EXECUTIVES IN POLITICS

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ABSTRACT

Between 1980 and 2014, the share of former corporate executives in federal elected office increased from 13.3% to 21.1%, and this increase was more pronounced among executives from regulated industries and industries most exposed to global competition. Firms whose executives win federal elections experience significant positive stock returns around the dates of elections and around the dates when Congress passes legislation introduced by their executives. Evidence from close elections shows that businessman politicians are more likely to vote for legislation supported by pro-business interest groups and less likely to vote for legislation supported by labor unions or consumer advocacy groups.

JEL classification codes: G32, G38, D72, G30

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1. Introduction

On November 8, 2016 Donald Trump won the U.S. Presidency. While his election was unusual in many respects, Trump is just one of several recent examples of corporate executives running for political office. William Harrison Binnie, a former CEO of Carlisle Plastics, Inc., unsuccessfully ran for the U.S. Senate in 2010. In 2000, Jon Corzine, a former CEO of Goldman Sachs, was elected U.S. Senator, and in 2005 became the governor of New Jersey. These examples are far from isolated. In fact, Figure 1 shows that the share of federal office holders (i.e., U.S. Congressmen, Senators, and Presidents/Vice-Presidents) who had executive experience prior to being elected remained relatively flat at around 13-14% between 1980 and 2000 but then started to increase rather sharply and reached more than 21% in 2014.[1] Why do so many executives make the switch from a career in business and run for political office? Further, how does the increase in executives' political participation affect their firms and the legislative process in the United States more generally? We investigate these and several related questions by studying the incidence of corporate executives running in U.S. federal elections between 1980 and 2014.

To explain the incentives of executives to seek political office, we turn to the economic theories of regulation. According to the regulatory capture theory (Stigler (1971); Peltzman (1976)), regulation creates barriers to entry and exists primarily for the benefit of industry incumbents. In contrast, the tollbooth theory of regulation (De Soto (1990); Shleifer and Vishny (1998)) posits that bureaucrats create regulation so as to extract benefits from firms by means of bribes, campaign contributions, votes, etc. To the extent that executives' ambition to run for political office is motivated by the interests of their firms, these two theories have different

[1] Figure 1 also shows that the recent increase in the number of businessman politicians cannot be solely attributed to the increase in the electoral strength of the Republican party.

implications regarding executives from which firms and industries will be more likely to seek political office. If regulation exists primarily to insulate firms from competition, then executives from firms facing large competitive pressure should be more likely to run for office. If, on the other hand, regulation exists to extract resources from firms to benefit bureaucrats, then executives from highly regulated industries should be more likely to run for office with the goal of reducing the regulatory burden on their firms. These two explanations are of course not mutually exclusive, and we find evidence of both theories having explanatory power for the recent increase in the number of businessman politicians. [2]

Consistent with the idea that firms may attempt to capture the political process to improve their deteriorating competitive position, we find that intensifying global competition has had a pronounced effect on the propensity of corporate executives to run for political office. First, the time trend in the number of businessman politicians in Figure 1 has a visible shift, which coincides almost exactly with China's entrance into the World Trade Organization (WTO) in 2001. This event has led to an unprecedented growth in the U.S. market's exposure to Chinese imports and may therefore have increased the benefits from political participation for firms in affected industries. In response to the increase in global competition, U.S. policy makers on at least two occasions introduced tariffs supported by narrow business interests. In 2002, President George W. Bush enacted the 30% tariffs on steel imports (Ho (2003)), which were supported by the U.S. steel makers but almost universally opposed by the broader business community.[3] More recently, the

[2] Another potential reason why executives may seek political office is related to capital gains deferral on the sale of property that would cause a conflict of interest (Section 1043 of the Internal Revenue Code and Subpart J of 5 CFR part 2634). However, tax benefits are unlikely to explain the increasing trend in the number of executives running for office. First, the law granting tax deferral was enacted in 1989 as part of the Ethics Reform Act and did not change since then. Second, it only applies to federal employees (as well as their spouses and dependents), but does not apply to legislators who constitute the vast majority of our sample.

[3] See "So far, steel tariffs do little of what President envisioned," *The Wall Street Journal*, September 13, 2003.

Administration of President Trump has imposed tariffs on steel and aluminum from a range of countries and on certain goods imported specifically from China.

To provide more systematic evidence, we use the identification strategy in Autor, Dorn, and Hanson (2013) that isolates industry-specific shocks related to Chinese import competition. By instrumenting industry-specific Chinese imports into the United States with industry-specific imports from China to other high-income countries, we find that executives from industries with larger exposure to global competition are substantially more likely to run for political office.[4] We also find evidence that executives from highly regulated industries are more likely to seek political office, which is consistent with the idea that some executives run for office to reduce regulatory burden on their firms. In particular, we use the time-series variation in the amount of federal regulation (Al-Ubaydli and McLaughlin (2017)) to show that lagged industry-specific regulation predicts subsequent growth in the number of businessman politicians.

Turning to firm-level evidence, we show that firms whose executives win federal elections experience significant positive abnormal stock returns around the dates of such elections. For example, our estimates suggest that the average firm adds more than $320 million in market value over the three-day period around elections won by its former executives. These results are consistent with executives adopting policies favorable to their firms after getting elected. Furthermore, the value of executives' own stockholdings in their firms increases on average by $283,514 over the same time period, indicating that executives also realize significant personal gains. These values are even higher over the seven-day period around elections ($391 million and $540,320, respectively).

[4] Another explanation consistent with this result is related to the model by Pastor and Veronesi (2017), who propose a theory of political cycles based on time-varying risk aversion. To the extent that greater exposure to China increases uncertainty about a given industry's profits and therefore makes entrepreneurship relatively less attractive, their theory would predict a higher incidence of entrepreneurs from such industries becoming government workers.

One potential explanation for the excess equity returns is that businessman politicians adopt better economic policies while in office, and that these policies benefit their firms and the aggregate economy more generally. While we cannot completely rule out this explanation, at least one piece of evidence appears to be inconsistent with it: we find that equity returns around elections are positively related to the amount of businessman politicians' stock holdings in their firms. Thus, executives who hold large equity positions in their firms are expected to generate larger benefits for their firms than executives who hold small equity positions, which indicates that at least some of these benefits must be motivated by businessman politicians' private incentives. We also find that firms whose executives serve in the U.S. House or Senate experience large abnormal stock returns around the dates when Congress passes legislation introduced by these firms' executives, suggesting that passing legislation is a direct mechanism through which businessman politicians affect firm value. This evidence also corroborates the empirical results in Cohen, Diether, and Malloy (2013), who find that legislation can have large effects on industry output and stock prices. Overall, it appears that the equity market expects businessman politicians to use public office to generate substantial private benefits for their firms.

If businessman politicians vote for legislation that is systematically different from the legislation supported by non-businessman politicians, then having more executives in elected office may also have aggregate effects on U.S. policy. These effects are generally not easy to identify since the policies that businessman politicians implement while in office may, at least partially, reflect the preferences of their constituencies. To address this issue, we perform two sets of tests. First, we analyze politicians' voting records after close elections in which a businessman politician either barely wins or barely loses: this strategy enables us to expunge the effect of voter preferences, since voters should be indifferent between winners and losers of close elections.

Second, for those businessman politicians who left office at some point during our sample period, we compare their voting records to the average long-run political preferences of their constituencies. In both cases, we find that businessman politicians are significantly more likely, relative to non-businessman politicians, to vote for legislation supported by corporate interest groups and are less likely to vote for legislation supported by pro-consumer interest groups or labor unions.[5] The effects we document are economically large, even after controlling for party affiliation: the magnitude of the coefficient associated with being a businessman politician is about one-third of the unconditional average of voting record measures that we use.

Perhaps an important question is why voters elect businessman politicians, even though such politicians tend to side with corporate interests over and above the inherent preferences of the voters themselves. We explore two possible explanations. First, it may be that businessman politicians are able to raise substantially more money than their opponents and therefore simply outspend them. Second, it may be that businessman politicians are inherently better along some dimensions of quality that voters find appealing. For example, Bertrand and Schoar (2003) find that, in a corporate setting, individual fixed effects explain a significant part of variation in firm policies and performance. Further, Besley (2005) argues that political competence is a complex mix of skills and too few talented citizens seek political office (see also theory by Caselli and Morelli (2004) and Callander (2008)), which may prompt voters to sometimes support high quality politicians regardless of the policy being implemented. Overall, we find no evidence consistent with the first explanation and some evidence consistent with the second explanation. Even though

[5] That politicians with executive experience are less likely to vote in favor of legislation supported by labor unions is consistent with such politicians' alignment with the interests of their firms. Economics literature generally finds that rigid labor regulation negatively affects firm performance. For example, Holmes (1998) shows that states which adopt pro-business right-to-work laws experience increases in manufacturing activity, Draca, Machin, and Van Reenen (2011) find that minimum wage increases in the U.K. significantly reduce firm profitability, and Lee and Mas (2012) show that close union wins have a negative effect on stock prices.

businessman politicians contribute about eight times more to their own campaigns than their non-businessman peers, the total amount of money raised by these two groups of politicians is very similar. At the same time, businessman politicians appear to be consistently better, relative to their electoral opponents, along quantifiable measures of quality (such as education). While the factors we consider are not the only determinants of electoral success, our evidence does indicate that voters may value certain, perhaps inherent, characteristics of businessman politicians, which may explain their recent electoral success.[6]

On the balance, it appears that over the last decade businessman politicians have increased their involvement in the legislative process in the United States, and this involvement may have generated substantial benefits for their firms and moved the balance of power toward pro-business interests. Our evidence indicates that global competition as well as the amount of federal regulation have been important factors that incentivized executives to interfere in the political process.

Our paper contributes to the large literature that studies interactions between firms and politicians. This literature explores several ways in which firms may participate in politics and argues that such participation may be valuable to firms. For example, state-owned firms may receive more subsidies from government in exchange for providing excess employment and paying above market wages (Shleifer and Vishny (2004); Bertrand, Kramarz, Schoar, and Thesmar (2018)). Other firms can invest in political capital by establishing direct connections with legislators (Faccio (2006); Goldman, Rocholl, and So (2009); Duchin and Sosyura (2012)), lobbying (Bertrand, Bombardini, and Trebbi (2014); Borisov, Goldman, and Gupta (2016)), financing candidates' political campaigns (Stratmann (1992); Cooper, Gulen, and Ovtchinnikov (2010); Akey (2015)), and influencing political contributions of their employees (Babenko,

[6] These results are also in line with the findings by Dal Bó, Finan, Folke, Persson, and Rickne (2017), who show that Swedish citizens who run for elective office are on average smarter than the population they represent.

Fedaseyeu, and Zhang (2018)). These activities may create value for firm shareholders because of greater government subsidies, favorable antitrust reviews and trade restrictions, preferential allocation of federal contracts, less strict regulation, and lighter taxation.[7]

A smaller literature that is more closely related to our paper examines the motivations of officers and large shareholders for entering politics and the effect it has on their firms' valuations. Faccio (2006) uses data on publicly traded firms in 47 countries and shows that firms whose officers or large shareholders obtain public office experience large abnormal stock returns, and that this effect is strongest in highly corrupt countries. Gehlbach, Sonin, and Zhuravskaya (2010) develop a theoretical model to show that when democratic institutions are weak and campaign promises are not binding, businessmen/businesswomen may prefer to run for office to avoid the cost of lobbying elected officials. Using Russian gubernatorial elections, they show a negative association between government transparency and the likelihood of businessman candidacy. Bunkawanicha and Wiwattanakatang (2008) study the entrance of big business owners into politics in Thailand around the 2001 election of Thaksin Shinawatra and find that market valuations of 13 tycoon families' firms increase by more than 200% when tycoons get elected. Similar to Gehlbach, Sonin, and Zhuravskaya (2010), they argue that weak institutions in Thailand allowed businessman politicians to engage in rent-seeking activities. In contrast to this prior literature, we focus on the role of businessman politicians in an environment characterized by high political stability and

[7] A number of studies document the positive effect of political activism on firm value (see, e.g., Fisman (2001); Johnson and Mitton (2003); Faccio (2006), Faccio, Masulis, and McConnell (2006); Claessens, Feijen, and Laeven (2008); Ferguson and Voth (2008); Goldman, Rocholl, and So (2009); Cooper, Gulen, and Ovtchinnikov (2010); Chaney, Faccio, and Parsley (2011); Duchin and Sosyura (2012); Amore and Bennedsen (2013); Akey (2015); Borisov, Goldman, and Gupta (2016); Brogaard, Denes, and Duchin (2016); Tahoun (2014); Huang and Brown (2017); Mehta, Srinivasan, and Zhao (2017); and Acemoglu, Johnson, Kermani, Kwak, and Mitton (2016)). However, moral hazard problems at politically connected firms can also lead to excessive risk-taking (see, e.g., Khwaja and Mian (2005); Kostovetsky (2015)).

strong democratic institutions.[8] Our paper is the first to systematically study the phenomenon of businessman politicians in the United States and to analyze the impact of such politicians on their firms and the legislative process more generally. Further, we identify regulation and intensifying global competition as important factors of the increased involvement of executives in politics.

