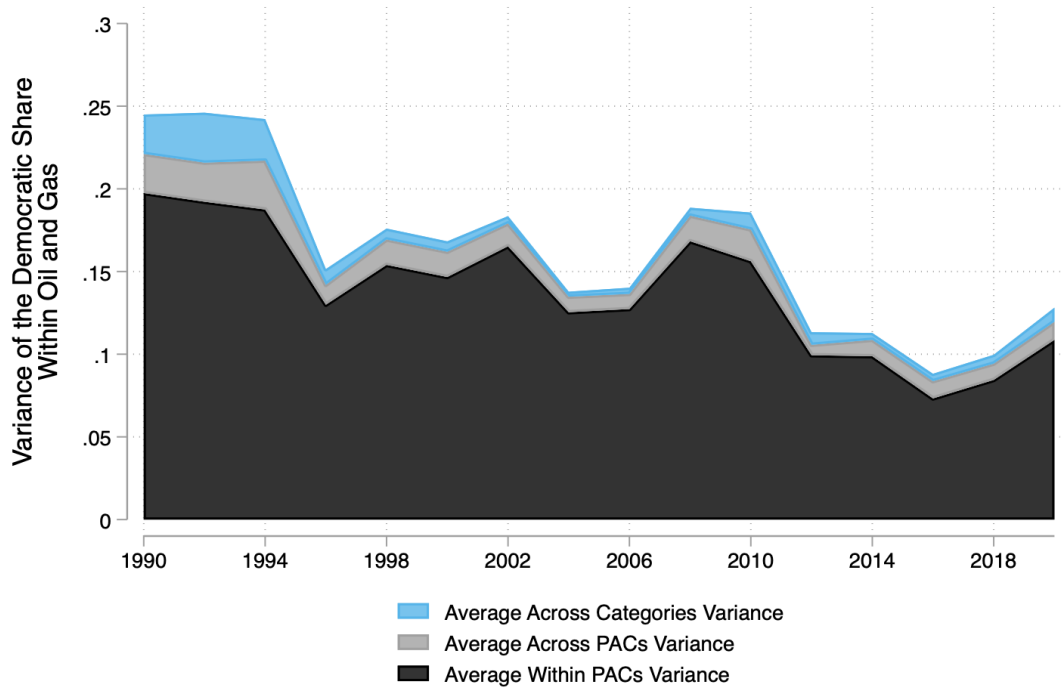
Overall, by looking at industries separately, we can see that some sectors have become increasingly partisan over time and some have become less partisan over time. Overall, however, aggregate contributions have remained largely bipartisan; if anything, sectors on average have been becoming *less* not more partisan over time. Our findings that political polarization along partisan lines have not, on average, impacted corporate giving is quite robust. We now turn to individual contributions.

B. Individual Contributions

We now move from corporations to individuals. Individuals have an opposite pattern of giving. On aggregate, they are similar in that the overall variance of giving for individual contributions, similar to PACs. It is very close to 0.25 in all years with the exception of 1996 when the variance dipped to approximately 0.22. Thus, on aggregate, there are similar amounts given to the Democratic and Republican parties. However, very different from the case of corporations, almost none of that variance is within individuals and around $\frac{4}{5}^{ths}$ is across individuals within zip-codes. The cross-zip-code within state component of the variance is the next largest component of the decomposition in all years followed by the across-state component of the variance. This means that most individuals are partisan and most partisan differentiation is not highly geographically clustered.

We note that the within-individual component of the variance is an upper bound of the within-individual component. This is because often husbands and wives make donations in their spouse's name. To the degree that spouses differ in political preferences, an individual's contribution patterns may look more heterogeneous than they actually are.

There are not strong trends over time in our variance decomposition. The most noticeable trend is that there has been a decline in the within-individual component of the variance. People have become even more one-sided in their contribution patterns. This could reflect both greater partisan attachment of individuals as well as greater degrees of assortative mating on politics if contributions are sometimes made by only one person in a household. The peak within-variance was slightly over 0.02 in 1992. However, it is currently a trivial fraction of the overall variance in individual campaign contributions.

