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## Parties, Congress, and the Stock Market

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### *Abstract*

Recent literature in both finance and political science has identified a series of systematic patterns in the way stock market responds to significant political events. The lack of a common theoretical core as well as the use of different empirical specifications in two literatures which hardly cross-reference each other has led to contradictory results. Several relevant questions arise: do stock markets really prefer Republicans or Democrats? Is divided government somehow better or worse for the stock market?

We develop a theoretical framework to comprehend two under-theorized mechanisms through which political factors affect stock market performance: redistributive and regulatory policies. Two main predictions follow from the model: stock market performs better under Democratic Presidencies and under Divided Government. We then test them by looking at monthly changes in US stock market performance from the 1870s until today. We control for all relevant variables used in both previous literatures and subject the results to robustness checks. In addition, we complement our results with historical narratives of stock market regulation –from public policy scholars and economic historians–, which show the mechanisms of the theory in operation.

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## **1. The Political Puzzle of the Stock Market**

The impact of political factors over stock market behavior has been increasingly capturing academic interest within both finance and political science literatures. Does the stock market do better when a Republican is President or when a Democrat is? Is divided government better or worse for equities? So far, almost all possible contradictory results have been found. In relation to stock market *returns*, Democrat incumbents may lead to a significant decrease (Leblang and Mukherjee 2005, Snowberg, Wolfers and Zitzewitz 2007), to a statistically insignificant decrease (Mukherjee and Leblang 2007), to a significant but almost negligible increase (Campbell and Li 2004), and to a significant and substantial increase (Hensel and Ziemba 1995; Santa-Clara and Valkanov 2003). Regarding the *volatility* of stock markets returns, it has been found that under Democrats average volatility is significantly higher (Freeman, Hays and Stix 2000, Herron 2000) and significantly lower (Santa-Clara and Valkanov 2003; Leblang and Mukherjee 2005). Similarly, divided government is welcomed on Wall Street by some (Chari et al. 1997, Tierney 2006), it has no substantive impact for others (Snowberg, Wolfers and Zitzewitz 2007), while it significantly raises volatility for others (Mukherjee and Leblang 2007).

The reasons for such divergent findings lie, in the first place, on the intrinsic difficulties for identifying the causal mechanisms that connect who sits in the Oval Office or in Congress with millions of individual decisions to invest in the stock market. In the second place, finance and political science literature use different empirical specifications and hardly cross-reference each other. The aim of this paper is to bridge the gap between these two literatures, taking advantage of their relative strengths: finance literature's complete empirical specifications and political science' theoretical insights.

Since the 1980s, finance literature has been challenging the traditional view that markets prefer republicans (Allvine and O'Neill 1980, Huang 1985, Ederer and Ederer 2006). There is a growing consensus in what Santa-Clara and Valkanov (2003:1841) define as the "presidential puzzle": stock market returns are higher under Democratic than Republican administrations and these differences are explained neither by

business-cycle variables nor by variations in the risk premiums assigned to each party.<sup>1</sup> Two main characteristics of finance scholars' analyses allow them to derive this conclusion. They constitute the empirical underpinnings of this paper.

First, if one wants to analyze how some exogenous factors (e.g. party of the president) affect individuals' propensity to take the risk of investing in the stock market, the relevant dependent variable must capture how attractive stocks are in comparison to completely safe investments. Therefore, finance scholars like Santa-Clara and Valkanov (2003) or Ederer and Ederer (2006) do not explore the effect of presidency over the stock market return, but over the *excess market return* -the difference between returns on stocks (e.g. the value-weighted CRSP index) and a risk-free return (e.g. three-month Treasury bill rate). The excess return is often referred in the literature as the "equity premium".

Second, following standard analyses of finance market behavior, these authors control for business-cycle variables previously found as relevant to forecast stock market –such as the dividend-price ratio, the term spread between two bonds with different maturity, the relative interest rate and the inflation rate.<sup>2</sup> Consequently, they can test if the party of the President is simply proxying for variations in the business cycle. They show that this is not the case, finding important party differences. For the period 1927-1998, Santa-Clara and Valkanov (2003) prove that, even when controlling for business-cycle variables, the stock market returned about 11 percent more a year under Democratic presidents and only 2 percent more under Republicans. Including these standard economic variables, finance researchers eliminate many possible alternative mechanisms through which presidential partisanship could affect the stock market (e.g. Democrats lead to higher growth or to higher interest rates). They thus clarify the empirical landscape showing that partisan differences in stock market behavior do not depend on differences in macro-economic policies between Democrats and Republicans, but must be attributed to the market being systematically positively surprised by *other Democratic policies*.

The main weakness of finance approaches is that their empirical sophistication is not preceded by theoretical models and we do not know which these other policies are

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<sup>1</sup> This is also the prevailing view among economists writing in the popular press. See, for instance, Hal Varian's "Which party in the White House means good times for stock investors?" (*The New York Times* 10/20/2003).

<sup>2</sup> For a review of the classic arguments within finance literature on the need to include these control variables, see Fama (1991) and Ederer and Ederer (2006).

and why politicians choose them.<sup>3</sup> Santa-Clara and Valkanov (2003:1870) conjecture that presidency may affect the stock market through its fiscal and regulatory policies, but do not develop the argument further. Likewise, finance literature narrows its attention exclusively to which party occupies the Presidency, neglecting other potentially relevant political factors –e.g. who controls the Congress. Quite the opposite, from political science several theoretical explanations -using more complex political factors- have been drawn. They constitute the theoretical underpinnings of this paper.