The rest of this paper is organized as follows. Section 2 describes data and sample construction and provides evidence on the extent of business executives' participation in politics over the last 25 years. Section 3 investigates the effect of global competition and regulation on the likelihood that executives run for political office, while Section 4 analyzes firm-value implications of executives holding public office. Section 5 studies the aggregate consequences of electing businessman politicians. Section 6 concludes.

2. Data, sample selection, and the supply of businessman politicians

We use data from a variety of sources, which we describe in detail in the appendix. Here, we briefly summarize the main steps in the sample construction process and describe the recent trends in the number of businessman politicians.

2.1. Data on businessman politicians based on official biographies

For each election year between 1980 and 2014, we obtain the official biographies of all members of the U.S. Congress (Representatives and Senators) as well as U.S. Presidents/Vice-Presidents who were elected (or re-elected) in that election cycle (1,878 office holders in total).[9] By reading

[8] One may expect that ethical conduct regulations in the United States which prohibit the use of one's government position for personal gain may significantly reduce or eliminate political rents and deter individuals with overt conflicts of interest from taking political office (see, for example, Standards of Ethical Conduct for Employees of the Executive Branch, 5 C.F.R. part 2635, House Ethics Manual, and Senate Ethics Manual).

[9] A member of Congress who was first elected prior to 1980 but was then re-elected at any point between 1980 and 2014 would be in our sample.

each individual biography, we identify all federal office holders (i.e., members of Congress and U.S. Presidents/Vice-Presidents) who, prior to being elected, held at least one position as the CEO (i.e., chief executive officer), president, chairman/chairwoman, or founder/owner of any private or public for-profit non-agricultural firm. We refer to such federal office holders as 'businessman politicians', of which there are 338. Panel A of Table 1 reports aggregate summary statistics on the share of businessman politicians among all federal office holders. Over the eighteen election cycles between 1980 and 2014, the share of businessman politicians was, on average, 15.2% and reached its maximum of 21.1% in 2014 (see Figure 1).

We also identify all public firms in which business politicians worked prior to being elected. Finally, for all members of Congress elected (or re-elected) between 1980 and 2014, we obtain their voting records, the data on their legislative productivity (i.e., the bills that they introduce and co-sponsor), as well as their campaign finance data.

2.2. Data on BoardEx executives running for political office

While the sample of businessman politicians constructed from official Congressional biographies enables us to study broad trends in executives' political participation, it cannot inform us about the differences between businessman politicians and other politicians at the electoral stage (i.e., prior to becoming members of Congress); neither can it shed light on the factors that motivate executives to run for political office or the extent to which the number of businessman politicians is supply- or demand-driven. To address these issues, we construct the sample of BoardEx executives running for federal office.[10]

[10] BoardEx is a dataset that collects detailed biographies for all people who have served as board members of S&P 1,500 firms after 2000. Importantly, BoardEx collects employment details for all firms where a given individual worked, even if those firms are not part of the S&P 1,500. For example, the biographies of board members of Apple Inc. (which is an S&P 1,500 firm) will include their positions in firms other than Apple Inc. as well, even if those firms are not part of S&P 1,500.

The sample construction at this stage involves an algorithm than enables us to process tens of millions of search results (the details are provided in the appendix). Here we briefly describe the main steps. We start by identifying all people in BoardEx who have held, at any point in their BoardEx employment history, at least one position as the CEO, president, chairman/chairwoman, or founder/owner of any private or public for-profit non-agricultural firm (i.e., we choose the same types of executive positions as in construction of the sample of businessman politicians from official Congressional biographies). This leaves us with 61,502 unique individuals. We then build a web crawler to identify all instances in which any of the 61,502 executives from the previous step run for political office. In particular, we search for all mentions of the executive's name in conjunction with any of the firms where he or she previously worked and a federal political office. We download the search results, which we then process for keywords and then manually analyze the web pages that contain any mentions of corporate executives from BoardEx running for federal political office. In total, we perform 11,972,754 web searches and analyze 29,908,149 individual search results. Ultimately, we identify 152 campaigns for federal office between 1980 and 2014 in which BoardEx executives run (65 unique individuals). They win 90 of those 152 campaigns. The aggregate summary statistics for the sample of businessman politicians based on BoardEx are reported in Panel B of Table 1, while the number of BoardEx executives running for office in each election cycle is shown in Figure 2.

2.3. Supply of businessman politicians

Figure 1, where the solid red line depicts the share of businessman politicians among federal office holders, shows a large increase in the number of such politicians after 2002. In fact, this share has

gone up in every election since 2002.[11] This increasing trend cannot be solely attributed to a greater electoral strength of the Republican party: the dashed blue line in the figure depicts the share of elected officials who come from the Republican party, and while the two lines largely co-move prior to 2002, they diverge afterwards. Is the increase in the share of businessman politicians supply- or demand-driven? On the demand side, it could be, for example, that the preferences of American voters shifted toward politicians with skills that executives are more likely to possess, such as business acumen, leadership, or the ability to run complex organizations. On the supply side, it could be that executives are more likely to seek political office (independently of demand) because the benefits from political participation for their firms have increased. While the aggregate trends are not sufficient to cleanly separate supply from demand, there is evidence suggesting that supply-side factors have been more important than demand-side factors in explaining the recent rise in the number of businessman politicians.

If supply factors are predominantly responsible for the increase in the number of businessman politicians, we would expect to see an increase in the executives' likelihood of running for political office while at the same time a decrease in their likelihood of winning political office. Since our sample of BoardEx executives from which we search for businessman politicians is fixed (at 61,502 people), a larger number of BoardEx executives running for office directly translates into a higher likelihood of running for office. While there is a considerable amount of variation across election cycles, and the number of observations in our sample is not large, there does appear to be a shift in the last decade: the average number of BoardEx executives running for

[11] Note that the total number of federal office holders (including temporary vacancies) is fixed at 537: 435 U.S. Representatives, 100 U.S. Senators, one U.S. President, and one Vice-President. Therefore, one explanation for the increase in the share of businessman politicians may be a lower share of politicians with other types of experience. Alternatively, since different types of experience are not mutually exclusive, the share of businessman politicians may have risen without affecting the proportion of politicians with other types of experience. In Appendix A, we show that the increase in the share of businessman politicians was accompanied by a decrease in the share of politicians with law experience and military service.

federal office per election between 1980 and 2002 is about 7, and this number rises to 11 in the period between 2004 and 2014 (see Figure 2). Thus, BoardEx executives are indeed more likely to run for office during the most recent decade.

To examine the aggregate effect of demand-side factors, we calculate the likelihood of BoardEx executives winning political office. If the increase in the number of business politicians is mainly driven by greater demand, we would expect their likelihood of winning to increase or remain flat between the periods in which relatively few and the periods in which relatively many executives run for political office. However, this is not what we observe. The likelihood that a BoardEx executive who runs for political office wins the election averages 77.0% between 1980 and 2002 (i.e., during the period in which relatively few BoardEx executives run for political office), but then falls to an average 40.5% between 2004 and 2014 (i.e., during the period in which a relatively large number of BoardEx executives run for political office).

The drop in the likelihood of executives' winning political office suggests that any demand-side factors that can potentially make executives more likely to seek office are outweighed by supply-side factors. Two such factors, suggested by the economic theory of regulation, are changes in the competitive pressure and the overall regulatory burden. Since these factors create incentives for firms to increase their involvement in the political process, they may also motivate their executives to seek political office directly. We investigate the role of these factors below.

3. The effect of global competition and regulation on executives' political participation

The theory of regulatory capture posits that regulation protects incumbent firms from competition. Therefore, a sudden shift in a firm's competitive position may incentivize its executives to interfere in the political process to stave off new competition. One potentially important source of

competitive pressure is globalization, and its relevance is indicated by a visible shift in the slope of the solid red line in Figure 1 right around China's entrance into the WTO. This shift suggests that intensifying global competition may have played a role in the recent increase in the number of businessman politicians.

China's economic rise is a particularly important global shock that unfolded over the last two decades. The magnitude of this shock and its impact on the United States is hard to overestimate: imports from China to the United States rose from $26.3 billion in 1991 to $330 billion in 2007, while the share of total U.S. spending on Chinese goods rose from 0.6 percent in 1991 to 4.6 percent in 2007, with an inflection point in 2001 when China joined the WTO (Autor, Dorn, and Hanson (2013)). Perhaps even more striking, China's competitive advantage is concentrated almost exclusively in manufacturing industries, which resulted in the displacement of a large number of manufacturing jobs in the United States and led to increased political polarization (Autor, Dorn, Hanson, and Majlesi (2017)).

Anecdotally, there is evidence that intensifying foreign competition may prompt domestic firms to restore their competitive position by capturing the political process. The 2002 tariffs imposed by the Administration of George W. Bush as well as more recent tariffs proposed by the Trump Administration are just two examples. Anecdotal evidence also suggests that government officials with business experience favor policies that benefit their firms and related industries. For example, Wilbur Ross, the Secretary of Commerce in the Trump Administration, was a vocal proponent of tariffs on imported steel and aluminum. It is plausible (although we cannot claim this with certainty) that his views on this issue have been informed by his role as a large investor in distressed steel companies in the early 2000s.

To provide systematic evidence on executives' response to intensifying global competition, we use the identification strategy developed in Autor, Dorn, and Hanson (2013), who study the effect of the China shock on U.S. manufacturing employment. If growing foreign competition motivates some businessmen/businesswomen to run for political office, then we would expect executives from industries more exposed to Chinese import competition to be more likely to run for political office than executives from other industries. Since imports from China to the United States are endogenous and can be motivated by a variety of domestic factors, we follow Autor, Dorn, and Hanson (2013) and instrument industry-specific imports from China to the United States by industry-specific imports from China to eight other high-income countries.[12]

This strategy will identify the causal effect of Chinese import shocks on the growth in the number of businessman politicians if the common within-industry component of rising Chinese imports to the United States and other high-income countries stems primarily from China's rising comparative advantage and not from changes in the demand for Chinese goods in the United States. There are several reasons to believe that China's export growth is driven by factors specific to China and is not caused by demand shifts in the United States. Fundamental factors such as rapid productivity growth and extensive policy reforms have contributed to a massive increase in China's absolute and relative manufacturing capacity. The recent productivity growth in China has been much more rapid than in the United States or any other major economy. For example, Brandt, Van Biesebroeck, and Zhang (2012) estimate that over the period from 1998 to 2007, China had average annual TFP growth in manufacturing of 8.0 percent, compared to the Bureau of Labor

[12] The data on imports from China to the United States and to eight other high-income countries are kindly provided on David Dorn's website (http://www.ddorn.net). The eight high-income countries used in Autor, Dorn, and Hanson (2013) and that we also use for our analysis are Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain, and Switzerland. The choice of these countries is motivated by data availability and comparability of their import-export statistics.

Statistics' estimate of 3.9 percent for the United States. Between 1992 and 2007, China accounted for three quarters of the worldwide growth in manufacturing value added that occurred in low- and middle-income nations (Autor, Dorn, and Hanson (2013)). Another reason why demand shocks cannot fully explain China's rise is that China's share of the U.S. market has grown sharply even relative to that of Mexico and Central America, regions which formed preferential free trade areas with the United States (through NAFTA and CAFTA, respectively). Finally, even if demand shocks play a role in China's export surge to the United States, it seems implausible that a growing number of businessman politicians in the United States would affect the demand for Chinese products in other high-income countries.

We proceed as follows. First, we calculate industry-specific growth rates in the number of businessman politicians who run for political office. To do so, for each BoardEx executive in our sample, we identify all four-digit SIC industries in which he or she worked prior to running for political office (the same person may be assigned to several industries). We follow Autor, Dorn, and Hanson (2013) and calculate growth rates separately for two decades, 1991-2000 and 2000-2007, which correspond to the time period during which data on imports from China to the United States and other high-income countries are available.[13] Overall, industry-specific growth rates in the number of businessman politicians can be negative (if their number goes down), positive (if the number increases), or zero (if the number does not change). In our sample, the percentage of non-zero growth rates varies between 30.4% (in the sample of manufacturing industries) to 40.4% (in the sample of all industries).[14] We then fit the following model adapted from eq. (5) in Autor, Dorn, and Hanson (2013):

[13] The data on industry-specific exposures to imports from China for the United States and other high-income countries are available from 1991 to 2007.