These patterns are similar to prior results on the spatial polarization of party registration and of voting Kaplan, Spenkuch and Sullivan (2022), where individuals inherently are are perfectly polarized; you cannot register for more than one party and cannot vote for more than one party in a given election (i.e. for presi-

Figure 7. : Variance of Individual Contributions: Person-Weighted
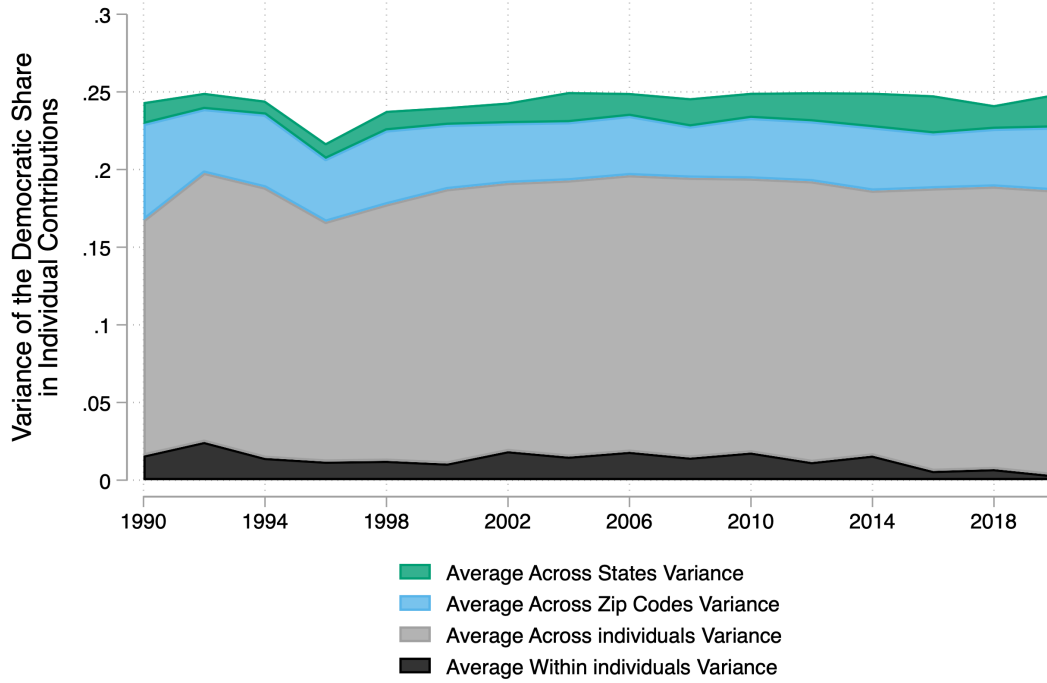
dent). This, however, is mechanical for institutional reasons. Kaplan, Spenkuch and Sullivan (2022) find, however, that there is a strong trend over time towards increased spatial polarization particularly at the most local levels such as precincts. This is different from what we see in contributions. One difference between contributing and voting or registering to vote is that there is substantially more selection into contributions. A small minority of citizens contribute whereas a majority of eligible voters do vote in general presidential elections. Moreover, contributors have been shown to pay more attention to politics (Snyder Jr and Strömberg (2010)). Thus, the fact that we some differences is not surprising.

We now turn to our dollar-weighted index of individual contributions. This is presented in Figure 8. As of 2012, 25% of contributions came from the top 0.01%

of donors and almost half come from donors who gave more than $1500 in total (Bonica et al. (2013)). Thus, given the highly concentrated nature of political contributions, reweighting our index from people to dollars dramatically shifts the the mean individual whose behavior the index is capturing[7].