In one of the most comprehensive contributions, Leblang and Mukherjee (2005) build up a game theory model showing the micro-foundations that, according to them, connect political events and market behavior. They predict that rational expectations of higher inflation under Democratic administrations will lower the volume of trade in the stock market and that will ultimately lead to a decrease in the mean and volatility of stock prices.<sup>4</sup> Their results support this hypothesis, showing that during the tenure of right-wing governments (in Britain and the US) both stock market mean returns and volatility are higher. These results thus sharply contradict finance literature's main finding. Leblang and Mukherjee include some macro-economic variables, such as inflation or interest rates, and, unlike finance literature studies, they also control for other political variables, such as the existence of divided government.

Nevertheless, unlike finance literature, they do not control for all the four standard business-cycle variables and this could be bias their striking findings. Variables related to the business cycle –which, at the same time, may be, although not necessarily must be, related to political factors- could be driving the results. Particularly, Leblang and Mukherjee do not include any proxy for dividend yield, which has been identified by the finance literature as the most powerful forecast for stock returns (Fama and French 1988 and Fama 1991).<sup>5</sup> More importantly, also contrary to finance literature, they examine the impact of political variables over stock market returns instead of excess returns. Increases or decreases in market returns do not tell us much about individuals' higher or lower propensity to make risky investments under certain political circumstances if we do not control for variations in available risk-free

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<sup>3</sup> Thus, it could be argued that we are left with lack of theoretical substance not so different from the work of Leinweber (1997) who, after exhausting multiple databases, found that historically the single best predictor of stock market behavior was butter production in Bangladesh.

<sup>4</sup> Another remarkable studies along similar lines are Mukherjee and Leblang 2007 and Bernhard and Leblang (2006).

<sup>5</sup> They use dividend yield but as a dependent variable to analyze the impact of partisanship over it; but, again in this analysis they do not control for other macro-economic variables.

options. Put simply, without a benchmark, we cannot assess if the stock market performs better or worse.

Very related to these empirical flaws, there is an inherent problem in the theoretical explanations of stock market behavior which rely on partisan macro-economic policy differences. Following the literature specialized on partisan economic effects, no clear predictions over the global macro-economic impact of political parties can be inferred. On the one hand, it is plausible to assume that, under Democratic presidencies, investors rationally expect “higher interest rates and that future economic activity, in general, will slow down” (Leblang and Mukherjee 2007:140). On the other hand, it is also plausible to assume almost exactly the opposite –that is, that under Democrats economic growth accelerates.<sup>6</sup> Therefore, in a single analysis Leblang and Mukherjee are actually attempting to test not one but two hypotheses at the same time. First, that Democratic presidents produce “poor economic activity and higher inflation” (2007:140) -a challenging hypothesis that, so say the least, it is difficult to confirm even by those scholars who address it directly. And, second, that macro-economic performance affects stock market behavior. Although the two hypotheses deserve scientific attention, they should be analyzed separately. Even in a well-specified theoretical model as the one Leblang and Mukherjee develop, there are too many intermediate steps (e.g. expectations of higher interest rates at low-medium term and, as a result, anticipation of lower growth at medium-long term) between the President and investors’ behavior. Leblang and Mukherjee thus face a joint-hypothesis problem similar to Fama’s (1991) observation about tests of the market efficiency hypothesis in stock market behavior. Any assessment of the effects of partisan politics on the stock market through macro-economic policies must be jointly tested with a model of partisan macro-economics.

We admit that partisan differences in economic policies may have a say in explaining partisan variation in stock market performance, but, given the lack of consensus on how partisanship affects macro-economy, we are not in conditions to identify how. Thus, similar to finance literature, in the empirical part we include the most standard proxies for the business cycle and focus our attention on the partisan

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<sup>6</sup> As Snowberg, Wolfers and Zitzewitz (2007:1) argue, empirical evidence on partisan effects on macro-economy is mixed due to the difficulty of generalizing from a small number of Presidential election cycles. Alesina et al. (1997) find faster economic growth under Democratic administrations, but we cannot reject that they could simply be taking advantage of a better inflation management by previous Republican presidencies.

variation of the stock market that does not seem to obey to macro-economic variables. Also like finance scholars, we use the excess return as the dependent variable.

The remainder of the paper is organized as follows. Section 2 develops a theoretical model based on investors' reactions to two policy dimensions: redistribution and stock market regulation. The main predictions of the models are that shareholders, who are assumed to overvalue predictability, prefer policies enacted by Democrats –the more leftist a President is, the better-, and under conditions of divided government and ideological polarization in Congress. Section 3 tests the hypotheses analyzing monthly changes in US stock market performance from the 1870s until today. It complements them with flesh-and-bone narratives -from public policy and economic history scholars- designed to show the micro-foundations of the theory. Section 4 concludes and connects the results of this paper with what recent comparative regulatory policy literature defines as the “striking political paradox of finance capitalism”: the support of center-left parties to the cause of shareholders (Cioffi and Höpner 2006:1).

## **2. Theoretical model**

The model developed in this section shares its main assumptions with traditional accounts on the relationship between politics and the stock market. Following Siegel (2002), we presuppose that most corporate executives and stock traders are Republicans and, while many Democratic policies may be perceived in principle as unfavorable to stock markets (e.g. income redistribution or tax treatment of capital gains), Republican fiscal and redistributive policies are seen as more positive. Nevertheless, unlike these traditional accounts, we do not easily derive from these assumptions that “it is well known that stock market prefers Republicans to Democrats” (2002:221). We contend that a full description of the interplays between politics and stock market must take into account not only redistributive concerns, but also an under-theorized mechanism in the finance and political science literatures: regulatory policy.

