The Politics of Financialization in the United States, 1949-2005: Supplemental File

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Measuring Financial Industry Mobilization

As noted, measuring financial industry political mobilization is not straightforward because the commonly used measures of business political activity are not available prior to the late 1970s. With the assistance of Lee Drutman, and at the advice of Chloe Thurston, I decided to use the ABA Banking Journal (which has changed names a number of times over the years) to develop a measure of the political mobilization of the financial sector. The ABA Journal was manually searched and the titles of all items were read to infer whether the article was about politics and policy. In ambiguous cases the actual text of the article was examined Other financial entities were obviously involved in the politics of financialization, and they did not always agree with the ABA, which represents large banks. For example, the savings and loan and companies and insurance industry sometimes saw themselves on the opposite side of financial issues. But the political mobilization of these sectors is likely highly correlated with the mobilization of the ABA and on the major regulatory issues, the large banks were the most forceful voice for change since they viewed themselves as disadvantaged by the current regulatory regime (see Krippner's work). Form a practical standpoint, unlike other potential sources, the ABA Journal existed for the entire time period of this study (with some name changes) which allows for a reliable longitudinal measure.

In a qualitative sense it was clear that politics began to preoccupy the ABA to a much greater degree as the decades wore on. Prior to the late 1950s there was virtually no attention to politics or policy. In 1959 the ABA Journal published an article called "Banking and Politics Do Mix", wherein the authors seek to convince bankers that it is appropriate for them to be engaged in politics. As late as July of 1967 the ABA seemed to have to sell bankers on the idea of political action with articles with titles like "Your political Responsibility" and "A Banker's Role in Politics." By the 1980s there were numerous articles describing ABA political action, but no need to convince group members that such action was necessary or appropriate. Based on this process

of examining the ABA Journal I produced a quantitative measure of how focused the financial industry was on politics compared to other matters - the percentage of items related to politics and policy in the ABA Banking Journal (versus issues like the adoption of new technologies, where to place branches, how to design lobbies, etc.).

The potential weakness of this approach is that the focus on politics is itself indirectly endogenous to financialization since with increasing financialization there is likely to be more Congressional attention to financial issues, and this attention can drive the ABA Journal's coverage of politics. Therefore, based partly on the recommendation of a reviewer I developed a measure of the "surprise" or "unexpected" attention to politics above and beyond what would be expected by the attention to financial issues in the current Congress and past realizations of ABA attention to politics. Essentially, I wanted to develop a measure of ABA political attention purged of Congressional issue attention and past ABA political attention Following the recommendation of a reviewer and with inspiration from Alesina, Cohen and Roubini (1993), I used ARIMA modeling to predict current ABA political attention using past ABA issue attention and current Congressional issue attention. The residuals from this ARIMA model constitute "unexpected" political attention, and it is exogenous with respect to the current issue agenda (and thus financialization).

To measure current Congressional issue attention I use the number of hearings focused on the FIRE sector, which is a common way to measure the issue agenda (e.g. Baumgartner and Jones 1993). To produce this hearing measure I electronically searched the Congressional Inform Services hearings database for witnesses testifying from organizations with the string "bank" or "insurance" in the organization's name, and created a count of the number of hearings with such a witness. This approach can include organizations like non-profits interested in insurance, or blood banks, but a detailed check of the years 1995-2000 showed that close to 100 percent of the organizations measured were actual "financial" or "insurance" companies or organizations representing these companies.

The raw ABA political focus variable (i.e. percentage of items related to politics and policy) and the hearings variable, as well as the exogenized political attention variable, are presented in the figure below (standardized so they appear on the same metric). We see that ABA attention to politics does appear to follow Congressional attention quite closely (r=0.70), but that the "exogenized" ABA measure is very similar to the gap between the two lines, though with some additional "noise" added by the ar terms. Most importantly, we can see that the FIRE mobilization variable is not very closely related to the current role of financial issues on the political agenda.