Figure 8. : Variance of Individual Contributions: Dollar-Weighted
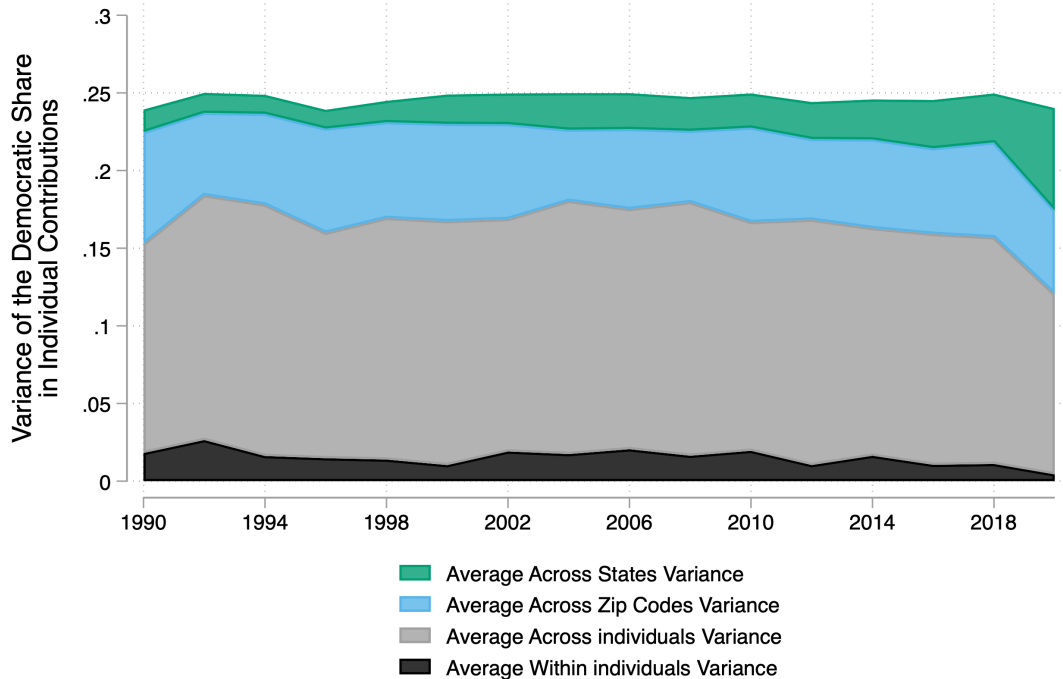
The results from Figure 8 look overall similar to those from Figure 7 with some notable differences. First, the across-individual, within zip-code fraction of the variance is smaller than for the person-weighted results. This reflects greater homogeneity in contribution patterns within zip codes and larger variances across zip-codes within states as well as across states. The within-individual components

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[7]Again, this is not incorporating independent contributions which are almost certainly substantially more skewed the individual contributions which get reported to the FEC

are quite similar whether we weight by people or by dollars. The across-zip-code component of the variance is around 60% of the variance as opposed to around 80% of the individual-weighted variance. Second, there are stronger trends over time in the across-state component of individual giving when dollar-weighted. There was a particularly large increase in 2020. As of 2020, the across-state component of the variance was over 0.05 (more than 20% of the total variance). This fraction of the variance has more than quadrupled since 1990 when the across-state component of the variance was around 0.01. Thus richer individuals in different states are increasingly contributing to different parties even though they aren't polarizing across zip-codes within states.

One possible reason for the lower overall fraction of the variance attributable to differences across individuals within zip-codes for the dollar-weighted specification is that individuals often tend to give only to one party and thus there is greater homogeneity still within zip-codes. This is particularly true given the fact that with dollar-weighted indices, a much smaller number of zip-codes will contribute a much larger fraction of the overall variance. Nonetheless, there is no reason to believe that these differences between dollar-weighted and individual-weighted indices can explain the differential trends over time. Overall, it does seem as though some richer individuals are becoming more polarized across states over time and particularly rapidly in recent years. However, for most individuals, most of the variance in giving is within zip-codes.

V. Discussion and Conclusion

In this final section, we summarize our results and try to think more broadly about them. Our overall findings are that, in contrast to affective polarization, there has not been a rise in polarization across firms. Firms remain largely bipartisan entities, likely because they are more interested in affecting legislation than in electing individuals who share their economic and political philosophy. Moreover, there has additionally not been a substantive rise in the spatial polarization

across individual campaign contributions with the exception of a slow secular increase in the polarization across states for large donors which has accelerated in the past few years.

Does this mean that firms are one component of society that has largely been unaffected from political polarization? This view certainly differs from the impression one would get from the public press with discussions of conservative corporations, of woke corporations, and of boycotts.

We see two possible answers to the question we have just posed. The first is that firms are sufficiently strategic that they are now and will likely remain nonpartisan (Bertrand et al. (2020); Thieme (2020)). They give to powerful legislators, potentially in exchange for favors though influence effects have been difficult to document (Ansolabehere, De Figueiredo and Snyder Jr (2003); Bertrand et al. (2020, 2023); Snyder Jr (1990)).

A second possibility, however, is that firms spend in a bipartisan fashion because patterns of campaign contributions are *not* salient for voters. The news does not generally shed light on patterns of the giving patterns of individual corporations in contrast to some of the public positions that corporations sometimes take on divisive social issues such as Apple on gay marriage in Indiana, Hobby Lobby on birth control, Delta on voting rights legislation in Georgia, and Disney on education in Florida. If political behavior of firms is now part of the bundle which is demanded by and purchased by consumers, companies may react to changing demand. However, they may continue to contribute in a bipartisan fashion for strategic reasons.