Since Stigler's (1964) advocacy for the development of testable hypotheses on regulatory policies, a substantial literature has arisen on the economics of particular stock market regulations. Nevertheless, many problems emerge in what is known as event-study methodology –i.e. when we want to test the impact of an individual regulatory policy on stock market performance. The noisy, lengthy regulatory process tends to give rise to, among others, endogeneity issues, confounding events, selection



concerns and imprecision of data (Mulherin 2007:428).<sup>7</sup> Furthermore, we always lack a control sample or counterfactual: what would have happened in the stock market if that particular regulation had not been passed?

These problems have come up in the studies on the regulations of the Securities Exchange Commission (SEC) in the 1930s.<sup>8</sup> Since these policies came after the 1929 crash, it is difficult to scientifically deal with variables such as risk and return before and after such an endogenous event (Mulherin 2007:427).<sup>9</sup> That is also the case of the 2002 Sarbanes-Oxley Act, the most comprehensive reform of corporate governance since the 1930s. The Act reacted to a sequence of corporate financial scandals, including Enron in November 2001, Tyco International in January 2002 and the collapse of World.Com in June 2002. Although it represents an unprecedented intervention of federal law into the internal structure and affairs of corporations (Cioffi and Höpner 2006:24), trying to estimate its effect on the stock market is “an extremely difficult task” (Mulherin 2007:429). The lengthy evolution of the Act through Congress over a period of several months, preceded as well by many other months of intense discussions in the media, makes it complicated to establish *when the market absorbed* the news about the passage of the Act.<sup>10</sup>

The absence of neat effects of particular regulations does not mean that markets are insensitive to regulatory policy.<sup>11</sup> Academic research has found a strong and robust impact of corporate governance structures over equity prices. Firms with a corporate structure protecting shareholders rights have, among other characteristics, higher value, higher profits, higher sales growth, and lower capital expenditures (Gompers et al.

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<sup>7</sup> Another important problem when analyzing regulatory policy –and which is often neglected– is that of the unintended consequences. According to Mulherin (2007:423), regulation of stock market could be subject to problems of unintended consequences similar to those found by Peltzman’s (1975) analysis of automobile safety regulations. While the mandatory provision of seatbelts effectively reduced fatalities to drivers, it had the offsetting effect of increasing pedestrian deaths as a result of faster driving.

<sup>8</sup> The Securities Act of 1933 and the Securities Exchange Act of 1934. The latter created the SEC.

<sup>9</sup> As a result, while some scholars –such as the Nobel laureate Stiglitz (2002)– find support for the hypothesis that the SEC is in the public interest (i.e. benefiting investors confidence), others –like the also Nobel laureate Stigler (1964)– are more skeptical and suggest rather a special interest impetus for SEC regulation (i.e. benefiting mostly insiders).

<sup>10</sup> Unlike the SEC regulation, the problem of counterfactuals can be surmounted in the case of the Sarbanes-Oxley Act, by studying its effects on cross-listed, non-US American Depositary Receipts that were also subject to the act and using as control samples matched firms (Litvak 2007).

<sup>11</sup> As the SEC itself concludes in relation the regulation of fund governance, “finding no relation in the data does not confirm that no economically significant relation exists between fund governance and performance” (quoted in Mulherin 2007:431).

2003).<sup>12</sup> Therefore, policies regulating corporate structures *should* have a notable impact on markets.<sup>13</sup> The scientific problem is how to determine it.

In order to solve the problems of endogeneity and lack of counterfactuals inherent to the analysis of particular regulations, we propose an alternative theoretical approach aimed at capturing investors' expectations of regulatory policy under different political circumstances. Our model presents several advantages.

In the first place, it follows Stigler's (1964:120) recommendation of generating testable propositions on regulation that are "simplicity in itself" through deriving investors' expectations directly from political changes. Secondly, we analyze the impact of political variables through a long span of time, from the late 19<sup>th</sup> century till nowadays. This allows us to have several control samples (e.g. several partisan alternations in power) and to take into account endogeneities produced by, for instance, stock crashes.<sup>14</sup> In addition, a long-horizon approach is the most appropriate way to avoid the most pervasive difficulty of event-study methodology: how to identify a single date for an event such as regulation which is preceded by political and media discussions, a lengthy legislative negotiation and, furthermore, it can be followed by judicial uncertainty (Gompers et al. 2003:2). Thirdly, we do not look at particular regulatory policies, or at investors' expectations about particular regulatory policies, but at investors' general expectations about market regulations under different political conditions.

The model developed here aims at answering how politicians actions affect shareholders' wellbeing (and therefore, the prices of stocks). Similar to political economy models we address the question by formalizing the behavior of constituencies and politicians as a result of their ideology and economic interest. These models have been lengthily applied to explain fiscal and monetary policy,<sup>15</sup> but, with possibly the sole exception of Pagano and Volpin (2005), they have not been used to study company law or stock market policies. Here, we simultaneously follow standard political economy theories, modeling fiscal-redistributive policy, and Pagano and Volpin's approach, modeling stock market regulations.

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<sup>12</sup> For a summary of previous studies showing similar results, see Shleifer and Vishny (1997).

<sup>13</sup> As Gompers et al. (2003:35) infer from their empirical analysis, "if an 11.4 percentage point difference in firm value were even partially 'caused' by each additional [pro-shareholders] governance provision, then the long-run benefits of eliminating multiple provisions would be enormous".

<sup>14</sup> We thus follow Officer (1973), who argues that SEC regulations in the 1930s are so endogenous that can only be analyzed with a long-term perspective –for him, from 1897 to 1969.

<sup>15</sup> For a summary of these models, see Drazen (2000).