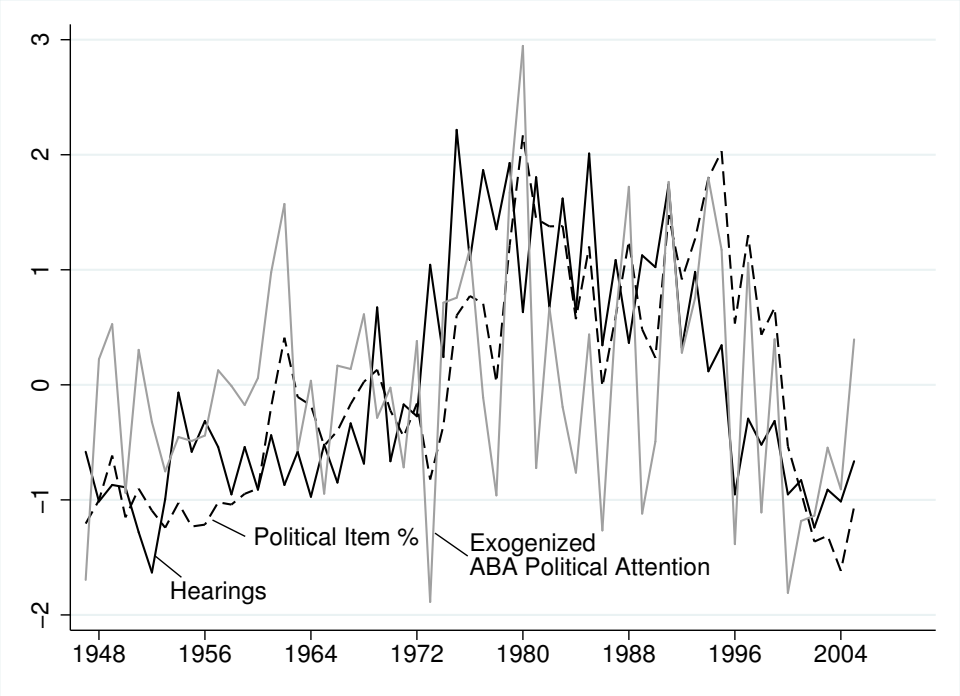

Figure 1: The Percentage of the ABA Journal Devoted to Politics and Policy and Financial Industry Congressional Hearings

Ideology Models

As can be seen in Figure 2 it is clear that shifts in the ideology of the "pivotal" member are closely associated with policy control of the institutions of government (the dramatic shifts are all a result of such changes). But we do not see increasing conservatism within the Democratic Party in Congress when that party has the majority (i.e. when the relevant DW-Nominate scores are low). Furthermore, even though Bill Clinton is more conservative than Jimmy Carter he is less conservative than LBJ or Truman by this measure. Thus, global measures of ideology as typically measured by scholars of American politics cannot explain any rightward shift in the Democratic Party on matters like regulation of the financial industry. This may suggest we need some less highly aggregated measures of ideology.

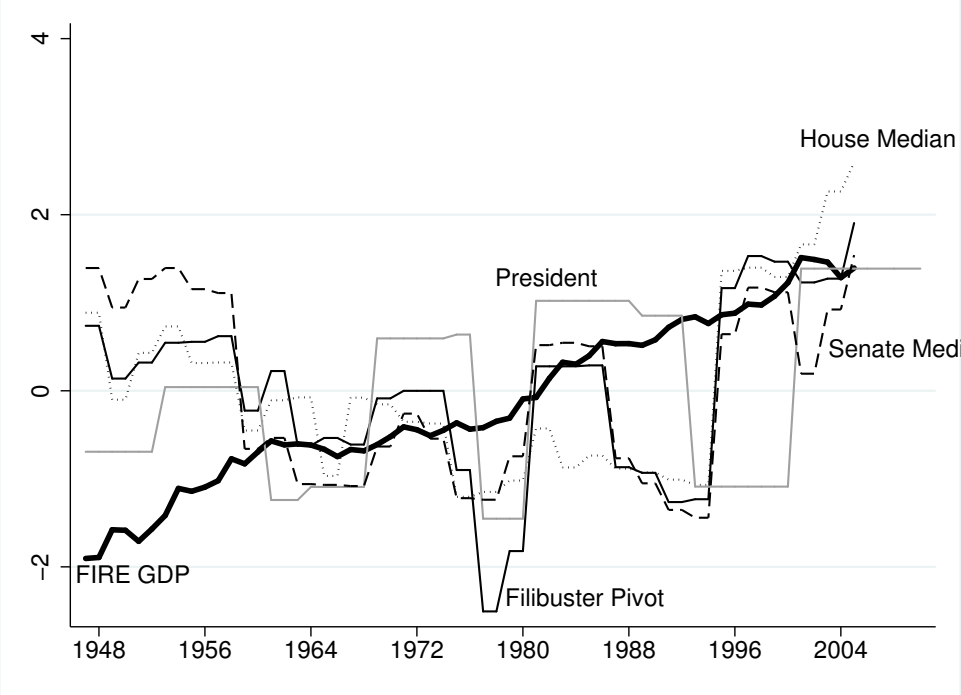

Figure 2: Poole and Rosenthal DW-Nominate Scores and Financialization

Table 1: Government Ideology and Financialization

	(1)	(2)
	ΔFIRE GDP	ΔFIRE GDP
FIRE Percent$_{t-1}$	-0.137	-0.155**
	(-1.84)	(-3.03)
ΔPres DW	-0.0411	-0.0674