Put another way, we show that firms have not polarized in the way that they contribute to political campaigns. However, there may be other dimensions which are more observable to voters which are more observable to consumers and thus where consumers may influence corporate behavior. This would be a demand-side channel of influence if it exists. On the other hand, it is also possible that managers and owners have become more polarized and may exert influence over

firms but relegated to areas where doing so is profitable. In particular, we think that future work could look at corporate advertising. Do firms market themselves increasingly to politically different groups of citizens in different venues, and using different language and symbols? These are all potentially observable to empirical researchers. Moreover, it is possible that companies are increasingly taking public positions on salient political issues which are not directly relevant to corporate profits. This, also, is potentially observable through media reporting.

We also think that if future research does find an increase in corporate polarization, that it would be useful to disentangle demand and supply side motives by comparing final goods and service industries where consumers are customers to intermediate goods industries where other industries are the customers[8]. We think that future work should focus on these aspects of firm political behavior to see whether contributions reflect an absence of polarization of firms or whether firms polarize in other ways.

As a final comment, we also think that if future research reveals evidence of demand-side effects of political polarization, then market structure may impact political behavior of firms. As an example, firms in less competitive markets may be more worried about cannibalization of consumer demand and may act in a more politically neutral fashion than firms in market structures that are more competitive. These types of questions are potentially both empirically and theoretically interesting.

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[8]Of course, though less likely, it is possible that corporations might have political preferences which may affect demand and thus political behavior of firms.

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A. Appendix Figures and Tables

Figure A1. : Number of Industry PACs Over Time

Number of industry PACs in the OpenSecrets data
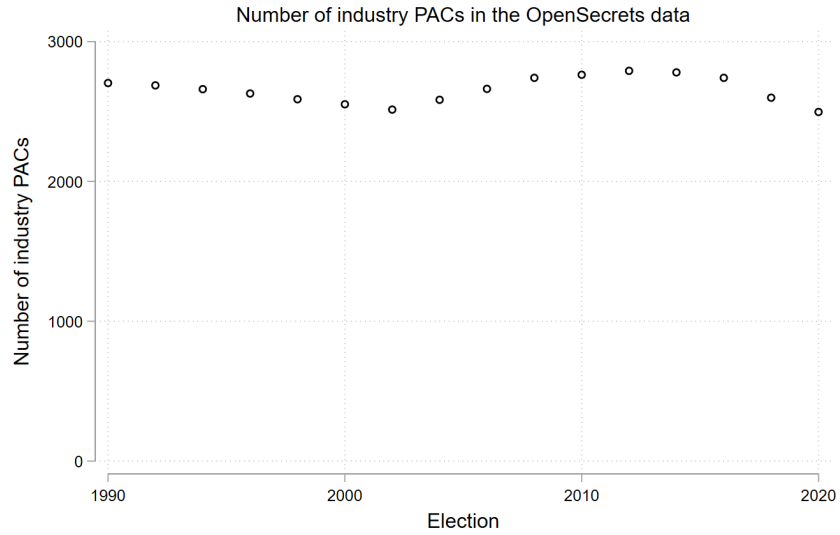
Figure A2. : Number of Donations by Industry PACs Over Time