This sketch of a theoretical model aims to explain why we observe: i) that democratic presidents are associated with higher returns for investors in the stock market; and ii) that situations of divided government, in which there are greater ideological differences between the president and congress are also associated with higher returns for investors.

Government's policies might influence the stock market in many ways. We will focus only on two: it can, by changing corporate governance rules, alter the balance of power between managers and investors over how to share the benefits (and costs) generated by the firm. It can, also, by regulating labor market conditions, establish taxation rules, (dis)incentives for unionization, etc...that affect the "share of the pie" that goes to employers (investors and management) and employees.

There are three economic actors -workers, shareholders and managers- with different Euclidean preferences<sup>16</sup> over these two dimensions of conflict: policies that affect the distribution of firms' surplus between capital-owners and labor (or, for sake of simplicity, "redistributive" policies), and policies that affect the distribution of non-workers gains between managers and shareholders (or "regulatory" policies). We normalize the weight of the first (redistributive) dimension to 1, so that the parameter  $\delta$  measures the relative weight of the second (regulatory) dimension ( $\delta < 1$  if the first dimension is more important,  $\delta > 1$  if the second dimension matters more).

We normalize the length of each dimension to the interval 0,1 where 0 represents the policy most preferred by shareholders in the two dimensions, and 1 represents the policy most preferred by workers in the first (redistributive) dimension, and by managers in the second (regulatory) dimension.

Managers' ideal policy position on the first dimension is the same as shareholders', while workers, in the second dimension are completely indifferent along the 0,1 line (i.e. they do not have an intrinsic preference over how managers and shareholders should split their share of the pie).

There are two parties, (D)emocrat and (R)epublican. Each party's policy position is a weighted average of the preferences of its voters. We assume that all workers are represented by the democratic party, while all managers are represented by the republican party. Therefore, party positions are exclusively given by these two

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<sup>16</sup> We assume that all groups' preferences are euclidean, i.e. policy deviations from the ideal policy cause equal losses in utility in the two dimensions, with the exception of workers, who only care about the first dimension (see below).

groups' preferences (workers for democrats, managers for republicans and the share of shareholders in each party).<sup>17</sup>

The composition of the electorate (and, as a result, the party's final platforms) is unknown prior to the elections. It is known, however, that workers are always a majority within the Democratic party. As a result, the proportion of shareholders in the democratic coalition  $s_D$  is given by a uniform probability distribution (0,1/2) while the share of shareholders in the republican party  $s_R$  is given by a uniform probability distribution (0,1), because, within the party, the proportion of shareholders can be either smaller or larger than the proportion of managers.

$$s_D \sim \text{unif}(0,1/2)$$

$$s_R \sim \text{unif}(0,1)$$

Under a democratic coalition of workers and shareholders, policy in the first dimension is given by the preference of workers minus the relative weight of shareholders in the party ( $1-s_D$ ), policy in the second dimension is given by the shareholders' preference (0), since workers are completely indifferent over this dimension.

Under a republican coalition of managers and shareholders, policy in the redistributive dimension is simply 0 (both groups have the same ideal point, 0, in this dimension of conflict), whereas the party policy in the regulatory dimension is given by a weighted average of the two sectors' preferences, which is simply  $1-s_R$ .

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<sup>17</sup> We rely on a large literature to characterize parties in this way. On the one hand, as mentioned above, we follow the traditional assumption that right-wing parties have been ideologically and strategically allied with employers –i.e. managers and shareholders- and in opposition to the working class, represented by left-wing parties. In terms of both policy orientation and electoral support, the Republican party has traditionally maintained closer ties to employers than do the Democrats (Cioffi and Höpner 2006:29). On the other hand, following recent literature on market regulation, there are several reasons to consider that Democrats also represent, at least partially, shareholders' preferences. First, the gap between managers' and shareholders' interests seems to be widening. Managers are increasingly interested in resisting hostile –and highly lucrative for shareholders- takeovers, and managers awarding themselves with rises in executive compensations –such as “golden parachutes” severance payments- at the expense of owners' interests (Cioffi and Höpner 2006:23).

Secondly, mass shareholding has made the defense of shareholders' interests a key element of all Democratic attempts to attract middle class voters (Cioffi and Höpner 2006:26). Furthermore, the preferences of both groups tend to increasingly converge regarding regulatory policy. Workers and shareholders are gradually forming in many OECD economies what Gourevitch and Shinn (2005) call “transparency coalitions”. Employees and unions are agreeing with the demands of investors in favor of the protection of shareholders rights for two reasons. First, pro-shareholders regulations help employees overcome informational asymmetries vis-à-vis managers. Second, employees are, through pension funds, ever more becoming shareholders themselves. Actually, some of the most activist investors in the US have been union pension funds, since they have both ideological reasons -as representatives of the working class- and strategic one -as shareowners (Cioffi and Höpner 2006:23). Closely tied to the AFL-CIO, they have been core contributors of the Democratic Party.

Given the distributions of  $s_D$  and  $s_R$ , the expected equilibrium policies under the Democratic party is (1/4,0); and under the Republican party, (0,1/2). With Euclidean preferences, this translates into a preference of shareholders for policies under republicans whenever  $\delta < 2$ .