[14] The calculation of the growth rate in the number of businessman politicians requires some elaboration. When the number of businessman politicians in a given industry increases from zero to some positive number, a simple growth

$$\Delta EX_{it} = \gamma_t + \beta_1 \Delta IC_{US,it} + e_{it}, \quad (1)$$

where ΔEX_{it} is the growth rate in the number of executives from industry *i* running for political office in decade *t*; γ_t is the time dummy for each decade; $\Delta IC_{US,it}$ is the growth in import competition from China to U.S. industry *i* in decade *t*, and e_{it} is the error term. We instrument $\Delta IC_{US,it}$ by $\Delta IC_{OTH,it}$, the average growth in import competition from China to industry *i* in other high income countries in decade *t*. While the data on Chinese import exposure are available from 1991 to 2007, we have a longer time series on the number of businessman politicians. Therefore, we estimate the model separately for 1991-2007 and for 1991-2010. In the latter case, we use the average import growth from 2000 to 2007 as a proxy for the entire decade between 2000 and 2010. We cluster standard errors by two-digit SIC codes to account for possible correlation in import exposure within larger industry clusters.

The estimation results are provided in Panel A of Table 2, where we report both the first- and second-stage estimates from instrumental variable regressions. As noted previously, we present estimates separately for 1991-2007 and for 1991-2010 and obtain virtually identical results. Since businessman politicians in our sample come both from manufacturing industries (which are directly exposed to Chinese imports) and from non-manufacturing industries (such as financial services, which are not directly exposed to Chinese imports), we estimate the model separately for manufacturing industries as well as for all industries with businessman politicians. In both cases, we find a statistically and economically important effect of Chinese import exposure on the likelihood of businessmen/businesswomen running for political office. In our sample of

rate calculation will produce an infinite growth rate. To avoid this issue, we rescale growth rates to ensure that a change from zero to one businessman politicians implies an increase of 100%. To do this, we first add one to the number of businessman politicians in all industries in all years and then calculate the simple growth rates. Using this procedure, a change from 0 to 1 implies a growth rate of 100%(=(2-1)/1), a change from 1 to 2 implies a growth rate of 50%(=(3-2)/2), and so on.

manufacturing industries, a one standard deviation increase in exposure to the Chinese import shock leads to a 2.7 percentage points increase ($0.024 \times 1.127 = 0.027$) in the growth rate of businessman politicians, which represents a 71.2% change relative to the average growth rate of 3.8%. The effect is, unsurprisingly, smaller in the sample that includes non-manufacturing industries, but it remains significant.

If course it is unlikely that exposure to China is the only factor that explains the recent rise in the number of businessman politicians. In fact, a second strand of the economic theory of regulation (the tollbooth theory) suggests a different motivation for executives to seek political office. The tollbooth theory posits that regulation is created by the bureaucrats to extract rents from firms. In such an environment, firms (and their executives) have a direct incentive to interfere in the political process to alleviate the heavy regulatory burden. Consequently, it is executives from highly regulated industries that should be more likely to run for political office.

To test this implication, we use the index of industry-specific regulation developed by Al-Ubaydli and McLaughlin (2017). To our knowledge, this index is the only measure of industry-specific regulation currently available. Since it is a relatively new metric, we describe it in some detail. Al-Ubaydli and McLaughlin (2017) use textual analysis of the *Code of Federal Regulations* (CFR), which is published annually and contains a stock of all regulations issued by the departments and agencies of the U.S. Federal Government. To quantify regulation at the industry level, they perform a two-step procedure. In the first step, they quantify the aggregate level of regulation in the CFR. To do this, they search the CFR for five strings that they term restrictions ("shall," "must," "may not," "prohibited," and "required") and count the total number of these restrictions in each division of the CFR. They also count the total number of words in each part of

the CFR.[15] This latter measure is similar to the one in Mulligan and Shleifer (2005) who use the sizes of digitized versions of state-level statutes as a proxy for the amount of state-level regulation. For example, the top five subjects by restrictions are: protection of environment, agriculture, internal revenue, labor, and transportation.

In the second step, Al-Ubaydli and McLaughlin (2017) quantify the applicability of regulations to specific industries using text analysis. To define industries, the authors take industry descriptions corresponding to the two-, three-, or four-digit NAICS industry classification codes and extract key strings out of these descriptions (e.g., NAICS code 52 "Finance and Insurance" includes strings "finance," "insurance," and "insurer"). They then count the number of industry-related strings in each part of the CFR and divide it by the total number of words in that part of the CFR. Finally, the industry regulation index is calculated as the product of the number of regulations in part *p* of the CFR in year *y* (based on the total word count or restrictions) and the applicability of the regulations in part *p* of the CFR in year *y* to industry *i*.

This procedure enables one to construct a consistent panel of industry-specific regulation using two measures: the number of restrictions and the total number of words in regulations.[16] According to this classification method, in 2014 the top five regulated industries by the total word count are: Insurance and Employee Benefit Funds; Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing; Petroleum and Coal Products Manufacturing; Depository Credit Intermediation; Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing. Since the measures developed by Al-Ubaydli and McLaughlin (2017) are based on NAICS codes, we match them with the SIC industry using the correspondence table provided

[15] The text of the CFR is broken down into titles, chapters, subchapters, parts, subparts, sections, and paragraphs. As Al-Ubaydli and McLaughlin (2017) note, they obtain similar results at different levels of granularity. We use the data publicly provided by the authors via RegData 3.1, which is based on parts of the CFR.
[16] The regulation data are available starting from 1970 and therefore covers our entire sample period.

by the Census Bureau.[17] When several NAICS industries are matched with the same SIC industry, we sum up the number of regulations (words or restrictions, respectively) over the corresponding NAICS industries.

Our empirical results are reported in Panel B of Table 2. We do not have an instrument for industry-specific regulation; however, it seems implausible that future growth in the number of businessman politicians affects past regulation. Therefore, we use the panel nature of the data and estimate the effect of lagged regulation on the subsequent likelihood of executives to seek political office. This setup also enables us to include industry and time fixed effects. In the specifications reported in Panel B of Table 2, we regress the growth in the number of businessman politicians at the industry level on the index of industry-specific regulation lagged by one election cycle.[18] We estimate the models separately for the two measures of industry-specific regulation (one based on the total word count and the other based on the number of restrictions) and obtain very similar results. Furthermore, since regulations at the industry level are unlikely to shift dramatically from one election cycle to the next, we estimate the models with election cycle fixed effects (columns 1 and 3) as well as decade fixed effects (columns 2 and 4). In all cases, we find that past regulation has a significant effect on future growth in the number of businessman politicians. In terms of economic magnitude, a one-standard deviation increase in the industry-specific regulations (based on the specification in column 1) results in a 1.3 percentage points increase ($0.008 \times 1.675 = 0.013$) in the growth rate of businessman politicians, which represents a 25.0% change relative to the average growth rate of 5.2% in this sample.

Overall, our results suggest that the exposure to global competition and increasing regulation both played a role in motivating corporate executives to seek political office. These

[17] The linking table is available at https://www.census.gov/eos/www/naics/concordances/concordances.html.
[18] We obtain very similar results also if we use two election cycles instead of one election cycle.

factors are not mutually exclusive: some executives may run for office in response to their firms' deteriorating competitive positions while others may run to reduce regulatory burden on their firms. In both cases, however, executives are likely to try to implement policies that would be beneficial to their firms. The extent to which the market expects the executives to be able to do so is the focus of the next section.

4. Firm-value implications of having businessman politicians in federal office

To investigate firm-level benefits of having executives in elective office, we conduct two event studies. In the first event study, we examine stock returns of firms that previously employed businessman politicians around the dates on which these politicians win political office. In the second event study, we examine stock returns around the dates on which Congress passes the legislation introduced by business politicians.[19]

Panel A of Table 3 reports the cumulative abnormal returns (CARs) for firms where business politicians worked prior to running for office around the dates on which these politicians win elections.[20] The CARs are substantial, indicating that the potential firm-level returns from having an executive in elective office are large. Within one day after a businessman politician wins an election, the firms where he/she worked gain, on average, 1.4% of equity value. After seven days, these gains cumulate to 2.8% on average. In terms of market capitalization, an average firm

[19] Apart from bills, which upon passage become laws, Congress can also pass resolutions. Since resolutions generally represent non-binding positions of the legislature, we exclude them from the analysis. As a matter of example, House Resolution 257 introduced on April 6, 2017 is meant to "condemn hate crime and any other form of racism, religious or ethnic bias, discrimination, incitement to violence, or animus targeting a minority in the United States."

[20] We report CAR around *all* elections won by businessman politicians who have worked at a public firm whose stock is traded at the time of the election. Most of these elections are not close, which likely underestimates the causal impact of businessman politicians on firm value—indeed, the CARs we report should reflect only the unexpected component of the market's reaction to businessman politicians' wins. Unfortunately, there is a very small number of close elections with businessman politicians from public firms, which makes it impossible for us to conduct an event study only around such elections.

in our sample gains more than $320 million within one day after one of its executives wins an election, and these gains reach almost $392 million by the seventh day.

Thus, it appears that the market expects the elections of businessman politicians to generate large benefits for their firms. To the extent that businessman politicians maintain ownership stakes in their firms, some of these benefits may also accrue to them directly.[21] To investigate, we collect data on stock holdings by businessman politicians from SEC filings and from Congressional financial disclosure forms. We find that businessman politicians hold substantial stakes in their firms, with an average of $5.7 million, and the value of these stakes rises significantly when businessman politicians win elections. The value of an average businessman politician's holdings in his/her firms increases by $283,514 on the first day after the election, and this increase reaches $540,320 by the seventh day.

If businessman politicians' equity stakes affect their incentives as federal office holders, one would expect equity returns around elections to be higher for firms whose executives maintain larger stakes in their firms. To investigate, we compare the CARs around elections for firms whose executives' ownership stakes are in the top quartile of the sample distribution of ownership with firms whose executives' ownership stakes are in the bottom quartile of the sample distribution of ownership. The results, reported in Panel B of Table 3, demonstrate that, indeed, firms whose executives hold large equity stakes experience substantially larger equity returns when those executives win elections. Thus, the market believes that executives' ownership affects the likelihood with which they will be able to generate benefits for their firms, which implies that at least some of these benefits must be driven by executives' private incentives.

[21] Businessman politicians may also benefit indirectly: for example, firms may increase their contributions to political campaigns of their former executives.

We also investigate a potential mechanism through which businessman politicians can generate value for their firms. To do so, we analyze the market's reaction to the passage of legislation introduced by businessman politicians. Panel A of Table 4 reports CARs around the dates on which Congress passes legislation that was proposed by businessman politicians. Similar to Table 3, we find that the firms in which businessman politicians previously worked experience positive CARs around the dates of legislation passage; these CARs range from 1.3% one day after legislation passage to 2.7% seven days after. We also split CARs by the size of the ownership stake that businessman politicians maintain. Since the likelihood that any given piece of legislation will become law is small (less than 7% on average), some of the businessman politicians who were elected during our sample period have not had any of their bills passed, and thus we have fewer observations in Table 4 than in Table 3. This limits our statistical power, and we no longer find that differences in ownership stakes generate statistically significant differences in CARs across different firms. The point estimates, however, suggest (similar to Panel B of Table 3) that firms whose executives maintain large ownership stakes when in federal office experience larger returns around legislation passage than firms whose executives maintain relatively smaller equity stakes.

Overall, it appears that the expected benefits that businessman politicians generate for their firms are substantial, and at least part of these benefits can be attributed to the favorable legislation introduced by these politicians. Our results on positive CARs around the dates of election of businessman politicians into office can be consistent with two potential channels. First, executives can develop and support government policies that explicitly benefit their former firms partly because some of these benefits accrue to executives themselves ('favoritism'). Second, it is possible that there is a true alignment between executives' personal political views and their firms' interests and preferred values, for example because executives' views have been partly formed as

a result of their experience in this industry ('political views alignment').[22] We do not attempt to separate these two channels because either way the election of executives translates into tangible benefits for their firms. Nevertheless, our results that firms whose executives hold large equity stakes experience significantly larger equity returns when these executives win elections are more in line with the favoritism channel.

5. The aggregate impact of businessman politicians on the legislative process

Apart from introducing legislation themselves, members of Congress also vote on legislation introduced by other members of Congress or the President. In fact, since a typical member of Congress introduces relatively few bills, perhaps the biggest impact that businessman politicians have on the legislative process (and thus on their firms) is through voting on bills introduced by others.[23] Our next set of tests, therefore, aims to examine broad voting patterns of businessman politicians.