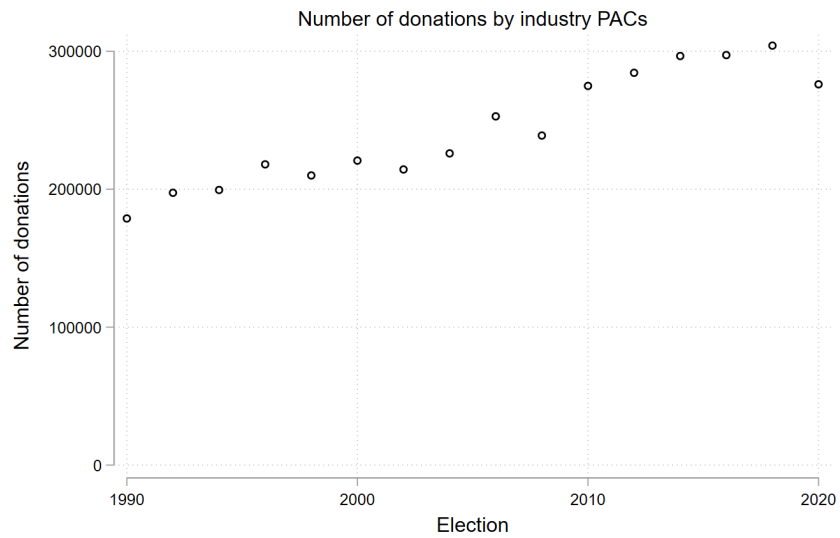Number of donations by industry PACs

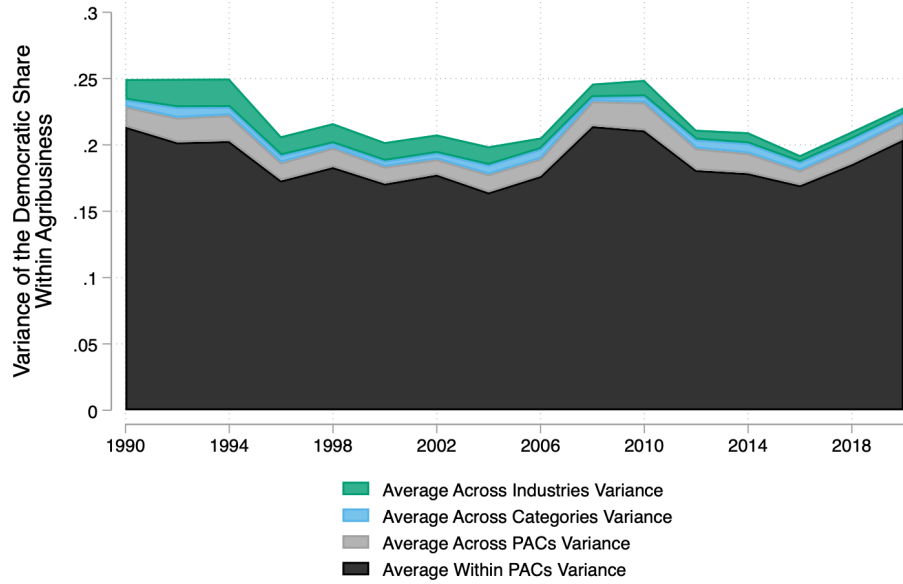Figure A3. : Variance of Agriculture Business: Dollar-Weighted

Figure A4. : Variance of Communication