Shareholders, however, are not only exclusively concerned about the expected policy position, but also about the *uncertainty* around the expected equilibrium policy. In particular, shareholders dislike policy deviations from the expected equilibrium policy in both dimensions, so that we can finally write their utility function as follows:

$$U_S = -(\mu(P_1)^2 - \gamma_1(\varphi(P_1))) - \delta(\mu(P_2)^2 - \gamma_2(\varphi(P_2)))$$

where  $\mu(P_n)$  refers to expected policy in the  $n$  dimension,  $\gamma_n$  measures the weight of the expected policy volatility of the  $n$  dimension in the shareholders' expected utility,<sup>18</sup> and  $\varphi$  to the average absolute deviation with respect to the expected value  $\mu$ .<sup>19</sup>

Again, drawing on the uniform distributions of  $s_D$  and  $s_R$ , the expected policy deviation is 1/8 in the redistributive dimension of conflict under democrats, and 1/4 in the regulatory dimension under republicans.<sup>20</sup> Once we know both the expected policy and the expected policy deviation, we can easily derive under what conditions do shareholders prefer democrats, and when republicans:

Democrats will provide a higher utility to shareholders whenever the following inequality holds

$$2\gamma_1 + 9 < 4(\delta + \gamma_2)$$

In words, democrats are preferred the greater the weight of the second dimension with respect to the first ( $\delta$ ), and the greater the relative sensitivity to volatility in the second dimension with respect to the first ( $\gamma_2/\gamma_1$ ), for different volatility/distance sensitivity ratios ( $\gamma$ ). Figure 1 shows the shareholders' indifference curves between

<sup>18</sup> Therefore, when  $\gamma_n=1$  the expected deviations from expected policies in the  $n$ -dimension are equally disliked than expected deviation from the ideal policy in the first dimension.

<sup>19</sup> We use the average absolute deviation, which is simply  $\frac{1}{n} \sum_{i=1}^n |x_i - \mu_x|$ , instead of the more commonly used standard deviation, which in a uniform distribution with range (a,b) is given by

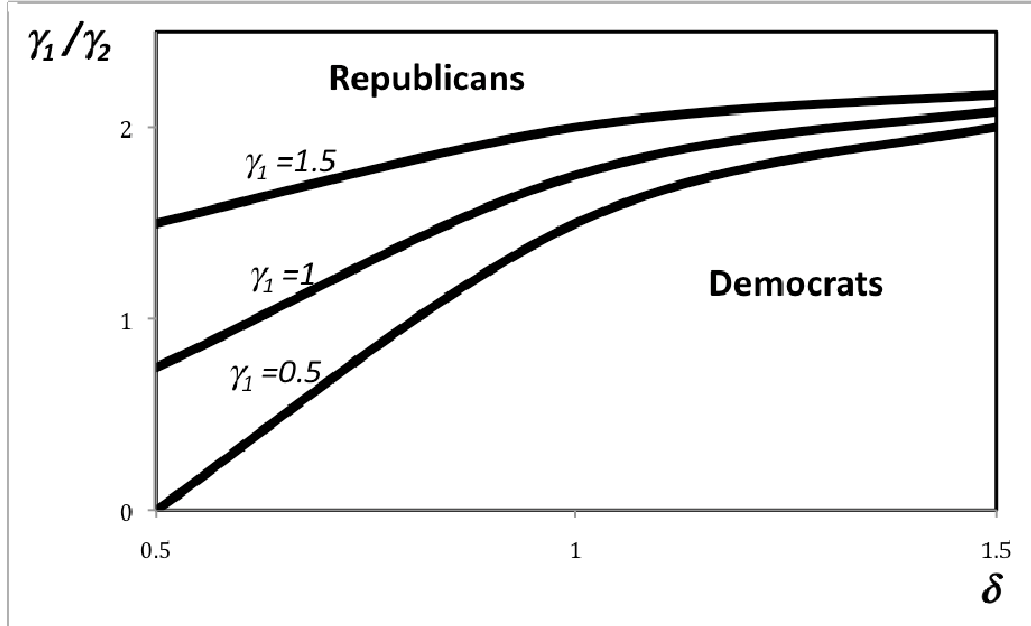
$$\sqrt{\frac{(b-a)^2}{12}}$$

. These two measures of dispersion are of course highly correlated, but we use the latter as the average absolute deviation grasps better what we are interested in, besides simplifying the algebra. No substantive difference would have been obtained had we used the standard deviation instead.

<sup>20</sup> Obviously, there is no expected policy deviation in the second or regulatory dimension under democrats, nor in the first or redistributive one under republicans –the expected and realized policy is always 0 in both cases.

democrats and republicans for different values of the model parameters. Above these indifference curves, republicans yield a higher utility, while democrats are preferred in all points below.

Figure 1. Shareholders' party preference for different values of  $\gamma_1$ ,  $\gamma_2$  and  $\delta$



The figure shows that democrats are preferred as the second (regulatory) dimension becomes more important ( $\delta$  high), policy volatility is more of a concern ( $\gamma$  high) and the sensitivity of stocks to policy volatility in the second dimension is higher than in the first ( $\gamma_1/\gamma_2$  low).

How does divided government affect the expected equilibrium policy, its volatility and, ultimately, the value of shares? We conceptualize divided government as a system of policy-making in which the policy is a result of a weighted combination of the preferred policies of two parties, one controlling the presidency, other controlling congress.

Under divided government, the equilibrium policy is thus given by the a weighted combination of the policy of the president and the congress, which is in the hands of a different party. For dimension  $i$ , the equilibrium policy when the president is a democrat and the congress is in the hands of republicans is:

$$P_i = \alpha(P_{D,i}) + (1 - \alpha)(P_{R,i})$$

where  $\alpha$  ( $0 < \alpha < 1$ ) measures the constraint imposed by congress on policy: it approximates 1 when divided government is meaningless, i.e. when the president gets

its preferred policy implemented, and it approximates 0 when congress is the only actor deciding over policy.