To quantify voting patterns, we use data on interest group ratings for all politicians in our sample. Pro-business ratings are provided by the Chamber of Commerce of the United States (CCUS); pro-labor unions' ratings are provided by the Committee on Political Education of the AFL-CIO (COPE), and pro-consumer ratings are from the Consumer Federation of America (CFA). We also collect the overall liberal/conservative scores (DW-NOMINATE), developed by Poole and Rosenthal (1991). Pro-business, pro-consumer, and pro-labor union ratings run from 0 to 100, with a higher score indicating a stronger alignment with the preferences of the given interest

[22] For example, Gormley's (1979) studies the voting behavior of regulators at the Federal Communications Commission and finds that commissioners with prior experience in a regulated industry are more likely to support this industry in their voting decisions.

[23] A growing literature in the political science shows the importance of interpersonal ties and social networks in Congress and their effect on voting behavior (see, e.g., Fowler (2006); Cohen and Malloy (2014)).

group. The original DW scores run from –1 to +1, with a larger (positive) number indicating a more conservative voting record. We multiply DW scores by 100 to make their scale comparable to the other scores.

We are interested in the causal impact of corporate executives on U.S. legislation. Of course, only those executives who ultimately win political office can vote on legislation, and winning political office may (at least in theory) require catering to the political preferences of voters that these executives represent. It may be, for example, that voters rationally anticipate which policies businessman politicians will implement once elected and decide to vote them into office precisely because they want to have these types of policies implemented. This mechanism would be consistent with Lee, Moretti, and Butler (2004), who find that voters elect (rather than affect) candidates' policy choices, and with Fedaseyeu, Gilje, and Strahan (2018), who show that exogenous shifts in voter preferences lead to the replacement of incumbents with politicians who represent the new preferences. Therefore, we perform two sets of tests to separate the legislative impact of businessman politicians from the preferences of their constituencies.

First, for businessman politicians who left political office at some point during our sample period, we track their voting scores over their entire tenure and compare these scores to those of their predecessors and successors. If businessman politicians simply represent the underlying political preferences of their constituents, we should observe either very similar types of voting behavior among businessman politicians and their predecessors and successors or a permanent shift in voting behavior upon businessman politicians assuming political office. For example, if voters decide permanently to shift away from liberal policies toward more conservative ones, then they may elect a businessman politician to implement their preferences, implying a potentially large discontinuous change in voting behavior between a businessman politician and his/her

predecessor. However, we then should observe no such change between a businessman politician and his or her successor. If, on the other hand, businessman politicians deviate from the underlying long-run preferences of their constituencies, then we should observe two large discontinuous changes: one between a businessman politician and his or her predecessor and the other between a businessman politician and his or her successor.

Figure 3 shows the voting patterns *within the same constituency* before, during, and after a businessman politician assumes office. In particular, we compare the voting records of politicians who served immediately prior or immediately after a businessman politician within the same electoral district, i.e., within the same Congressional district for U.S. Representatives and within the same state for U.S. Senators. The figure is constructed in normalized event time to account for the fact that different businessman politicians serve a different number of terms. Each panel represents a single voting score: the top two panels show liberal voting scores associated with pro-consumer and pro-labor unions interest groups, while the bottom two panels represent conservative voting scores associated with pro-business interest groups as well as the overall conservativeness of a politician. In each panel, time 0 represents the average score in the first year that a businessman politician is in office, time 2 represents the average score in the last year that a businessman politician is in office, while time 1 averages a given score across all years that a businessman politician is in office. Time –2 and time –1 show the average scores of other politicians serving in the years immediately preceding the businessman politician, while time 3 and time 4 show the average scores of other politicians serving in the years immediately after the businessman politician leaves office, all within the same constituency.

In all four panels in Figure 3, we observe large discontinuous changes in voting scores immediately after a businessman politician assumes office and immediately after he or she leaves

office, and these changes are economically large (on average, about one-third of the unconditional mean of the corresponding score). Relative to their immediate predecessors and successors, businessman politicians consistently vote against pro-consumer and pro-labor unions interests and vote in line with corporate interests. The graphical evidence also strongly suggests that the voting behavior of businessman politicians deviates from long-run underlying political preferences of their constituencies. Of course, this evidence is not sufficient to rule out a potential explanation of *temporary* shifts in voter preferences, and that policies implemented by businessman politicians mostly reflect these temporary shifts. Further, there is a potential concern that in these univariate tests we cannot control for the change in party affiliation of politicians in office. To provide more direct evidence that businessman politicians have an independent impact on legislation that goes beyond temporary shifts in voter preferences and to properly control for politicians' party affiliation, we use a second identification strategy that relies on the comparison of politicians' voting records around close elections.

More specifically, we compare voting scores among winners of close elections in which a businessman politician either barely wins or barely loses (we use the victory margin of 10% to identify close elections).[24] Since voters are close to being indifferent between winners of such elections, comparing the scores of businessman politicians to their non-businessman counterparts should produce the causal effect that businessman politicians have on legislation, free from the contaminating influence of voter preferences.

[24] Note that we have voting scores for all businessman politicians, and not only for businessman politicians whose firms are publicly traded during their time in office. Thus, even though the sample of close elections we use in this section is not large, it is sufficient to draw statistical inferences. Our results for voting scores also hold for a sample of all elections, albeit the economic magnitudes are somewhat smaller in the full sample (we report these latter results in the appendix).

Table 5 reports the results of regressions where each politician's score is regressed on the party indicator as well as the businessman politician dummy and election cycle fixed effects. Consistent with the graphical evidence presented in Figure 3, we find that businessman politicians are more likely than non-businessman politicians to vote against labor union and consumer interests but in favor of business interests. Businessman politicians also accumulate an overall more conservative voting record than their non-businessman peers, even after controlling for party affiliation. In some specifications in Table 5, we also directly control for voter preferences by adding the Republican vote share as an explanatory variable. This variable never enters significantly, suggesting that our identification strategy is successful at removing the contaminating effects of voter preferences. On the balance, it appears that businessman politicians shift the balance of power toward corporate interests by supporting pro-business legislation at the expense of legislation supporting the interests of labor unions and consumers.

Why do voters elect businessman politicians if such politicians support legislation that deviates from the underlying political preferences of their constituencies? There are at least two possible explanations. First, businessman politicians may be able to outspend their electoral opponents (by using their own personal funds or raising more campaign contributions from other sources). Second, it may be that businessman politicians possess certain quality characteristics that voters find appealing and value over and above their political preferences. We investigate these explanations in turn.

First, we examine campaign finance data and identify the donors of the electoral campaigns of businessman politicians and their peers; the results are reported in Table 6. Because we have only nine Presidential elections during our sample period and because candidates in Presidential elections generally raise substantially more funds than candidate in Congressional elections, we

report the contributions data separately for these two types of elections (see Panel A and Panel B of Table 6). We observe similar patterns in both cases, and therefore focus our discussion on Congressional elections since they include the vast majority of politicians in our sample.

In terms of the total amount of inflation-adjusted campaign contributions received from all sources, businessman politicians raise $27,588 or approximately 2.5% more than non-businessman politicians, but this difference is not statistically significant. Furthermore, this difference is entirely due to the fact that businessman politicians donate more of their own personal funds to their political campaigns (about $73,333 versus $9,098). Thus, in terms of campaign contributions that do not come from the candidates themselves, businessman politicians are virtually identical to their non-businessman peers. It is the composition of these contributions that differentiates these two groups. Specifically, labor unions-linked special interests donate more to non-businessman politicians and less to businessman politicians.[25] This is perhaps expected given the voting record of businessman politicians, who are more likely than their non-businessman peers to vote against labor union interests. Overall, however, it appears that the electoral success of businessman politicians cannot be explained by their ability to outspend their opponents.

Campaign contributions are not the only (and perhaps not even the main) determinant of electoral success, and businessman politicians may possess unique skills that voters value on their own. For example, businessman politicians may be, on average, better-educated than their opponents. Further, the voters may value the ability of businessman politicians to run complex organizations and challenge the status quo.

To investigate this channel further, we collect, for all businessman politicians in our BoardEx sample (152 election campaigns), their personal characteristics such as age, gender,

[25] Figure 4 shows that this pattern holds in every election cycle during our sample period.

education, and any prior experience in the government, finance, army, or academia, as well as some other characteristics (see Table 7). Finally, we identify all opponents who run against businessman politicians in our BoardEx sample, who we term 'the electoral opponents of businessman politicians.' The list of such opponents is obtained from the election results provided by the FEC. For all such individuals we manually collect the same set of characteristics that we have collected for businessman politicians. Since there is no central database that contains the biographies of U.S. political candidates who did not get elected, we perform extensive web searches on each candidate.[26]

Table 7 reports summary statistics and compares the characteristics of businessman politicians and their electoral opponents.[27] We find that businessman politicians are more likely to run as Republicans, more likely to have undergraduate or graduate education and to come from an Ivy League school; they are also more likely to have an MBA degree and finance experience, as well as to be married and to run in their home state. Non-businessman politicians, on the other hand, are more likely to have prior government experience (before running for office) and a law degree. There appear to be no significant differences in other characteristics of businessman politicians and their opponents; in particular, there is no lower proportion of females among businessman candidates. This is notable given that males are more likely than females to hold executive positions. For example, Adams and Ferreira (2009) report that only 8.1% of directors of S&P 1,500 firms were female over 1996–2003, and this fraction is likely to be lower among senior executives we consider. Thus it appears that the females who hold senior executive positions are no less likely than males to run for political office.

[26] Most of our information on the electoral opponents of businessman candidates comes from official campaign websites of losing candidates, newspaper announcements that describe the candidates, obituaries, and candidate interviews.

[27] Since not all variables are available for all candidates, the sample sizes vary slightly.

On the balance, we find that businessman politicians rank higher than their electoral opponent in terms of education but are less likely to have had government experience prior to running for office. This evidence, while not conclusive, is consistent with businessman candidates having higher underlying quality and being more likely to challenge the existing status quo in politics, and it seems plausible that both of these characteristics may be valued by voters.

6. Conclusion

We study the incidence of top corporate executives running for political office in the United States. Over the last two decades, there has been a substantial increase in the number of businessman politicians serving in federal elective office. We argue that this trend is at least in part driven by intensifying global competition and greater federal regulation, both of which may have increased the benefits from political participation for U.S. executives.

We also show that executives with political power are expected by the market to provide substantial benefits to their firms. Electoral wins of businessman politicians are associated with large equity value appreciation for their firms; equity values also increase when Congress passes legislation introduced by business executives. Further, businessman politicians' voting records are generally pro-business but go against the interests of labor unions.

Overall, our results indicate that during the last decade business interests have increased their direct impact on the legislative process in the United States.

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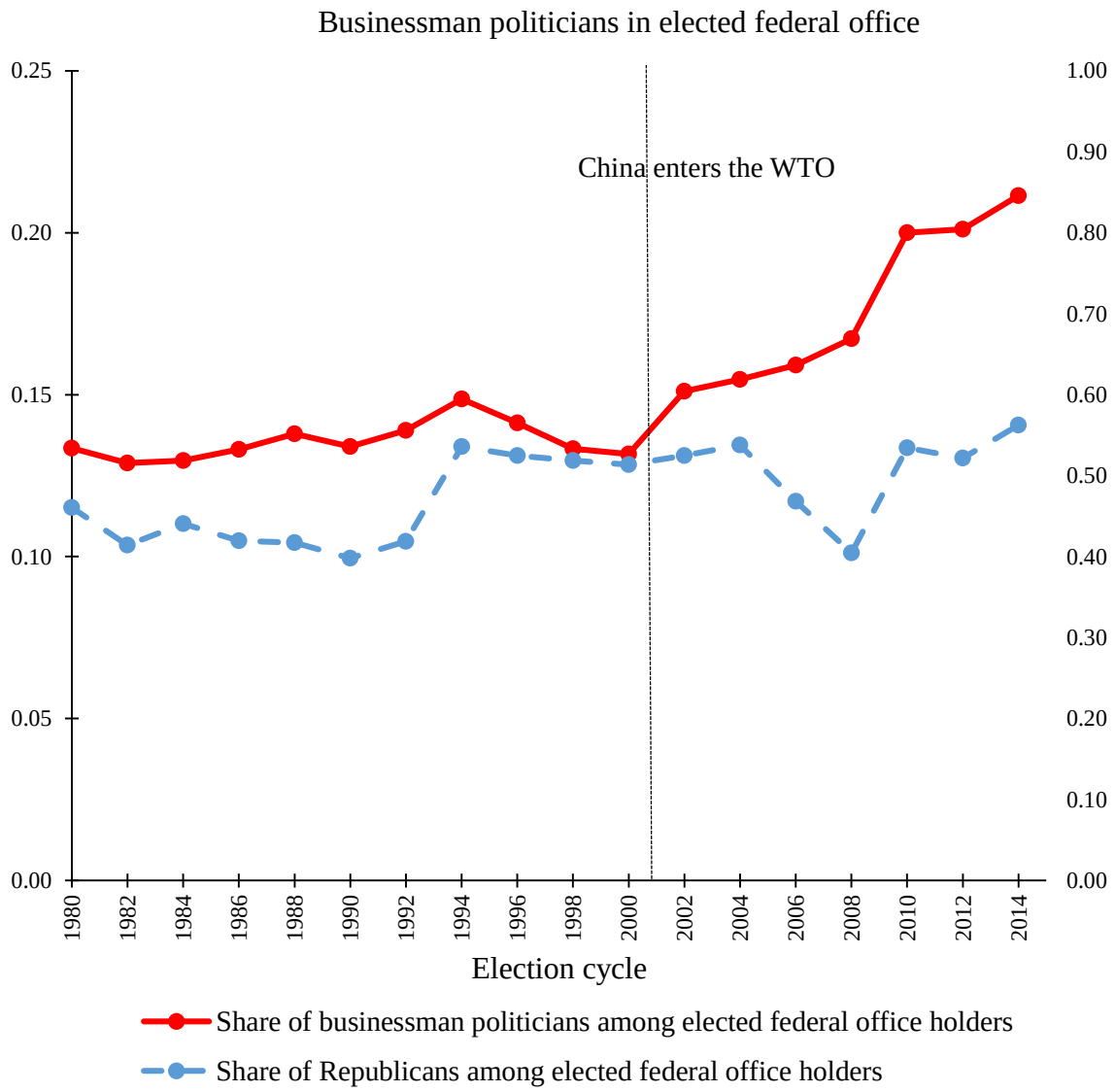

Figure 1. Share of businessman politicians in federal office

In this figure, the solid red line (measured against the scale on the left) depicts the share of federal office holders (U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents) who, prior to being elected, held at least one position as the CEO, president, chairman/chairwoman, or founder/owner of any private or public for-profit non-agricultural firm. The dashed blue line (measured against the scale on the right) depicts the share of federal office holders (U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents) from the Republican party. The dotted vertical line represents the year when China entered the WTO (which occurred in December of 2001).