	(-0.33)	(-0.48)
Pres DW_{t-1}	0.0340	0.0164
	(0.33)	(0.15)
ΔHouse Med. DW	-0.370	0.0664
	(-0.41)	(0.08)
House Med. DW_{t-1}	-0.824	-0.734
	(-1.35)	(-1.26)
ΔSen Med. DW	1.401	
	(1.27)	
Sen Med. DW_{t-1}	0.410	
	(0.52)	
ΔUnion Dense	-0.103	-0.118
	(-1.41)	(-1.73)
Union $Dense_{t-1}$	-0.0266	-0.0342
	(-1.07)	(-1.74)
ΔFIRE Mobilization	0.0191	0.0178
	(1.49)	(1.38)
FIRE $Mobilization_{t-1}$	0.0118	0.0111
	(0.57)	(0.53)
ΔNon. Fin. Profs	-0.863**	-0.853**
	(-2.88)	(-2.84)
Non. Fin. $Profs_{t-1}$	-1.562**	-1.496**
	(-3.38)	(-3.24)
ΔInflation	-5.688**	-5.191*
	(-2.96)	(-2.58)
$Inflation_{t-1}$	-1.585	-0.667
	(-0.83)	(-0.35)
ΔStock Options	0.00443	0.00437
	(0.07)	(0.07)
Stock $Options_{t-1}$	0.169**	0.147*
	(2.77)	(2.33)
ΔFilibuster DW		0.851
		(0.72)
Filibuster DW_{t-1}		0.654
		(0.65)
Constant	2.930	3.258*
	(1.73)	(2.62)
N	57	57
R^2	0.57	0.56

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The models presented here replicate the models in Table 1 in the main text but use DW-Nominate (first dimension) scores instead of party control variables. We see using a variety of measures of the ideology of government (the Senate median, House median, Presidential score and Filibuster pivot score) that there is no consistent relationship between ideology and financialization, though the House score has a low p-value in model 1. Thus, party control of government appears to be more important than government ideology in determining the rate of financialization, though of course these two variables

are highly correlated

Alternative Party Coding Models

In this section I present the results of models using other codings of the party variables. The "Dem. Pres." variable is an indicator of whether there is a Democratic President, "Unif. Dem. Cong." is an indicator of whether ther is a unified Democratic Congress, "Cong. Dem. Pct." is the percentage of congressional seats held by Democrats, "Dem. House" and "Dem. Sen." are indicators of a Democratic House and Senate, and "Dem. Cong." ranges 0 to 2, giving a score of 1 for each house controlled by the Democrats.

Table 2: Alternative Party Codings and Financialization

	(1)	(2)	(3)	(4)
	ΔFIRE Percent	ΔFIRE Percent	ΔFIRE Percent	ΔFIRE Percent
FIRE Percent$_{t-1}$	-0.176***	-0.174**	-0.180***	-0.181**
	(-3.58)	(-3.50)	(-3.63)	(-3.44)
ΔDem Pres.	0.0372	0.0481	0.0239	-0.0224
	(0.30)	(0.38)	(0.19)	(-0.17)
Dem Pres.$_{t-1}$	-0.133	-0.124	-0.138	-0.138
	(-1.45)	(-1.33)	(-1.48)	(-1.40)
Δ Unif. Dem. Cong.	-0.213			
	(-1.67)			
Unif. Dem. Cong$_{t-1}$	-0.188			
	(-1.57)			
ΔUnion Dense	-0.0866	-0.0728	-0.100	-0.111
	(-1.29)	(-1.06)	(-1.51)	(-1.64)
Union Dense$_{t-1}$	-0.0354	-0.0322	-0.0391*	-0.0421*
	(-1.86)	(-1.66)	(-2.07)	(-2.12)
ΔFIRE Mobilization	0.0284*	0.0277*	0.0254*	0.0226
	(2.39)	(2.27)	(2.14)	(1.89)
FIRE Mobilization$_{t-1}$	0.0328	0.0336	0.0275	0.0225
	(1.68)	(1.71)	(1.42)	(1.19)
ΔStock Options	0.00468	0.0136	0.00665	0.0252
	(0.09)	(0.25)	(0.12)	(0.44)
Stock Options$_{t-1}$	0.140**	0.165**	0.135*	0.155**
	(2.94)	(3.04)	(2.67)	(2.90)
ΔNon. Fin. Profs	-0.716*	-0.723*	-0.697*	-0.717*
	(-2.62)	(-2.58)	(-2.51)	(-2.48)
Non. Fin. Profs.$_{t-1}$	-1.154**	-1.174**	-1.113*	-1.180*
	(-2.78)	(-2.72)	(-2.63)	(-2.69)
ΔInflation	-3.432	-3.583	-3.924*	-4.902*
	(-1.83)	(-1.89)	(-2.08)	(-2.46)
Inflation$_{t-1}$	-0.0732	-0.0292	0.141	-0.277
	(-0.05)	(-0.02)	(0.09)	(-0.16)
Δ Dem. House		-0.0941		
		(-0.33)		
Dem. House$_{t-1}$		0.147		
		(0.83)		
ΔDem. Senate		-0.138		
		(-0.60)		
Dem. Senate$_{t-1}$		-0.272		
		(-1.80)		
ΔDem. Cong			-0.120	
			(-1.60)	
Dem. Cong$_{t-1}$			-0.0768	
			(-1.07)	
ΔCong Dem. Perc.				-0.00750
				(-0.72)

Cong Dem. Perc.$_{t-1}$				0.00119
				(0.13)
Constant	3.886**	3.692**	4.018**	3.924**
	(3.26)	(3.03)	(3.34)	(3.17)
N	57	57	57	57
R^2	0.59	0.60	0.58	0.56

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The percentage and simple indicator variables are not significant, while the p-values for other variables (Dem. Cong. and Unif. Dem. Cong.) are very close to 0.05 and would be under 0.05 using one-tailed tests, which are appropriate given directional expectations. These results, along with those in the main article, indicate that the Democrats ability to slow financialization is enhanced when they control more institutions of government, and simply controlling one "veto point" is probably not sufficient to explain varying rates of financialization over time. Of course, interacting each of these party variables with union density and the professionals gap variable may produce more consistently significant party effects, but this would require presenting several additional models, which would suffer from serious multicollinearity.