or Electronics: Dollar-Weighted

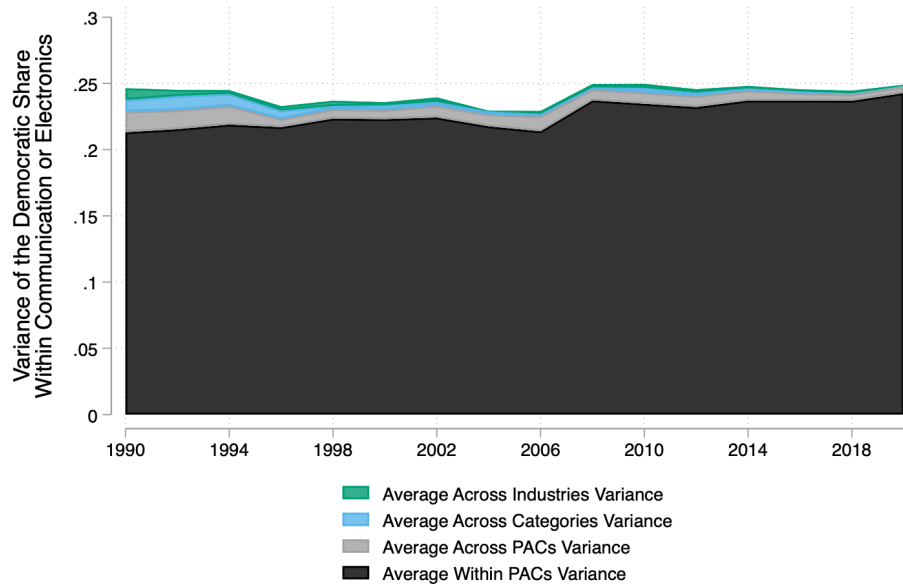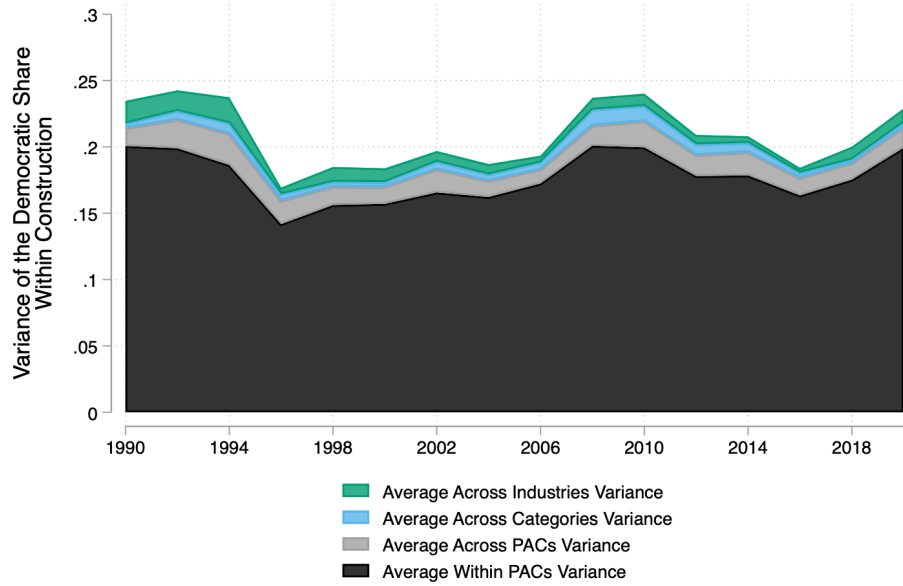Figure A5. : Variance of Construction: Dollar-Weighted
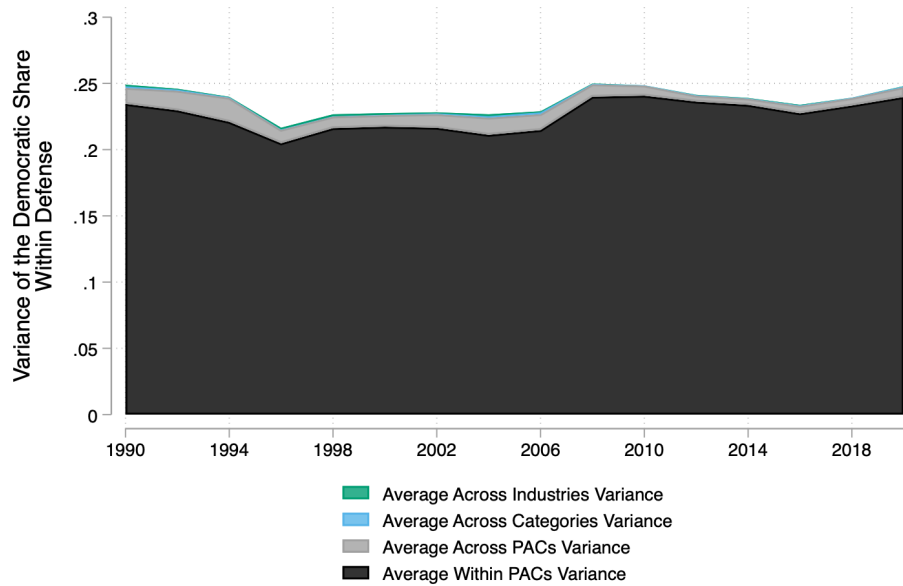