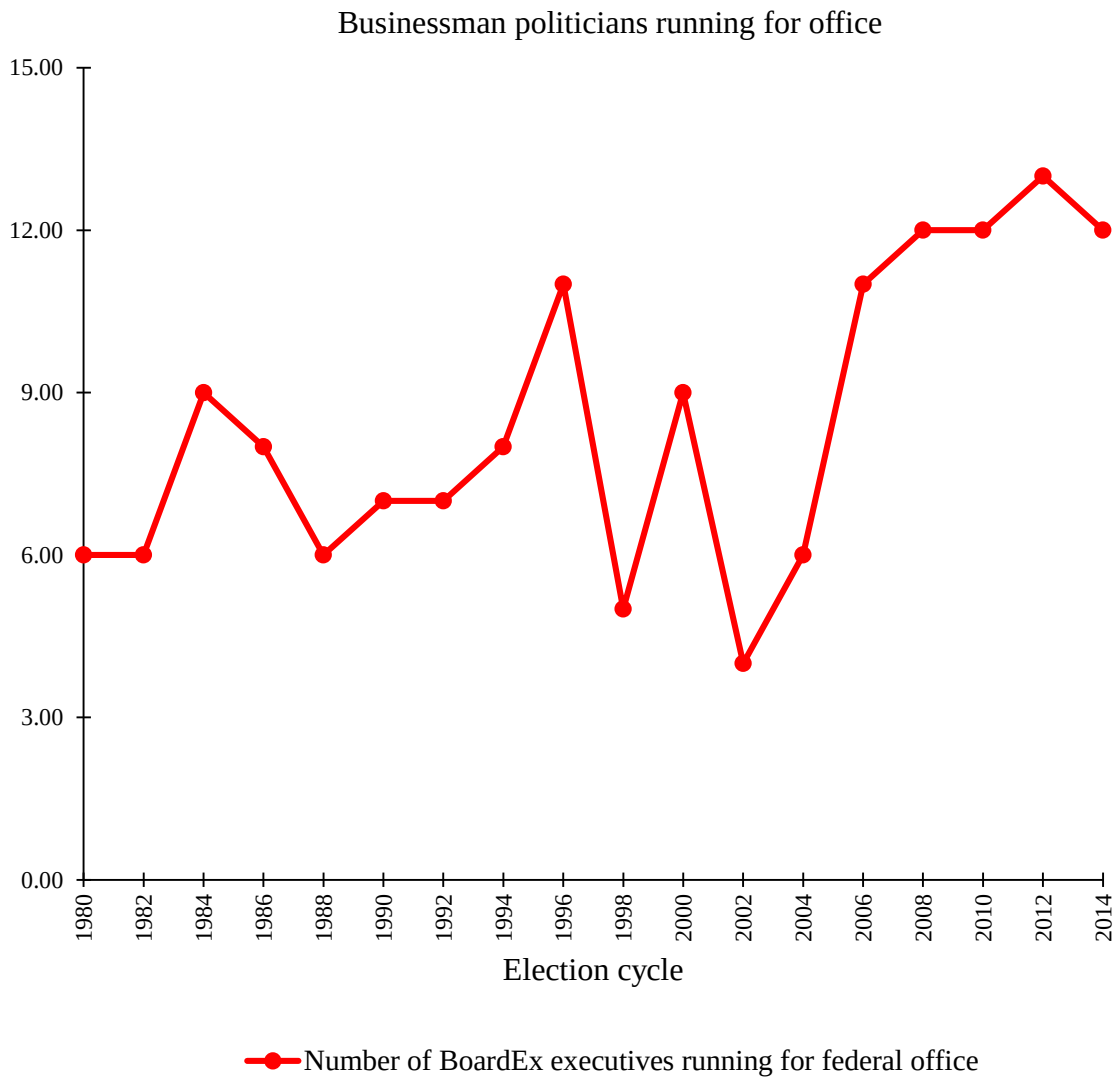

Figure 2. The likelihood of businessman politicians running for office

This figure shows the number of executives from the BoardEx database who run for office in any given election cycle.

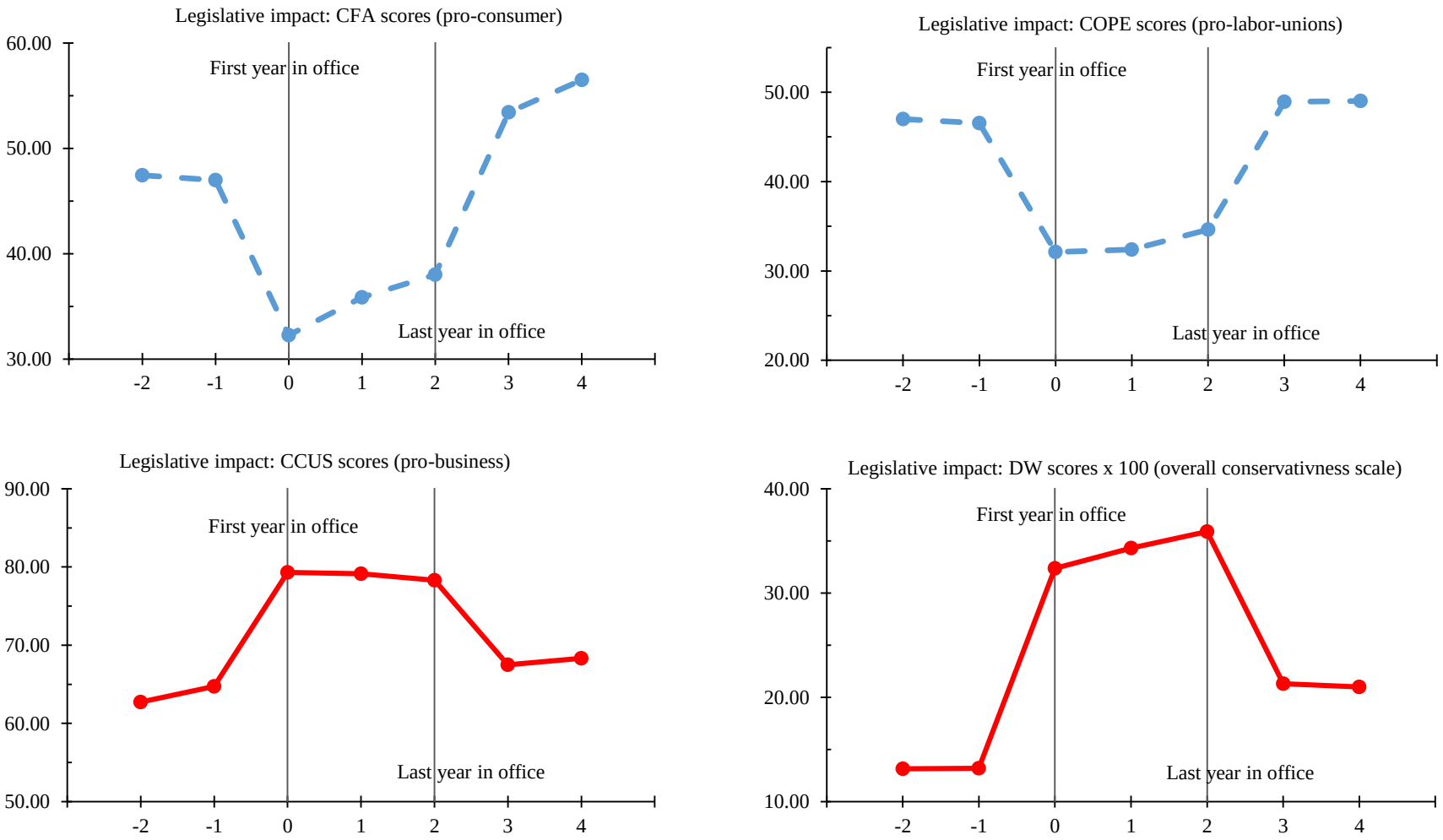

Figure 3. Businessman politicians' legislative impact

This figure reports legislative scores before, during, and after a businessman politician holds office. The time scale is normalized: time 0 is the first year during which a businessman politician is in office, time 2 is the last year during which a businessman politician is in office, while the value at time 1 represents the average value of a given legislative score over all years during which a businessman politician is in office (see text for details). DW scores are multiplied by 100 to put them on a scale comparable to the other scores.

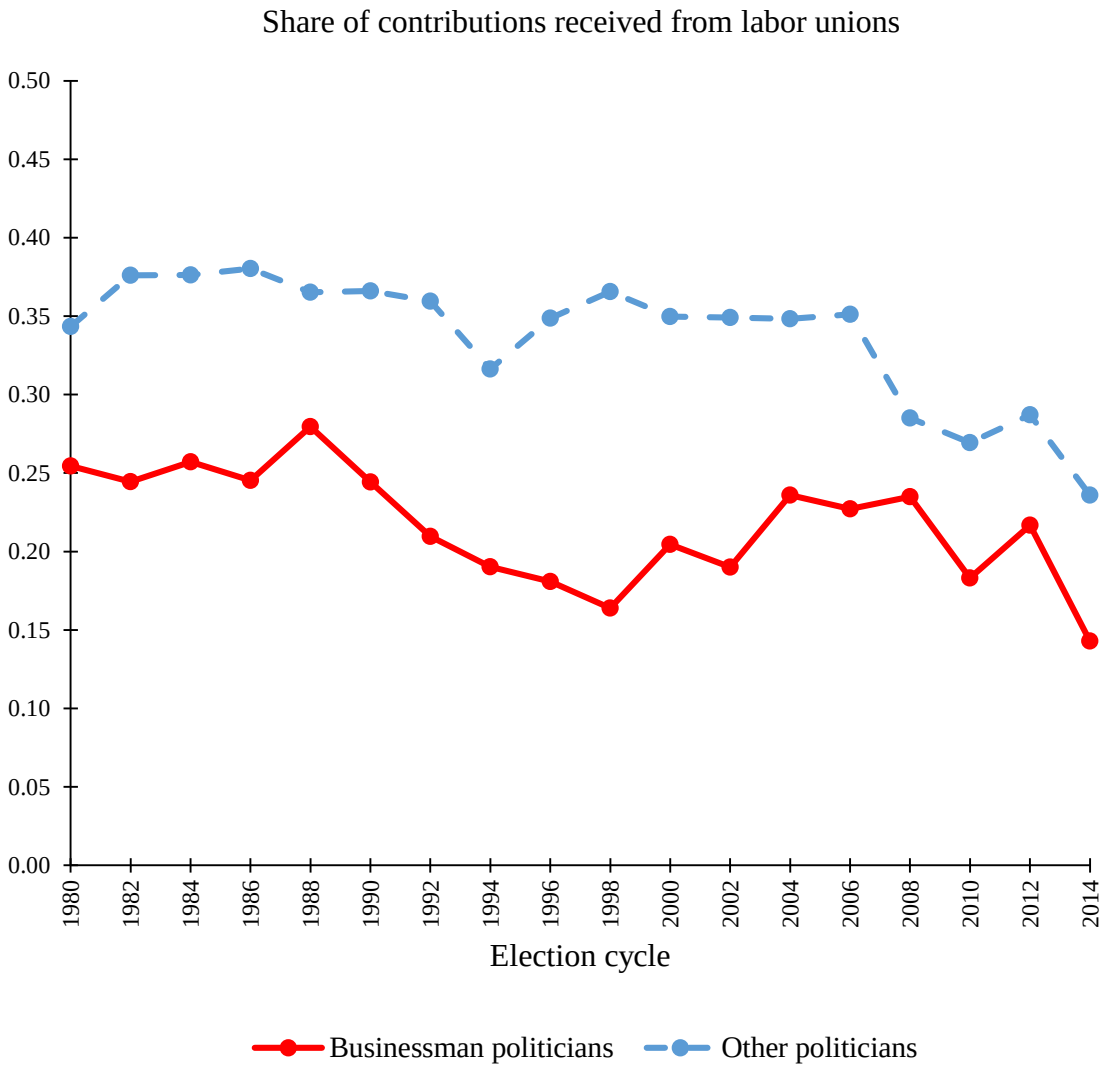

Figure 4. Campaign contributions made by PACs associated with labor unions to businessman politicians and to other politicians

In this figure, the solid red line depicts the share of contributions from labor unions in the total amount of contributions from corporations and labor unions received by businessman politicians elected to the U.S. House or the U.S. Senate. The dashed blue line depicts the share of contributions from labor unions in the total amount of contributions from corporations and labor unions received by non-businessman politicians elected to the U.S. House or the U.S. Senate.