Alternative Dependent Variable Models

In this section I consider the effect of political variables on other potential measures of financialization. We see clearly in Figure 3 that the percentage of GDP derived from the FIRE sector (thick black line) which is the outcome variable in the article, financial profits as a percentage of GDP (dashed line) and financial profits as a percentage of total domestic corporate profits (thin black line), which others have used as measures of financialization, are all very highly correlated. Indeed, the latter two are almost perfectly correlated since they share the same numerator and total corporate profits growth and GDP growth are highly correlated. The major difference between the profit-based measures and the FIRE activity as a percentage of GDP is that the rapid growth takes place later and is more volatile.

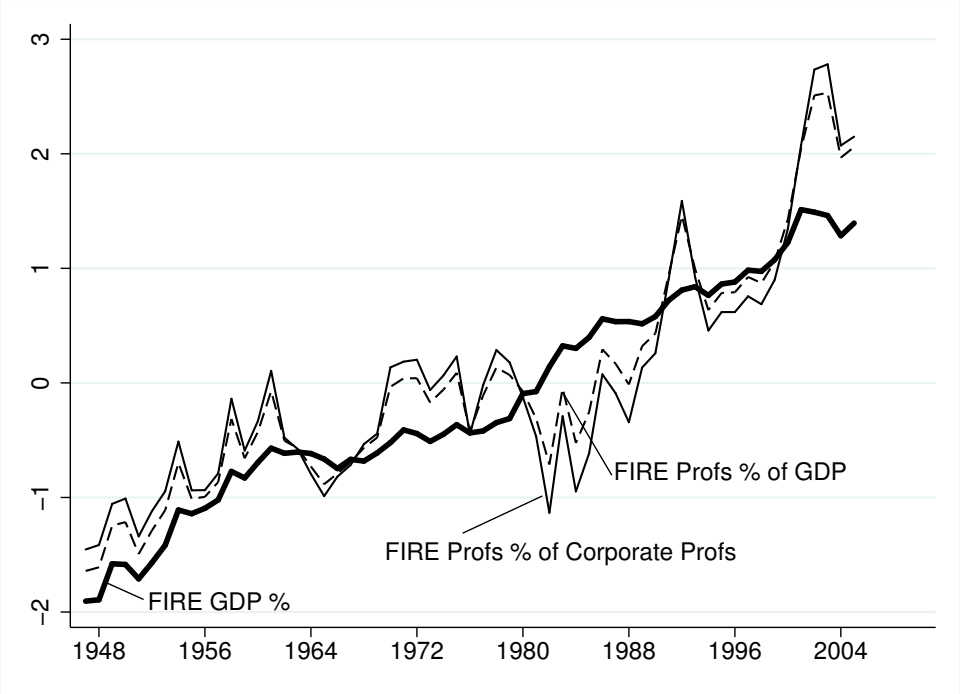

Figure 3: Various Measures of Financialization

For substantive reasons I think it is more useful within the framework of this study to understand how the government and policy affect the total economic activity derived from finance since this has the broadest impacts on the economy and people's lives. However, similar models to those presented in Table 1 using these two other other outcome

variables are presented below. Firms have substantial control over when they declare profits which produces the greater volatility in the series, and these declarations are especially sensitive to capital gains tax rates for financial firms.[1] Therefore, I also control for the maximum capital gains tax rate in the models below. We see that the effect of the political variables on these outcomes appears to be mostly through deregulation, which is significant in both models, as expected if deregulation enhances financial industry rent-seeking. Interestingly, union density is a negative and significant predictor in one model and is a positive and significant predictor in the other model. This may indicate that unions have the greatest effect on financialization indirectly by stimulating activity in heavily unionized sectors, which would affect the relative GDP derived from finance, but not necessarily limit profits accruing to financial firms. Indeed, the results suggest that perhaps because unions are effective at obtaining some potential profits as wages via collective bargaining and FIRE is lightly unionized, strong unions might even have a positive effect on the proportion of profits going to FIRE firms by limiting profits even while they are able to expand activity in those sectors.