We can now see how divided government affects the equilibrium policy under a democratic and under a republican presidency:

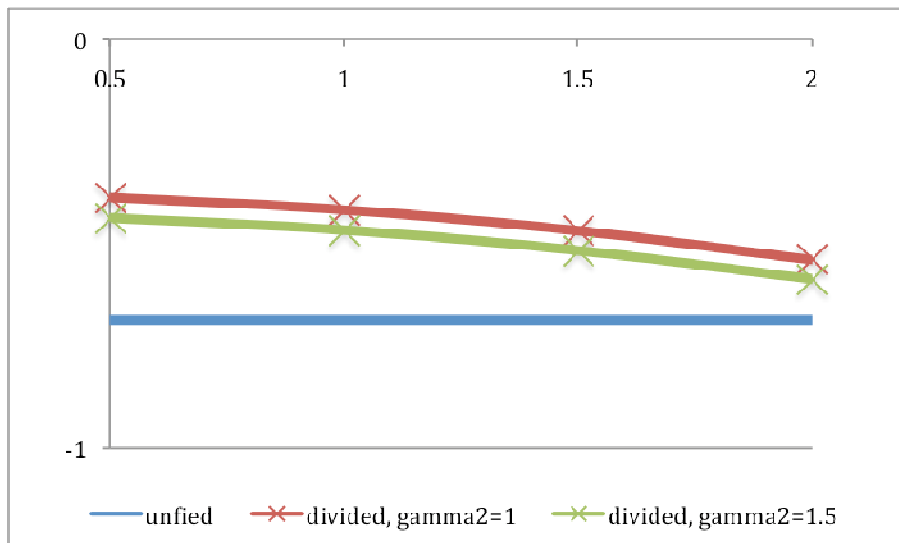
$$U_{S,D} = \alpha[-\mu(P_{D,1})^2 - \gamma_1(\varphi(P_{D,1}))] + (1 - \alpha)[\delta(-\mu(P_{R,2})^2 - \gamma_2(\varphi(P_{R,2})))]$$

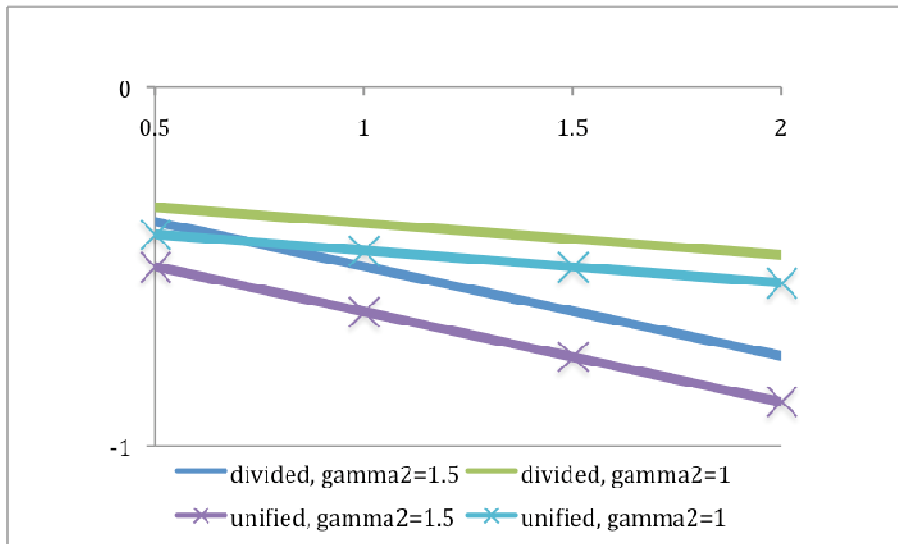
$$U_{S,R} = \alpha[-\mu(P_{R,2})^2 - \gamma_2(\varphi(P_{R,2}))] + (1 - \alpha)[\delta(-\mu(P_{D,1})^2 - \gamma_1(\varphi(P_{D,1})))]$$

In words, the utility loss for shareholders under a democratic (republican) president equals the expected policy deviation of democrats (republicans) in the first (second) dimension, weighted by the power of the president ( $\alpha$ ), plus the expected policy of deviation of republicans (democrats) in the second (first) dimension, weighted by the power of congress ( $1-\alpha$ ).

To illustrate the results, we simulate what the utility for shareholders is under different values of the model parameter under divided government:  $\alpha=0.6$ . We compare the utilities under divided and unified government for different sensitivities to volatilities in the second dimension ( $\gamma_2=1$  and  $\gamma_2=1.5$ ), for different values of  $\delta$  (x-axis), both under democratic (figure 2a) and republican (figure 2b) presidents, showing clearly that for reasonable values of the model parameters, divided government is welfare-enhancing for shareholders.

Figures 2a and 2b.





The intuition for the salutary effects of divided government is straightforward: as divided government induces policy choices that are less extreme than before,<sup>21</sup> divided government is preferred to extreme policies in one dimension.

In sum, both democratic governments (under certain value parameters), and divided government are associated with better expected environments for shareholders, suggesting some possible channels through which political phenomena can exert effects on stock market behavior. The next section tests with stock market data whether it is indeed the case that these two political features have been systematically associated, as expected, with periods of better stock market performance.

### 3. Empirical Analysis

This section tests the theoretical hypotheses of the model with data on stock market performance from 1872 to 2003. Before starting the test, we must though answer the following question: when did stock market investors start to take into account the policy dimensions of the model? On the one hand, it would be naïve to assume that investors' expectations have remained the same since 1872 when the first regulations of the stock market were not enacted until the 1930s. On the other, as the literature has pointed out, although much of the motivation for the SEC regulations in the early 1930s came from the perceived weaknesses leading up to the 1929 crash, calls for federally mandated disclosure to reduce fraud and tame insider trading were made earlier (Mulherin 2007:425). Thus it is plausible to assume that the stock market started to expect/fear

<sup>21</sup> Quadratic preferences over the policy space imply that, for instance, the policy vector (0.5, 0.5) is always preferred to (1,0) or (0,1).



public regulations long before the creation of the SEC, but it is difficult to establish a particular date.