Table 1. Summary statistics

This table reports aggregate summary statistics. The data are for 18 election cycles from 1980 to 2014 and includes all federal office holders (U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents). Panel A is based on official biographies of federal office holders; Panel B is based on the sample of BoardEx executives (see text for details on sample construction). Panel C reports statistics on industry-specific exposure to competition from China and on industry-specific growth in the number of businessman politicians, separately for manufacturing industries and for all industries with at least one businessman politician. Industry is defined as all firms in the same four-digit SIC code. Panel D reports statistics on the index of industry-specific regulation developed by Al-Ubaydli and McLaughlin (2017) and on industry-specific growth in the number of businessman politicians in the sample of four-digit SIC industries for which the index is available. Al-Ubaydli and McLaughlin (2017) develop two measures of regulation, one based on the number of words in the CFR associated with a specific industry and the other based on the number of restrictions in the CFR associated with a specific industry. Panel E reports summary statistics on voting records of winners of close elections (defined as elections won by a margin of 10% or less). Pro-consumer ratings are provided by the Consumer Federation of America (CFA). Pro-labor unions' ratings are provided by the Committee on Political Education of the AFL-CIO (COPE). Pro-business ratings are provided by the Chamber of Commerce of the United States (CCUS). The ratings are based on the individual voting records of politicians. A higher rating by a given interest group indicates a voting record more aligned with that group's preferences. The overall liberal/conservative scores (DW-NOMINATE) are developed by Poole and Rosenthal (1991), with a higher score indicating a more conservative voting record; DW-NOMINATE scores are multiplied by 100 to put them on a scale comparable to the other scores.

	N	Mean	25th Pctl.	Median	75th Pctl.	Std. Dev.
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Sample based on official biographies						
Number of unique federal office holders	1,878	-	-	-	-	-
of which:						
U.S. Representatives	1,559	-	-	-	-	-
U.S. Senators	310	-	-	-	-	-
U.S. Presidents/Vice-Presidents	9	-	-	-	-	-
Number of unique federal office holders (businessman politicians)	338	-	-	-	-	-
of which:		-	-	-	-	-
U.S. Representatives	288	-	-	-	-	-
U.S. Senators	47	-	-	-	-	-
U.S. Presidents/Vice-Presidents	3	-	-	-	-	-
Share of businessman politicians in federal office, per election cycle	18	0.152	0.133	0.140	0.158	0.026
Panel B: Sample based on BoardEx						
Number of unique electoral campaigns by businessman politicians	152	-	-	-	-	-
Number of businessman politicians, per cycle	18	8.444	6.000	8.000	11.000	2.791
Number of elections in which businessman politicians run, per cycle	18	8.056	6.000	8.000	10.000	2.363
Share of elections won by businessman politicians, per cycle	18	0.667	0.600	0.714	0.778	0.244
Panel C: Industry-specific exposure to competition from China (unit of observation is industry-decade)						
Growth in the number of businessman candidates, manufacturing	112	0.038	0.000	0.000	0.000	0.099
Growth in Chinese import penetration, manufacturing	112	0.624	0.189	0.306	0.479	1.127
Growth in the number of businessman candidates, all industries	498	0.050	0.000	0.000	0.125	0.127
Growth in Chinese import penetration, all industries	498	0.140	0.000	0.000	0.000	0.593
Panel D: Industry-specific regulation (unit of observation is industry-election cycle)						
Growth in the number of businessman candidates	2,431	0.052	0.000	0.000	0.000	0.371
Regulation measured by the number of words	2,431	1.139	0.090	0.430	1.340	1.675
Regulation measured by the number of restrictions	2,431	0.012	0.001	0.005	0.014	0.017
Panel E: Voting records in the sample of close elections						
CFA	255	43.263	17.000	33.000	72.000	30.628
CCUS	526	71.027	53.000	79.000	92.000	25.133
COPE	526	44.420	11.000	33.000	83.000	36.984
DW-NOMINATE x 100	497	20.657	-22.400	30.900	55.300	42.966

Table 2. Global competition, regulation, and the likelihood of businessman politicians running for office

Panel A reports instrumental variables regressions of growth in industry-specific number of businessman politicians on growth in the industry-specific exposure to imports from China, where an industry is defined as all firms within the same four-digit SIC code. Following Autor, Dorn, and Hanson (2013), we instrument an industry's exposure to China by the industry-specific imports from China to eight other high-income countries, separately for each decade (see text for details). Consequently, the sample includes one observation per industry per decade. A businessman politician is assigned to all industries in which he/she had work experience prior to running for elected office, and the same businessman politician can thus be assigned to several industries. We report both the second- and first-stage estimates. The sample in columns (1) and (2) includes all manufacturing industries with at least one businessman politician, whereas the sample in columns (3) and (4) includes all industries with at least one businessman politician. Columns (1) and (3) are constructed using the sample of businessman politicians who ran for office prior to 2007, Columns (2) and (4) are constructed using the sample of businessman politicians who ran for office prior to 2010. Panel B reports estimates from regressions of growth in industry-specific number of businessman politicians on the index of industry-specific regulation (Al-Ubaydli and McLaughlin (2017)). The regressions include industry and time fixed effects as indicated. Standard errors, clustered by two-digit SIC codes, are reported in parentheses.

Panel A: The effect of global competition

	Instrumental variables: Second-stage estimates			
	Growth in the number of businessman politicians			
Sample:	Manufacturing industries		All industries	
	(1)	(2)	(3)	(4)
Growth in imports from China to U.S.	0.024***	0.024***	0.016**	0.016**
	(0.006)	(0.005)	(0.008)	(0.006)
Post-2000 indicator	0.023	0.042**	0.035***	0.051***
	(0.025)	(0.021)	(0.013)	(0.011)
	Instrumental variables: First-stage estimates			
Growth in imports from China to OTH	0.536***	0.536***	0.613***	0.613***
	(0.056)	(0.056)	(0.027)	(0.027)
Post-2000 indicator	-0.382**	-0.382**	-0.080**	-0.080**
	(0.154)	(0.154)	(0.037)	(0.037)
Time period	1991-2007	1991-2010	1991-2007	1991-2010
Observations	112	112	498	498
R-squared	0.492	0.492	0.515	0.515

**p<0.1, **p<0.05, ***p<0.01*

Panel B: The effect of regulation

	Growth in the number of businessman politicians			
	(1)	(2)	(3)	(4)
Regulation measured by words	0.008**	0.014**	-	-
	(0.004)	(0.005)	-	-
Regulation measured by restrictions	-	-	0.604*	1.092**
	-	-	(0.315)	(0.442)
Observations	2,431	2,431	2,431	2,431
R-squared	0.088	0.026	0.088	0.026
Industry fixed effects	Yes	Yes	Yes	Yes
Election cycle fixed effects	Yes	No	Yes	No
Decade fixed effects	No	Yes	No	Yes

**p<0.1, **p<0.05, ***p<0.01*

Table 3. Firm-value implications of business executives' winning political office

This table reports cumulative abnormal returns (CARs) around the dates of federal elections for firms whose executives win political office. Day 0 is the day of the election. CARs are based on the market model estimated over one trading year (255 trading days), with the estimation window ending two months (46 trading days) before the election date; the value-weighted CRSP index is used as the market return. Panel A reports the returns for all public firms in the sample whose executives win federal political office. Panel B compares the returns of firms whose executives, at the time of their election, hold a large ownership stake in the firm with the returns of firms whose executives hold a small ownership stake in the firm; a large ownership stake is defined as ownership in the top quartile of sample ownership distribution, a small ownership stake is defined as ownership in the bottom quartile of the sample ownership distribution. The data on stock holdings, when available, are obtained from the SEC filings and Congressional disclosures.

Panel A: CARs of firms whose executives win political office

	CAR	N	*t*-stat
	(1)	(2)	(3)
Event window (-1; +1)	0.014	71	2.21**
Event window (-1; +3)	0.018	71	2.15**
Event window (-1; +5)	0.019	71	2.07**
Event window (-1; +7)	0.028	71	2.34**

**p<0.1, **p<0.05, ***p<0.01*

Panel B: CARs of firms whose executives win political office, sample splits at the top and bottom quartiles

	CAR (ownership in the top quartile)	N	CAR (ownership in the bottom quartile)	N	*t*-stat
	(1)	(2)	(3)	(4)	(5)
Event window (-1; +1)	0.046	13	0.008	29	1.88*
Event window (-1; +3)	0.065	13	0.005	29	2.22**
Event window (-1; +5)	0.072	13	0.011	29	2.13**
Event window (-1; +7)	0.099	13	0.013	29	2.23**

**p<0.1, **p<0.05, ***p<0.01*

Table 4. Firm-value implications of legislation introduced by business executives

This table reports cumulative abnormal returns (CARs) around the dates of legislation passage for firms whose executives introduce legislation to U.S. Congress. Day 0 is the date of legislation passage. CARs are based on the market model estimated over one trading year (255 trading days), with the estimation window ending two months (46 trading days) before the election date; the value-weighted CRSP index is used as the market return. Panel A reports the returns for all public firms in the sample whose executives introduce legislation that becomes law. Panel B compares the returns of firms whose executives, at the time of their election, hold a large ownership stake in the firm with the returns of firms whose executives hold a small ownership stake in the firm; a large ownership stake is defined as ownership in the top quartile of sample ownership distribution, a small ownership stake is defined as ownership in the bottom quartile of the sample ownership distribution. The data on stock holdings, when available, are obtained from the SEC filings and Congressional disclosures.

Panel A: CARs of firms whose executives introduce legislation

	CAR	N	*t*-stat
	(1)	(2)	(3)
Event window (-1; +1)	0.013	48	2.02**
Event window (-1; +3)	0.017	48	1.97*
Event window (-1; +5)	0.021	48	2.30**
Event window (-1; +7)	0.027	48	2.19**

**p<0.1, **p<0.05, ***p<0.01*

Panel B: CARs of firms whose executives introduce legislation, sample splits at the top and bottom quartiles

	CAR (ownership in the top quartile)	N	CAR (ownership in the bottom quartile)	N	*t*-stat
	(1)	(2)	(3)	(4)	(5)
Event window (-1; +1)	0.015	11	0.018	18	0.21
Event window (-1; +3)	0.015	11	0.011	18	0.22
Event window (-1; +5)	0.029	11	0.011	18	0.87
Event window (-1; +7)	0.029	11	0.015	18	0.53

**p<0.1, **p<0.05, ***p<0.01*

Table 5. The impact of businessman politicians on U.S. legislation: Evidence from close elections

This table reports the results of regressions of interest group ratings for U.S. Representatives and U.S. Senators elected (or re-elected) between 1980 and 2014. The sample includes only close elections in which a businessman politician either narrowly won or narrowly lost by a margin of 10% or less. Pro-consumer ratings are provided by the Consumer Federation of America (CFA). Pro-labor unions' ratings are provided by the Committee on Political Education of the AFL-CIO (COPE). Pro-business ratings are provided by the Chamber of Commerce of the United States (CCUS). The ratings are based on the individual voting records of politicians. A higher rating by a given interest group indicates a voting record more aligned with that group's preferences. The overall liberal/conservative scores (DW-NOMINATE) are developed by Poole and Rosenthal (1991), with a higher score indicating a more conservative voting record; DW-NOMINATE scores are multiplied by 100 to put them on a scale comparable to the other scores. Not all ratings are available for all politicians in all years, which explains the varying sample sizes. All regressions include year fixed effects. Standard errors, clustered by politician and year, are reported in parentheses.