Table 3: Alternative Dependent Variables

	(1)	(2)
	ΔFIRE Profs of GDP	ΔFIRE Profs Perc
FIRE Profs GDP$_{t-1}$	-0.239*	
	(-2.23)	
Δ Dem. Control	-4.58e-08	0.285
	(-0.12)	(0.59)
Dem. Control$_{t-1}$	-4.85e-08	-0.194
	(-0.12)	(-0.37)
ΔFIRE Mobilization	6.67e-08	0.0540
	(0.79)	(0.50)
FIRE Mobilization$_{t-1}$	3.98e-08	0.129
	(0.29)	(0.75)
ΔNon. Fin. Profs	-0.00000362	-8.434**
	(-1.91)	(-3.45)
Non. Fin. Profs$_{t-1}$	-0.00000496	-15.14***
	(-1.64)	(-4.06)
ΔInflation	-0.0000324*	-18.06
	(-2.29)	(-1.02)
Inflation$_{t-1}$	-0.0000408**	-38.47*
	(-3.03)	(-2.21)
ΔStock Options	-0.000000270	-0.693
	(-0.77)	(-1.56)

[1]see Mihir A. Desai and William M. Gentry. 2003. "The Character and Determinants of Corporate Capital Gains." *NBER Working Paper*.

Stock Options$_{t-1}$	-0.000000603	0.300
	(-1.78)	(0.70)
ΔUnion Dense	-0.000000493	-0.400
	(-1.10)	(-0.71)
Union Dense$_{t-1}$	0.000000289*	0.125
	(2.24)	(0.87)
ΔCap. Gains Max	4.02e-08	-0.0157
	(0.43)	(-0.13)
Cap. Gains Max$_{t-1}$	-0.000000204**	-0.306***
	(-3.42)	(-3.88)
ΔDeregulation	0.00000162	0.630
	(2.00)	(0.59)
Deregulation$_{t-1}$	0.00000120**	1.024*
	(2.96)	(2.06)
Fin. Profs Perc$_{t-1}$		-0.486***
		(-4.08)
_cons	-0.00000143	8.671
	(-0.41)	(2.00)
N	57	57
R^2	0.49	0.56

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Model with FIRE Campaign Contributions

Here I present models examining the effect of FIRE sector campaign contributions on the rate of financialization.[2] Because campaign contribution data were not collected until the late 1970s there is a very small sample size and these results should, of course, be interpreted with caution. We see here that both contribution coefficients have t-scores very close to 2. The null results for the Democratic Party variables likely reflects that for much of this time period the party coalition was already economically heterogeneous and unions were very weak, limiting the willingness or ability of the Democratic Party to slow financialization.

Table 4: Model with FIRE Campagin Contributions

	(1)
	ΔFIRE Percent
FIRE Percent$_{t-1}$	-0.876*
	(-2.85)
ΔDem. Control	0.140
	(0.98)
Dem. Control$_{t-1}$	-0.000149
	(-0.00)
Δ Union Dense	-0.560
	(-1.20)
Union Dense	-0.132
	(-1.02)
ΔFIRE Conts	0.00000247
	(1.71)
FIRE Conts$_{t-1}$	0.00000312
	(1.84)
ΔNon. Fin. Profs	-0.00823
	(-0.02)

[2]Specifically, I use the total campaign contributions from the universe of FIRE sector PACs that were continuously registered since 1979 through 2004 obtained from the FEC detailed data files webpage, $http://www.fec.gov/portal/download.html$.

Non. Fin. Profs	-0.470
	(-0.62)
ΔInflation	-9.191
	(-1.35)
Inflation_{t-1}	3.412
	(0.56)
Δ Stock Options	-0.0917
	(-1.19)
$\text{Stock Options}_{t-1}$	0.0953
	(1.78)
Constant	15.66*
	(2.67)
N	26
R^2	0.67

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Preference Gap Between Professionals and Non-professionals

Figure 4 shows that gap in the proportion of non-professionals/non-managers minus professionals/managers supporting the Democratic Presidential candidate discussed in the article. We can see very clearly that the gap has diminished over time and that professionals and managers are now almost as likely to support the Democratic candidate.