In the aftermath of the 1907 bank panic which would trigger the creation of the Federal Reserve (1913), popular press and some scholars started to raise their concerns about the consequences for general welfare of a non-publicly regulated stock market (Emery 1908).<sup>22</sup> Nevertheless, the first systematic political debates on stock market regulation would probably be around 1913, according to both literature and contemporary accounts. That was the year of the “Money Trust Investigation” by the US Senate *Pujo Committee*, considered as the first relevant intervention of political power into the stock market -that had been so far an entirely private business (Untermeyer 1915:27). The Pujo Committee gave visibility and politicized the increasing conflict of interests between, on the one hand, small investors and, on the other, finance tycoons and managers, who were accused of abusing the confidence of the former.<sup>23</sup> Therefore, it is likely to assume that investors, similar to some finance experts testifying before the Committee, began to forecast future political interventions in the stock market:

“I am convinced that the time will come, and before long, after regulation has been enforced, when those who are now bitterly assailing the champions of this legislation in the vain hope of thereby diverting the issue will find that it has marked the dawn of a new era of usefulness and prosperity for them, and that the Exchange will feel grateful to those who have pointed the way.”<sup>24</sup>

The political struggles between different economic actors became evident in the years immediately before and after the Pujo Committee. Several pamphlets by public opinion leaders, books by professionals and articles by academics were published in the 1910s and seen at the time as “the result of the renewed agitation in recent years against speculative markets and the widespread demand for their control or abolition by legislative action” (Emery 1913:917).<sup>25</sup> Chief among them would be Untermeyer’s *Speculation on the Stock Exchanges and Public Regulation of the Exchanges* in 1915, a

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<sup>22</sup> Some authors already out the context surrounding the passage of the pro-consumers The Pure Food and Drugs Act of 1906 as the time when “the speculator-investor, like other consumers, became conscious of the abuses of the market place that only the producers had complained of previously” (Cowing 1958:17).

<sup>23</sup>“Many of the vast illegitimate fortunes that have debauched our citizenship are attributable directly to that cause. For many years the pretended market prices of securities of our greatest corporations have been ‘rigged’ and manipulated at the will of a handful of gamblers and operators, and the people of the country have been literally robbed of hundreds of millions of dollars through such transactions (Untermeyer 1915:42).”

<sup>24</sup> Testimony of Samuel Untermeyer before the US Senate Committee (quoted in Untermeyer 1915:68).

<sup>25</sup> E.g. John H. Piper’s (1915) *The Technology of Stock Market Manipulation*, W.C. Van Antwerp’s (1913) *The Stock Market From Within* or Thomas Gibson’s (1913) *The Elements of Speculation*.

detailed description of how “small honest investors” were victims of the abuses committed by “members of pools ‘insiders’” (Untermeyer 1915:46-49).<sup>26</sup> Based on these accounts, we choose the date of the Pujo Committee (1913) as the initial year to start testing our hypotheses. Since 1913 onwards we can plausibly assume that it was *common knowledge* among investors that regulation would take place.<sup>27</sup>

### *Dependent Variable*

As argued above, our dependent variable is the excess return or “equity premium”: the difference between stock market returns and a risk-free rate. We use monthly stock market return and Treasury Bill data from Global Finance Data for the period 1872 to 2003. Like finance literature approaches, we also use the log excess return for our analysis. The log excess return is constructed using the S&P 500 Composite Total Return Index and the USA Total Return Commercial/Treasury-Bill Index. The S&P 500 is back-calculated to 1872 by the Cowles Foundation using the Commercial and Financial Chronicle. The US bill returns series uses commercial bills from 1872-1918 and treasury bills thereafter.

### *Economic Variables*

Similar to mainstream financial studies, we use four main economic control variables: the *log dividend-price ratio* (IDY<sub>t</sub>), the *term spread* (TS<sub>Pt</sub>) *between two bonds with different maturity*, the *relative interest rate* (RR<sub>t</sub>) and the *monthly inflation rate*

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<sup>26</sup>For example, as Umtermyer (1915:29) denounced, a share of stock that cost \$11 was charged with the same compulsory commission as one that cost \$200.

As Umtermyer constantly recalls, what explains fraud and corruption within the New York Stock Exchange was not the absence of regulations, but the fact that regulations and restrictions were imposed by its own members. “Like every industry and profession it contains black sheep within its fold, but unlike others its regulations and practices have heretofore held out to them and to the gamblers whose tools they are temptations, inducements, and immunities of which they have freely availed themselves (...) “My criticism is of a financial system that not only permits but which it is claimed by its authors and those who are executing its self-made law renders it necessary for a handful of private citizens to seize and exercise such vast powers because there is no constituted authority to protect the public or with the right to restrain, direct, or review their action. Herein lies the anomaly of our situation –unlike anything of this kind in the civilized world (...) Why should the determination of such vital public policies be left in private and interested hands?” (Umtermyer 1915:26-35).

So, the question was not between absence of regulation and public regulation, but between private regulation (by a closed 1,100-strong group of investors) and public regulation. As a matter of fact, the NYSE was extremely regulated during the 1910s, including the prohibition to its members, under the pain of expulsion, from buying or selling securities without the express approval of a special committee and then only under certain restrictions as to the price, terms and other conditions (Umtermyer 1915:33)

<sup>27</sup> As Cowing (1958:19) remarks, “the exchanges were afraid that regulation would follow in the wake of the revelations in the Pujo Report”.