Panel A: Pro-consumer (CFA), pro-labor (COPE) interest group ratings

	CFA		COPE	
	(1)	(2)	(3)	(4)
Businessman politician indicator	-10.638**	-10.704**	-7.104*	-7.113*
	(4.834)	(4.988)	(3.950)	(3.848)
Republican indicator	-48.524***	-48.876***	-65.639***	-62.404***
	(4.675)	(5.725)	(2.468)	(2.952)
Republican vote share	-	0.074	-	-0.686
	-	(0.865)	-	(0.456)
Observations	255	255	526	526
R-squared	0.667	0.667	0.807	0.808

**p<0.1, **p<0.05, ***p<0.01*

Panel B: Pro-business interest group ratings (CCUS), the overall conservative/liberal score (DW-NOMINATE)

	CCUS		DW-NOMINATE x 100	
	(1)	(2)	(3)	(4)
Businessman politician indicator	4.432	4.443	12.154***	12.197***
	(4.518)	(4.380)	(4.316)	(4.050)
Republican indicator	37.955***	35.459***	79.239***	75.898***
	(3.252)	(4.165)	(3.211)	(4.164)
Republican vote share	-	0.528	-	0.708
	-	(0.528)	-	(0.683)
Observations	526	526	497	497
R-squared	0.651	0.653	0.867	0.868

**p<0.1, **p<0.05, ***p<0.01*

Table 6. Campaign contributions to business executives and other politicians

This table reports the sources of campaign contributions received by businessman politicians and non-businessman politicians. The sample includes all U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents elected (or re-elected) between 1980 and 2014. Special interest groups (other than corporations and labor unions) comprise corporations without capital stock, cooperatives, trade associations, and membership organizations. Panel A includes all House and Senate election campaigns; Panel B includes all Presidential campaigns. All amounts are adjusted for inflation and expressed in 2014 dollars. In both panels, column 5 reports *t*-statistics for the difference between the amounts of contributions received by businessman politicians and non-businessman politicians.

Panel A: House and Senate elections

	Businessman politicians	N	Other politicians	N	*t*-stat
	(1)	(2)	(3)	(4)	(5)
Total contributions from all sources	1,147,702.50	1,517	1,120,115.00	8,033	0.61
Contributions made by the candidate	73,332.96	1,517	9,097.61	8,033	6.47***
Contributions made by other individuals	612,817.13	1,517	622,346.44	8,033	-0.27
Contributions made by corporations	209,442.13	1,517	198,846.19	8,033	1.50
Contributions made by labor unions	55,001.50	1,517	94,376.27	8,033	-12.68***
Contributions made by other special interests	197,108.78	1,517	195,448.48	8,033	0.31

**p<0.1, **p<0.05, ***p<0.01*

Panel B: Presidential elections

	Businessman politicians	N	Other politicians	N	*t*-stat
	(1)	(2)	(3)	(4)	(5)
Total contributions from all sources	99,177,520.00	3	94,310,624.00	6	0.06
Contributions made by the candidate	666.67	3	833.33	6	-0.13
Contributions made by other individuals	97,697,816.00	3	94,134,440.00	6	0.04
Contributions made by corporations	1,061,230.38	3	111,401.34	6	5.58***
Contributions made by labor unions	18,681.33	3	11,235.33	6	0.78
Contributions made by other special interests	399,130.34	3	52,712.00	6	3.56***

**p<0.1, **p<0.05, ***p<0.01*

Table 7. Comparison of businessman politicians and their electoral opponents

This table reports individual characteristics of businessman politicians (in Panel A) and their opponents (in Panel B), i.e., other candidates who run in the same election but are not businessman politicians. The sample includes all executives from the BoardEx database who run for federal political office between 1980 and 2014. Panel C reports the differences between businessman politicians and their opponents and the corresponding *t*-statistics for the test of difference in means between the two groups.

	N	Mean	25th Pctl.	Median	75th Pctl.	Std. Dev.
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Businessman politicians						
Female	152	0.125	0.000	0.000	0.000	0.332
Republican-party candidate	152	0.671	0.000	1.000	1.000	0.471
Prior government experience	152	0.303	0.000	0.000	1.000	0.461
Army service	152	0.362	0.000	0.000	1.000	0.482
Undergraduate degree	152	0.967	1.000	1.000	1.000	0.179
Graduate degree	152	0.691	0.000	1.000	1.000	0.464
Ivy League school	152	0.263	0.000	0.000	1.000	0.442
MBA degree	152	0.204	0.000	0.000	0.000	0.404
Law degree	152	0.230	0.000	0.000	0.000	0.422
Academic experience (Ph.D. degree or professor)	152	0.125	0.000	0.000	0.000	0.332
Finance experience	152	0.224	0.000	0.000	0.000	0.418
Age	152	52.375	45.500	52.000	60.000	9.119
Married status	152	0.914	1.000	1.000	1.000	0.281
Number of children	152	2.724	1.500	2.000	3.000	1.765
Foreign-born	152	0.046	0.000	0.000	0.000	0.210
Runs in home state	152	0.493	0.000	0.000	1.000	0.502
Panel B: Opponents of businessman politicians						
Female	516	0.140	0.000	0.000	0.000	0.347
Republican-party candidate	516	0.403	0.000	0.000	1.000	0.491
Prior government experience	516	0.459	0.000	0.000	1.000	0.499
Army service	516	0.306	0.000	0.000	1.000	0.461
Undergraduate degree	516	0.859	1.000	1.000	1.000	0.349
Graduate degree	516	0.587	0.000	1.000	1.000	0.493
Ivy League school	513	0.164	0.000	0.000	0.000	0.370
MBA degree	516	0.081	0.000	0.000	0.000	0.274
Law degree	516	0.314	0.000	0.000	1.000	0.465
Academic experience (Ph.D. degree or professor)	516	0.120	0.000	0.000	0.000	0.325
Finance experience	516	0.056	0.000	0.000	0.000	0.231
Age	451	52.242	45.000	52.000	60.000	10.962
Married status	415	0.814	1.000	1.000	1.000	0.389
Number of children	392	2.625	2.000	2.000	4.000	1.686
Foreign-born	445	0.047	0.000	0.000	0.000	0.212
Runs in home state	443	0.388	0.000	0.000	1.000	0.488

Panel C: Differences between businessman politicians and their opponents

	Businessman politicians	N	Opponents of businessman politicians	N	*t*-stat
	(1)	(2)	(3)	(4)	(5)
Female	0.125	152	0.140	516	-0.46
Republican-party candidate	0.671	152	0.403	516	5.97***
Prior government experience	0.303	152	0.459	516	-3.46***
Army service	0.362	152	0.306	516	1.29
Undergraduate degree	0.967	152	0.859	516	3.70***
Graduate degree	0.691	152	0.587	516	2.31**
Ivy League school	0.263	152	0.164	513	2.78***
MBA degree	0.204	152	0.081	516	4.31***
Law degree	0.230	152	0.314	516	-1.99**
Academic experience (Ph.D. degree or professor)	0.125	152	0.120	516	0.16
Finance experience	0.224	152	0.056	516	6.39***
Age	52.375	152	52.242	451	0.14
Married status	0.914	152	0.814	415	2.90***
Number of children	2.724	152	2.625	392	0.60
Foreign-born	0.046	152	0.047	445	-0.05
Runs in home state	0.493	152	0.388	443	2.28**

**p<0.1, **p<0.05, ***p<0.01*

APPENDIX A: FEDERAL OFFICE HOLDERS WITH EXPERIENCE IN THE MILITARY, LAW, AND AGRICULTURE

The total number of federal office holders (including any temporary vacancies) is fixed at 537 (435 U.S. Representatives, 100 U.S. Senators, one U.S. President and one Vice-President). Therefore, one explanation for the increase in the share of businessman politicians may be a lower share of politicians with other types of experience. Alternatively, since different types of experience are not mutually exclusive, the share of businessman politicians may have risen without affecting the proportion of politicians with other types of experience.

To investigate, we consider three types of non-business experience: service in the military, law experience, and agriculture experience (the latter should correspond to the changes in the urban and rural composition of the U.S. population). To identify these types of experience, we search the official biographies for corresponding keywords.[1] We then calculate the share of politicians with each type of experience among office holders and plot it in Figure A1.[2]

As Figure A1 shows, the share of politicians with experience in agriculture remained relatively stable between 1980 and 2014. The share of politicians with law experience and military service, however, dropped, and in the case of military experience the drop has been rather dramatic. Thus, the increase in the share of businessman politicians was accompanied by a decrease in the share of politicians with law experience and military service.

[1] The following set of keywords corresponds to military experience: "Unites States Navy", "United States Army", "United States Air Force", "United States Marine Corps", as well "National Guard", "military service", "veteran", "prisoner of war" (and any variations on the above). The following set of keywords corresponds to law experience: "law school", "school of law", "attorney", "lawyer", "legal assistant", "legal research assistant", as well as "JD", "LLM", "LLB" (and any variations on the above). The following set of keywords corresponds to agriculture experience: "farmer", "rancher", "farm owner", "farm operator", "agriculture businessman", "agriculture businesswoman" (and any variations on the above).

[2] Note that the same person may possess more than one type of experience.

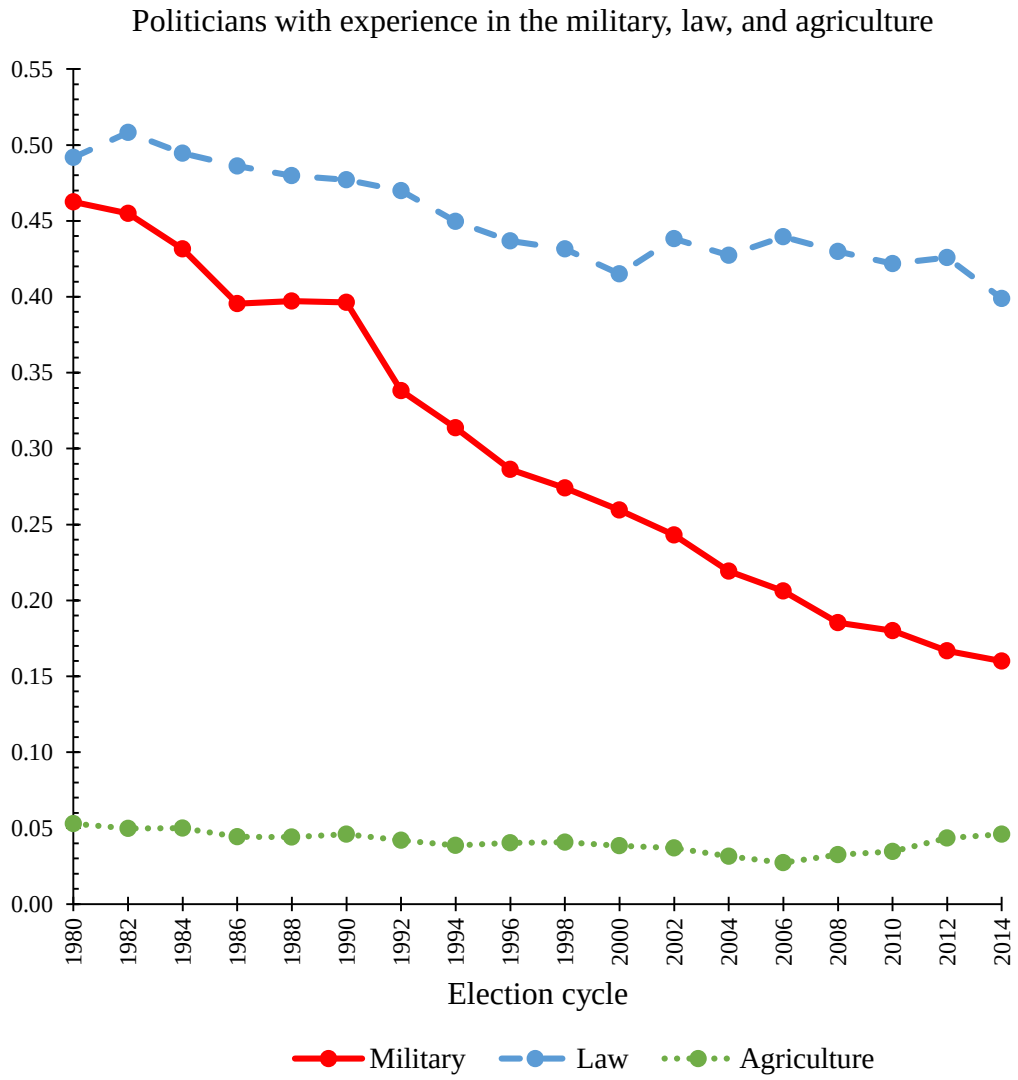

Figure A1. Share of federal office holders with experience in the military, law, and agriculture

This figure depicts the share of federal office holders (U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents) who, prior to being elected, had experience in the military (the solid red line), law (the dashed blue line), and agriculture (the dotted green line).