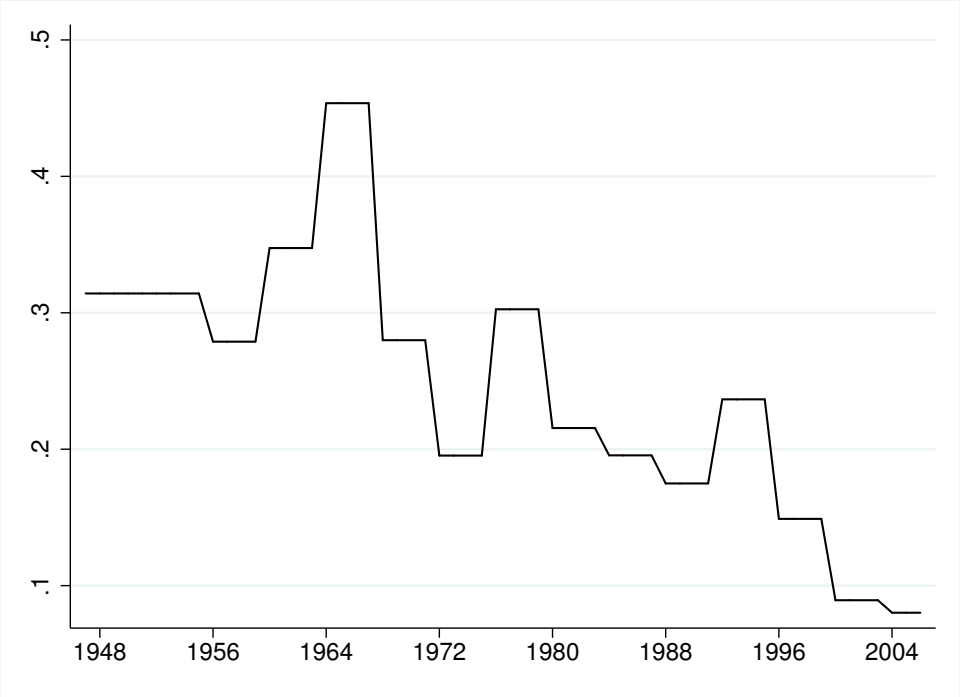

Figure 4: The Gap in Democratic Voting Between Managers and Non-managers

Concentration of FIRE GDP Across the States

In Figure 5 we see that since the early 1960s the geographic concentration of FIRE activity across the U.S. states has decreased, though not monotonically over time. It initially declined steeply throughout the 1960s and early 1970s before again increasing fairly rapidly and then declining rapidly to historic lows. So the total number of congressional constituencies benefiting from financialization has probably increased over time.

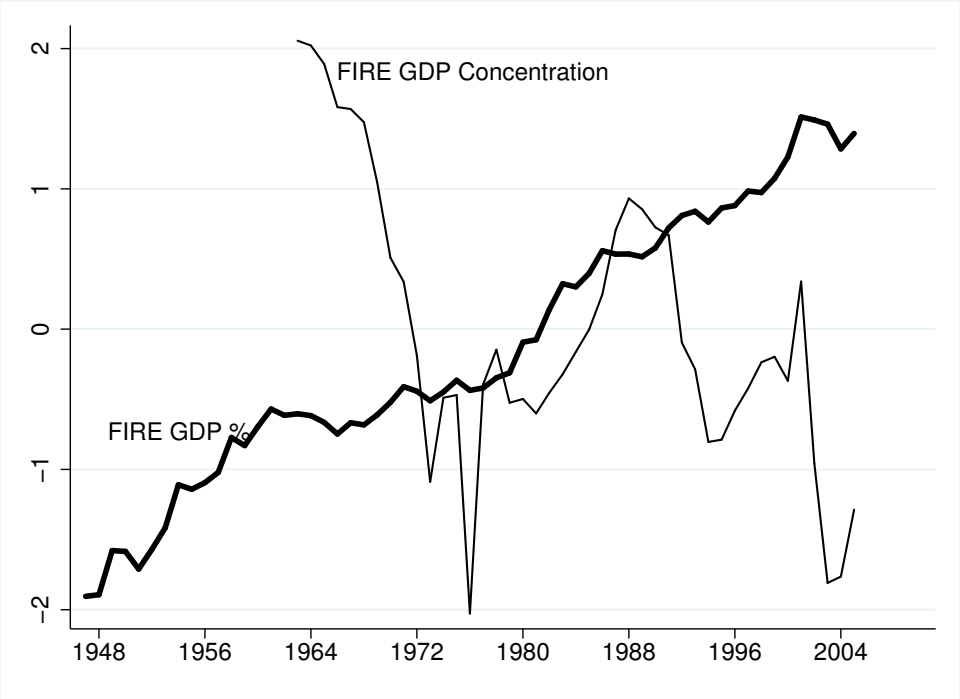

Figure 5: The Concentration of FIRE GDP Across the States

Potential Break Points

If financialization changed dramatically at a certain time point then it is possible that an estimation approach that treats coefficients as stable over time is inefficient. In Figure **??** we see the results of a Bayesian change point analysis of the dependent variable used in this study. Though it is clear that financialization is increasing over time it seems that there are a number of time periods where somewhat unusually large increases occurred, rather than a single break point where a major change in the trajectory of financialization occurred.[3] Two of the more statistically reliable spikes actually occurred early in the time period, but these spikes became more common in the later part of the data period, as one would expect given that financialization is thought to have accelerated in recent years.

[3]To develop the posterior probabilities of a change in the series I used the bcp R package developed by Erdman and Emerson 2007; Erdman, Chandra and John W. Emerson. 2007. "bcp: An R Package for Performing a Bayesian Analysis of Change Point Problems." *Journal of Statistical Software* 23(3).