Figure A6. : Variance of Defense: Dollar-Weighted

Figure A7. : Variance of Finance/Insurance/Real Estate: Dollar-Weighted
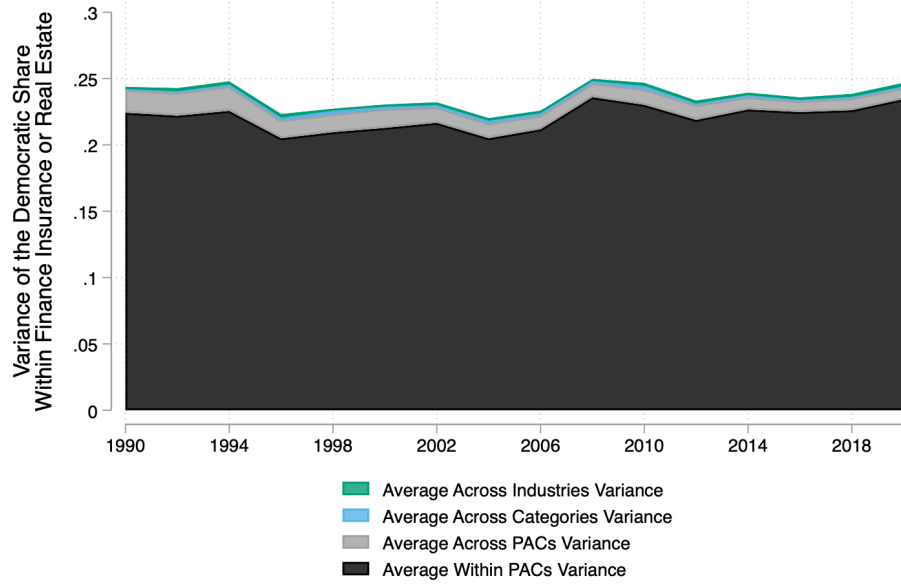
Figure A8. : Variance of Health: Dollar-Weighted
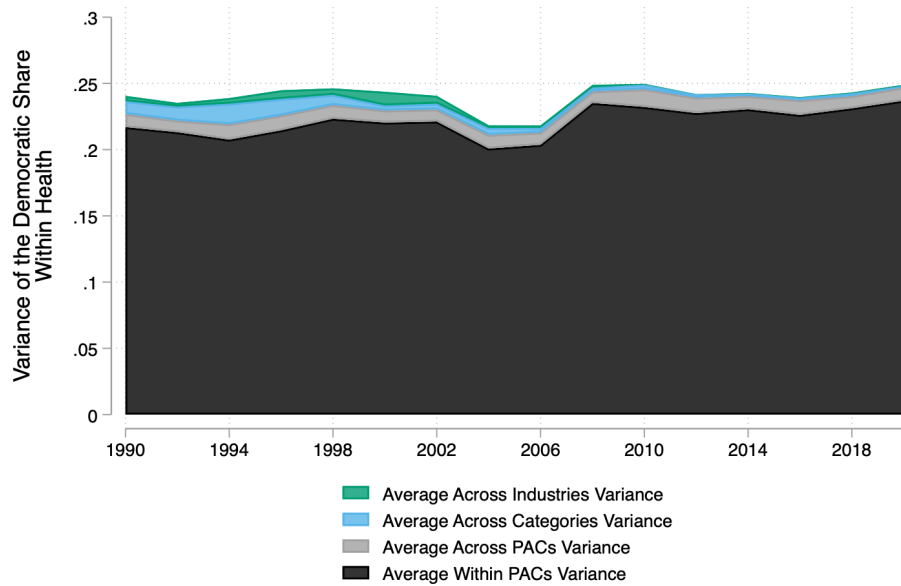
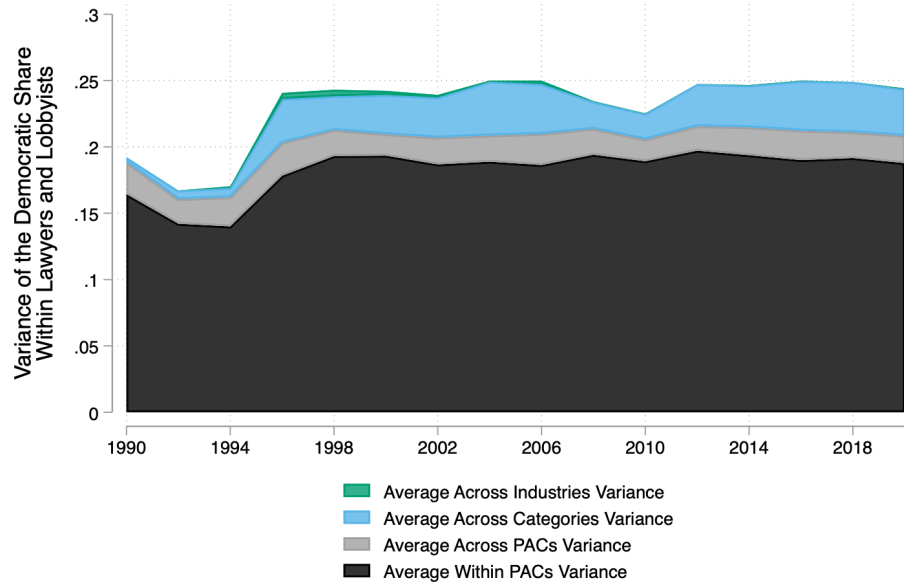Figure A9. : Variance of Lawyers and Lobbyists: Dollar-Weighted