APPENDIX B: DETAILS OF SAMPLE CONSTRUCTION, ADDITIONAL TESTS

B1. The sample of businessman politicians based on official biographies

We identify all federal office holders (i.e., U.S. Representatives, U.S. Senators, and U.S. Presidents/Vice-Presidents) who were elected (either for the first time or re-elected for a subsequent term) at any point of time between 1980 and 2014. We then obtain their official biographies, available at http://bioguide.congress.gov/biosearch/biosearch.asp and at https://www.govtrack.us. We use the latter source for our analysis, since it also contains the list of all bills sponsored and co-sponsored by each U.S. Representative and U.S. Senator. In total, we identify 1,878 federal office holders, of which 1,559 are U.S. Representatives, 310 are U.S. Senators, and 9 are U.S. Presidents/Vice-Presidents (the U.S. President and Vice-President are always elected simultaneously, with one U.S. Vice-President, George H. W. Bush, later becoming President himself).

For each federal office holder identified in the previous step, we read the official biography and find all people who, prior to being elected, held at least one position as the CEO, president, chairman/chairwoman, or founder/owner of any private or public for-profit non-agricultural firm. We term such federal office holders 'businessman politicians', of which we identify 338. In rare cases, a person may obtain executive experience between his/her terms in federal office. For example, Dick Cheney served in the U.S. House of Representatives until 1989, at which point he became the Secretary of Defense (from 1989 to 1993) and later the CEO of Halliburton Company (from 1995 to 2000). He then became the Vice-President of the United States in 2000 and served in this capacity until 2008. In such cases, the office holder is termed a businessman politician during the terms for which he/she was elected after having obtained executive experience and is

termed a non-businessman politician during all other terms. For example, Dick Cheney is considered a non-businessman politician prior to 1995 and a businessman politician afterwards.

For all businessman politicians, we then identify all firms in which they worked prior to being elected (294 unique firms for 212 businessman politicians). Among these firms, we then identify all firms that had a publicly listed stock during federal elections in which a businessman politician participated. In total, we have 22 unique politicians and 32 unique firms. For all politicians whose firms have stock returns data available, we obtain, whenever possible, the data on their stockholdings in those firms. The first source of stockholdings data is the DEF 14A filings from the Securities and Exchange Commission (SEC). For each election, we obtain the most recent DEF 14A filing prior to election, when available.[3] The second source of stockholdings data is Congressional personal finance disclosure forms, which, after 2004, are publicly available from the Senate Office of Public Records and the Office of the Clerk of the House; these forms are also provided in machine readable format by the Center for Responsive Politics (https://www.opensecrets.org/personal-finances). It is not always possible to precisely identify the amount of stockholdings of each stock for each politician, since politicians are required to report the amount of each of their assets within one of several ranges. In such cases, we use midpoints. However, some politicians provide additional information on the exact holdings of stock in individual firms – we use these more detailed disclosures when available. The SEC electronic data are only available from 1994, and Congressional financial disclosures start in 2004, which therefore reduces the sample of office holders for which we have stockholdings data to 17 unique politicians and 27 unique firms.

[3] For example, Darell E. Issa's holdings in Directed Electronics, Inc. during the 2006 election are available at https://www.sec.gov/Archives/edgar/data/1323630/000095015306001070/p72181def14a.htm.

Further, we obtain data on legislative productivity of all U.S. Representatives and U.S. Senators serving between 1980 and 2014. In particular, for each politician in our sample, we identify all bills that this politician introduced (in which case this politician would be termed the bill's "sponsor") or supported during the bill's introduction (in which case this politician would be termed the bill's "co-sponsor").[4] In total, we analyze 207,149 individual bills. Since not all bills are signed into law, we also identify, among sponsored and co-sponsored bills of each legislator, the ones that ultimately pass (8,872 bills). We are also interested in how likely business politicians are to collaborate with other legislators. We term all legislators who sponsor or co-sponsor the same bill as "legislative collaborators." For each politician in our sample (businessman and non-businessman), we identify all of his/her legislative collaborators and calculate the share of businessman politicians among them. This share is a measure of how likely a given politician is to collaborate with businessman politicians as opposed to non-businessman politicians. We then average these shares separately across businessman politicians and across non-businessman politicians.

To measure voting patterns, we obtain data on interest group ratings for all politicians in our sample. Pro-business ratings are provided by the Chamber of Commerce of the United States (CCUS); pro-labor unions' ratings are provided by the Committee on Political Education of the AFL-CIO (COPE), and pro-consumer ratings are from the Consumer Federation of America (CFA). We also collect the overall liberal/conservative scores (DW-NOMINATE), developed by Poole and Rosenthal (1991). Pro-business, pro-consumer, and pro-labor union ratings run from 0 to 100, with a higher score indicating a stronger alignment with the preferences of the given interest

[4] A sponsor is the first member of the House of Representatives or Senate to be listed among the possibly numerous lawmakers who introduce a bill or resolution. In Senate, multiple sponsorship of a bill is allowed. A sponsor, once designated, is responsible for the handling or processing of a bill in the legislative process.

group. The original DW scores run from –1 to +1, with a larger number indicating a more conservative voting record. We multiply DW scores by 100 to make their scale comparable to the other scores. Not all scores are available for all politicians in all years, which generates varying sample sizes.

Finally, we obtain data on campaign contributions received by all politicians in our sample. These data are publicly available from the Federal Election Commission for all election cycles after 1980. We collect the total amount of politician contributions that a given politician receives in each election cycle and also separately identify the sources of those contributions. We distinguish between the following three types of contributions from special interest groups: corporations, labor unions, or other special interests. All contributions made by entities whose organization type in the FEC data is coded C ("Corporation") are attributed to corporations, and all contributions made by entities whose organization type in the FEC data is coded L ("Labor organization") are attributed to labor unions. Contributions that cannot be attributed to either corporations or labor unions (and are not explicitly coded as contributions from individuals) are considered contributions by other special interests. Examples of such special interests include membership organizations, trade association, and cooperatives (e.g., American Medical Association Political Action Committee and Ohio Action Committee for Rural Electrification fall under the category of other special interests).

B2. The sample of businessman politicians based on BoardEx

We start by identifying all people in the BoardEx database who held at least one position as the CEO, president, chairman/chairwoman, or founder/owner of any private or public for-profit non-agricultural firm. In particular, we retain all people, who, according to their employment history

in BoardEx, held at least one of the following titles: "CEO", "Chairman/Chairwoman", "President", and "Founder".[5] We also restrict the sample to positions in non-government firms located in the United States. This leaves us with 61,502 unique people who hold 152,762 unique positions (i.e., unique person-firm combinations).

For each person identified in the previous step, we build online search queries of the following form: "Person's name" + "Company name" + "Political office" + "Elect", where "Political office" denotes a federal elective office. We separately search for each combination of the following: "US/United States" + "House/Senat/Congress/President" (notice that "Senat" represents "Senator", "Senate", "Senatorial", etc.). Further, we perform a separate search for each unique person-firm-office combinations, for a total of 1,994,920 unique search queries.

Each of the 1,994,920 unique search queries is automatically input into a search engine. Modern search engines employ a variety of search algorithms that may depend on location and the history of prior searches. To ensure that we receive the full range of all possible search results, we perform each unique search on six independent servers. If a search query returns no output (we have 539 such cases), we repeat it again on the six different servers on a different day. In total, we run 11,972,754 search queries that return 29,908,149 unique search results (for each query, we retain top 20 search results, when available, and some search results may overlap because we build multiple searches for each individual in our sample).

Because modern search algorithms do not limit their search results to keywords verbatim, the 29,908,149 search results from the previous step contain many web sources that do not describe electoral campaigns. A common example is company filings that describe board elections, in

[5] We are careful to remove from consideration assistant positions, such as "Assistant CEO", by removing role titles containing the following keywords and their variations: "assistant", "division", "group", "emeritus", "regional", "deputy", "acting", "interim", "vice", and "designate".

which case the name of a BoardEx executive may appear in connection with his/her role as the President of the firm or his/her election to the board. Another common example are newspaper articles that describe executive's wealth (in which case, for example, the word "House" may be mentioned frequently). We use a two-step procedure to eliminate extraneous search results. First, we verify that the web pages that the search results provide contain at least one mention of the BoardEx executive as well as at least one of his/her firms and any of the federal political offices. To do this, we obtain the http source code of each web page in the list of search results and perform a within-web keyword search, where we search for all mentions of the person's name, firm(s) and office(s). We thus identify 47,783 web pages that contain at least one mention of the BoardEx executive as well as at least one of his/her firms and any of the federal political offices. In the second step, we hire human research assistants to manually read each of the 47,783 web pages and retain only those pages that contain any mention of political campaigns run by BoardEx executives. For example, research assistants exclude all articles that mention instances of executives making monetary campaign contributions to politicians (but do not mention the incidence of executives running for office themselves). This leaves us with 65 BoardEx executives who run in 152 campaigns for federal office between 1980 and 2014.

Next, we identify all electoral opponents of BoardEx executives. Using the candidate master file from the FEC, we identify all other political candidates who ran in the same elections as the BoardEx executives from our sample. We restrict the sample to the candidates who appear on the ballot (since many of the candidates that register with the FEC do not ultimately run) by limiting the list of candidates to those for which the FEC reports election results. In total, we identify 823 electoral opponents of BoardEx executives.

B3. Voting records of businessman and non-businessman politicians in the full sample

To estimate the causal impact of businessman politicians on policy in the main body of the paper, we use close elections (see Table 5). In Table B1, we provide full-sample estimates for the same models that we report in Table 5. The results in Table B1 are of course less well-identified than those reported in Table 5. However, the two sets of results are not too dissimilar, suggesting that the sample of politicians who win close elections is representative of the full sample of politicians. One important difference between Table 5 and Table B1, however, is that the coefficient on the Republican vote share enters significantly and with the correct sign in three out of four full-sample regressions (in contrast to the results for the sample of close elections). This is further evidence that the political preferences of constituencies play a role in how politicians vote. At the same time, the estimation in the sample of close elections appears to be successful in isolating the preferences of voters from the preferences of businessman politicians.

Table B1. The impact of businessman politicians on U.S. legislation: Large-sample evidence

This table reports the results of regressions of interest group ratings for all U.S. Representatives and U.S. Senators elected (or re-elected) between 1980 and 2014. Pro-consumer ratings are provided by the Consumer Federation of America (CFA). Pro-labor unions' ratings are provided by the Committee on Political Education of the AFL-CIO (COPE). Pro-business ratings are provided by the Chamber of Commerce of the United States (CCUS). The ratings are based on the individual voting records of politicians. A higher rating by a given interest group indicates a voting record more aligned with that group's preferences. The overall liberal/conservative scores (DW-NOMINATE) are developed by Poole and Rosenthal (1991), with a higher score indicating a more conservative voting record; DW-NOMINATE scores are multiplied by 100 to put them on a scale comparable to the other scores. Not all ratings are available for all politicians in all years, which explains the varying sample sizes. All regressions include year fixed effects. Standard errors, clustered by politician and year, are reported in parentheses.

Panel A: Pro-consumer (CFA), pro-labor (COPE) interest group ratings

	CFA		COPE	
	(1)	(2)	(3)	(4)
Businessman politician indicator	-5.529***	-5.538***	-4.940***	-4.812***
	(1.641)	(1.638)	(1.312)	(1.312)
Republican indicator	-45.860***	-44.490***	-69.806***	-65.014***
	(2.341)	(2.303)	(1.811)	(1.841)
Republican vote share	-	-0.049	-	-0.170***
	-	(0.044)	-	(0.034)
Observations	8,380	8,380	15,290	15,290
R-squared	0.655	0.655	0.821	0.823

**p<0.1, **p<0.05, ***p<0.01*

Panel B: Pro-business interest group ratings (CCUS), the overall conservative/liberal score (DW-NOMINATE)

	CCUS		DW-NOMINATE x 100	
	(1)	(2)	(3)	(4)
Businessman politician indicator	3.691***	3.499***	5.922***	5.726***
	(0.975)	(0.959)	(1.588)	(1.580)
Republican indicator	45.927***	38.747***	80.261***	72.769***
	(1.867)	(2.107)	(2.998)	(2.778)
Republican vote share	-	0.255***	-	0.267***
	-	(0.038)	-	(0.050)
Observations	15,298	15,298	14,629	14,629
R-squared	0.712	0.719	0.843	0.846

**p<0.1, **p<0.05, ***p<0.01*