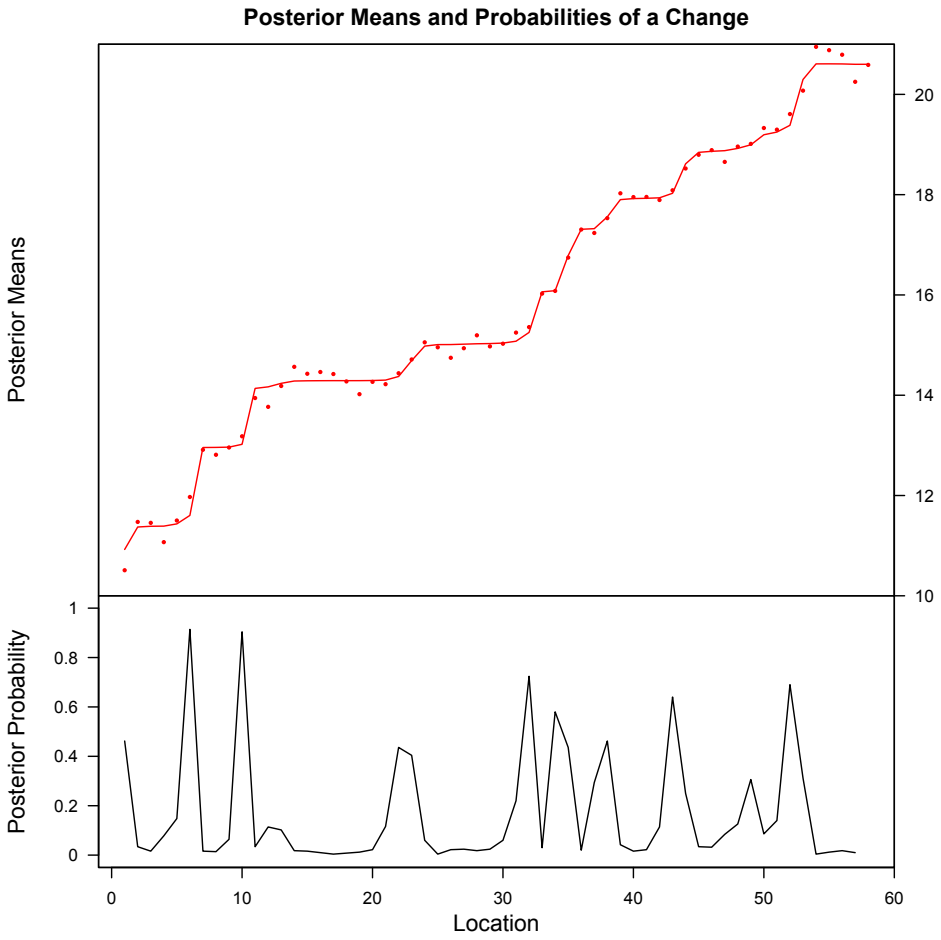

Figure 6: Bayesian Change Point Analysis of ΔFIRE GDP

The Determinants of Deregulation and Indirect Effects of Political Variables

This table presents the results of a time-series logistic regression analysis of the determinants of a new deregulatory act in a given year. All of the political variables used in the analysis of financialization are included in this model, along with the lagged level of deregulation, inflation and the growth rate of non-financial corporate profits because these factors led to a shift of economic activity into finance, which may have fueled deregulation. It is fairly certain based on Figure 1 in the paper and our knowledge of the process of deregulation that there is temporal dependence in the data. Thus, a generalized linear model with a logit link function with heteroskedasticity and autocorrelation-consistent variances was estimated, which produces valid point estimates and standard errors, even in the presence of autocorrelation. The results show that the political variables have coefficients in the expected directions with associated p-values below 0.05, indicating that when unions and Democrats are stronger a new deregulatory act is less likely, and when FIRE mobilization is greater deregulatory acts are more likely.

Though we can see that the key explanatory variables are at least weakly exogenous with respect to the outcome variable, it is demonstrated here that deregulation is affected by the other political variables, meaning that when deregulation is included in the models with these other variables their coefficients are biased downward to some extent. Of course, as discussed we can get the total effects by simply omitting the policy variables from the model. However, we may be interested in determining indirect effects via deregulation. As noted in the main text, determining "average" indirect effects is difficult because of the fact that the effects of the political variables on the binary outcome variable (whether there is a deregulatory act) are non-linear. However, by taking the change in probability of a deregulatory act between two points (while holding other variables constant at their means) and multiplying that probability by the value of the coefficient for the short-term deregulatory variable we can estimate the expected change via dereg-

Table 5: The Effect of Parties and Organized Interests on Financial Deregulation

	Additional Deregulation
Deregulation Level$_{t-1}$	-1.07^{***}
	(-6.37)
Dem. Control$_t$	-2.45^{***}
	(-19.21)
FIRE Mobilization$_t$	0.15^{***}
	(7.31)
Union Dense$_t$	-1.37^{***}
	(-5.56)
Inflation$_t$	1.09^{***}
	(7.47)
Non-Financial Profs$_t$	5.10^{***}
	(7.47)
Constant	26.21^{**}
	(5.97)
Observations	58

z scores in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

ulation (though only at that specific change because the effect is non-linear). Moving from one standard deviation below the mean to one standard deviation above the mean for the union density and FIRE mobilization variables we get an expected change of -0.06 and 0.01 in the percentage of the economy in the FIRE sector via deregulation. Shifting from Democratic control of zero institutions to Democratic control of three institutions produces an expected increase in financialization of around 0.05 percentage points. These effects are clearly modest compared to the total long-term direct effects discussed in the article, reflecting that unions and the Democrats also affect financialization by many other means. Nevertheless, these results show that the decline of unions and the shifting power of the Democratic Party probably had a meaningful effect on financialization via deregulation, considering that the mean annual change in financialization was around 0.18 percentage points.