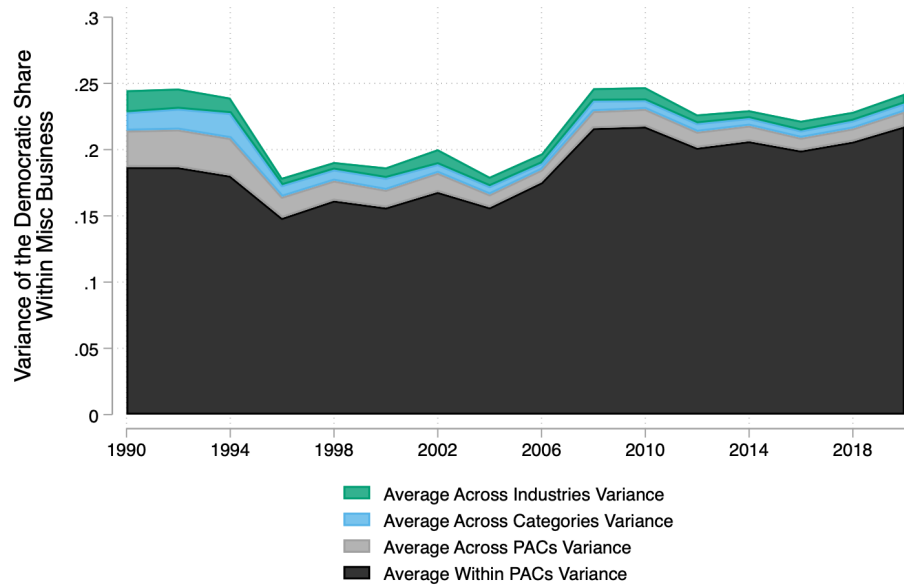Figure A10. : Variance of Miscellaneous Business: Dollar-Weighted

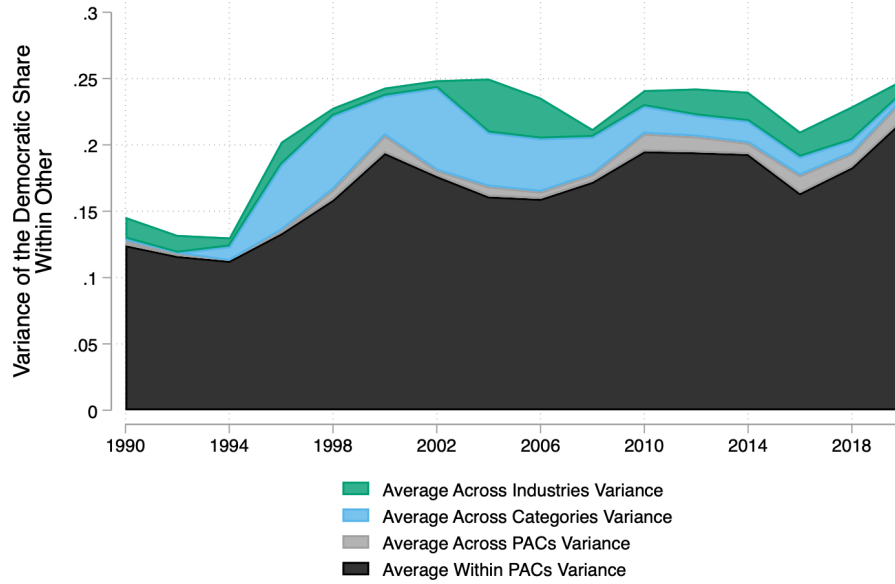Figure A11. : Variance of Other: Dollar-Weighted
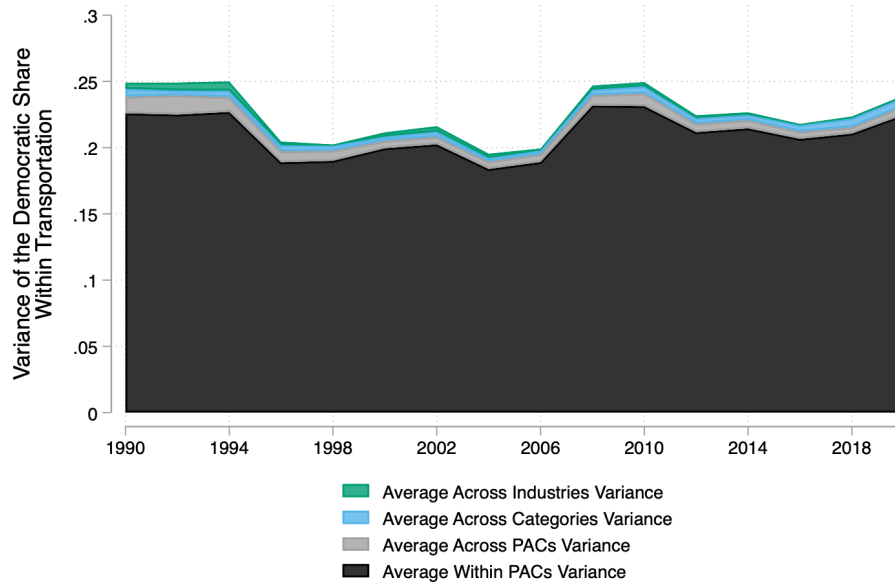

Figure A12. : Variance of Transportation: Dollar-Weighted

Figure A13. : Variance of Mining: Dollar-Weighted