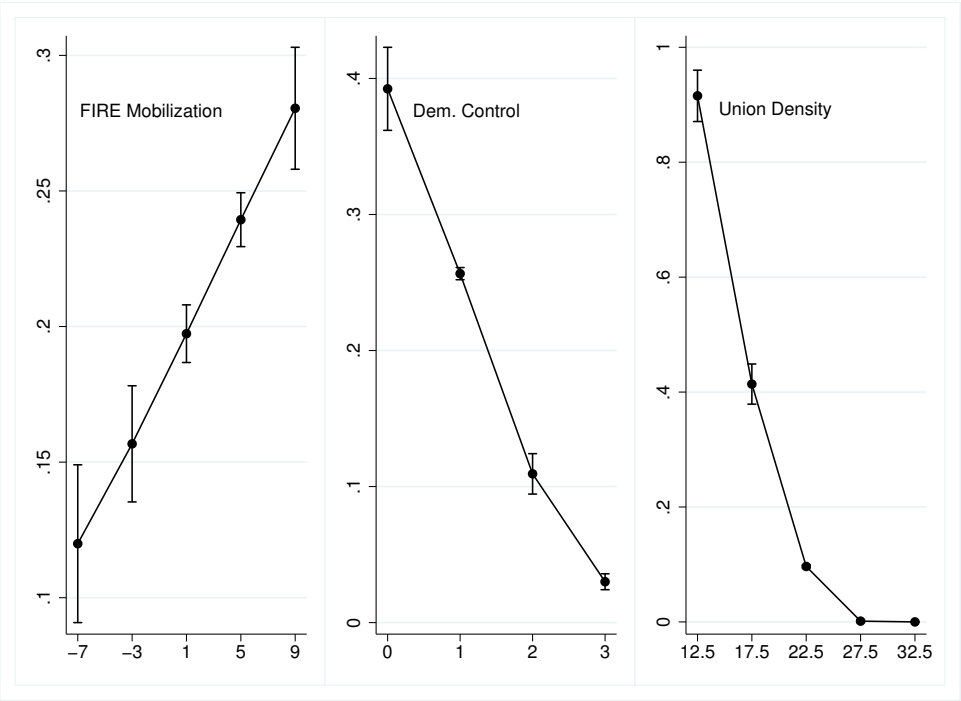

Figure 7: The Effect of Unions, FIRE Mobilization and Democratic Control on the Probability of Deregulation

Placebo Tests of the Politics of Financialization Model

It is possible that the argument here is not specific to financialization, but is more general to a number of sectors that were deregulated. If this is the case, then the same set of political variables should explain changes in the growth of other deregulated sectors. Here, I examine this possibility with regard to both the Transporation and Information/Telecommunications (IT) sectors, which were both also deregulated substantially after the 1970s. Unlike the FIRE sector, the Transportation sector has declined as a percentage of GDP since the 1970s, but the IT sector did increase from 3.8 to 4.7 percent of GDP between 1979 and 2005. However, the results in the table below show that even for IT, the political and policy variables (I use the financial deregulation variable in these models since it has been suggested that financial deregulation was simply one aspect of a broader deregulatory agenda) do not explain any of the variation in the percentage of GDP derived from these activities. This suggests that the financialization of the economy is not simply the result of broader economic changes - the political model presented here explains the trajectory of the financial sector, but not other deregulated sectors. If the argument here is correct, this is because the growth of the financial sector produces clear winners and losers, its growth is also more sensitive to changing political conditions than other deregulated sectors. However, future research should consider the politics and impact of the broader deregulatory agenda.

Table 6: Alternative Dependent Variables

	(1)	(2)
	ΔInfo Perc.	ΔTrans. Perc.
Information Perc.$_{t-1}$	-0.200	
	(-1.99)	
Transportation Perc.$_{t-1}$		-0.0411
		(-1.31)
ΔDem. Control	-0.00233	0.0118

	(-0.08)	(0.59)
Dem. Control$_{t-1}$	-0.0181	0.0284
	(-0.63)	(1.38)
ΔFIRE Mobilization	0.00631	0.00122
	(1.08)	(0.30)
FIRE Mobilization$_{t-1}$	0.00993	0.00102
	(1.11)	(0.16)
ΔUnion Dense	-0.0171	-0.00648
	(-0.51)	(-0.28)
Union Dense$_{t-1}$	-0.00923	0.00258
	(-0.81)	(0.35)
ΔDeregulation	0.0462	-0.0259
	(0.87)	(-0.68)
Deregulation$_{t-1}$	0.00493	0.00972
	(0.27)	(0.76)
Constant	1.003	-0.0242
	(1.58)	(-0.14)
N	58	58
R^2	0.14	0.18

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$