(INFMt). We can thus test the hypothesis if the political variables are simply a proxy for these business-cycle variables. Akin to Ederer and Ederer (2006), and contrary to Santa-Clara and Valkanov, (2003) we do not include a default spread between yields of differently rated bonds, because such data is not available for the pre-1927 period. Also similar to Ederer and Ederer (2006), due to data scarcity for the first decades of the sample, we use proxies for the 10-year treasury note and the 3-month treasury bill used by Santa-Clara and Valkanov to construct the term spread series. As the US Government 90-day T-Bills series is only available back to 1920, we use the 3-month Commercial Paper before that date. All control variables are demeaned.

#### *Historical Variables*

Like many previous studies, we control for major historical events found as significant to explain stock market returns. We include the following dummy variables: *World War I* (WWIt; 1 between 1914:8-1918:10, zero otherwise), *the Great Depression* (GDt; 1929:10-1932:7), *World War II* (WWIIIt; 1939:9-1945:8), the *1973 Oil Crisis* (OILCt; 1973:10-1973:11), and *January* –given the standard finding that stocks tend to rise in that month.

#### *Political Variables*

Following the theoretical model, we introduce three political variables. *Ideology of the President* comes from Poole and Rosenthal dataset. We mostly use a continuous ideological variable instead of the standard in the literature presidential dichotomy. Firstly, this allows us to keep valuable information which is otherwise lost with a dummy variable. Secondly, the driving force in our theoretical model –as well as probably in many other previous explanations- is not so much the party label of the candidate, but his particular position within a certain ideological or policy scale. Due to the lack of reliable data on the ideology of some presidents for the pre-1944 period, we also incorporate the dummy *Democrat* (President) in some of the models.

*Unified Government* and *Polarize* are our proxies for the degree of separation of powers and heterogeneity of political preferences. *Unified Government* is a dummy with value 1 when the party of the President controls both legislative chambers and 0 otherwise. *Polarize* comes from the Poole and Rosenthal database based on roll-call voting data, and it is a measure of the distance between the median democrat and the median republican in the Congress in each year.

*Analysis of the 1872-1913 period*

Table 1 shows the results of two models which analyze the impact of political factors in the pre-Pujo Committee period. In other words, when one can plausibly assume that the regulatory policy was a minor concern for stock investors and only one of the two dimensions of the theory (redistributive policy) was relevant. Or, what is the same, when we are in the left side of Figure 1. The prediction would thus be straightforward here: stock markets will perform better under Republicans.

Similar to finance literature, instead of time series with lagged dependent variables, we run Ordinary Least Squares (OLS) regressions of the log excess returns and use Heteroskedasticity and Autocorrelation Consistent Standard Errors (HACSE). They allow us to correct better for problems of heteroskedasticity and serial correlations than standard time series. One can see in Model 1 of table 1 that effectively the ideology of the president exerts a significant and positive effect on excess returns: the more Republican (or right-wing) a president is, the better for the stock market. Due to the existence of numerous missing values for the ideologies of some presidents during this period (Poole and Rosenthal themselves recommend not to use them), we double check the results with the dummy variable Democrat President in model 2. Again, it goes in the right direction –excess return is lower under Democrats-, but this time the result is not statistically significant.

Regarding the control variables, they follow the direction of the standard predictions in the theory, but –in some cases probably because of the low number of observations- they do not stand as significant. The exception would be the dummy *January*, the impact of which is significant, confirming the traditional assumption that stocks tend to rise in that month.

**Table 1. Political and Economic Determinants of US Stock Market Performance 1872-1913**

	Model 1	Model 2
Inflation	0.060 (0.146)	0.103 (0.092)
Dividend-price ratio (log)	0.021 (0.018)	-0.006 (0.009)
Term spread two bonds	0.004* (0.002)	0.001 (0.001)
Interest rate	0.801 (3.828)	0.443 (1.667)
January	0.018** (0.008)	0.014*** (0.005)
Ideology President	0.292*** (0.011)	
Party President (1= Dem)		-0.004 (0.005)
Polarization	0.131 (0.073)	0.002 (0.345)
Unified Government	0.016 (0.220)	-0.006 (0.010)
Constant	-0.0138 (0.064)	-0.015 (0.029)
N	180	492

\*\*\*1% significance \*\* 5% significance, \*10% significance. Standard errors in brackets

These results are in line with qualitative evidence from economic and political historians of the period. To begin with, according to literature accounts, the regulation of the stock market seemed to lack political salience prior to the 1910s. The major politically divisive issue that one may assume as affecting investors was fiscal policy – and, very particularly the lengthy process of the passage of the income tax, which lasted for more than two decades. When the Democrats won the congressional election of 1890 and the presidential election of 1892, the income tax was put on the top of the political agenda. In the post-Civil War period Democrats, together with the Populist Party, were strongly identified with agricultural, low-income states; and attempted to introduce an income tax which would be mostly paid in the more Republican higher-income industrial North (Baack and Ray 1985:609).

After the passage of the Income Tax in 1894, the political debates surrounding it, if any, gained impetus.<sup>28</sup> A few months later the Supreme Court ruled that the income tax was unconstitutional because it was a “direct” tax. This judicial decision made the income tax a major political issue in the presidential campaign of 1896 and, again, party positions were transmitted very clearly to the electorate and to the stock market. While the Democrats under the Populist candidate Bryan included the tax in their party platform, Republican President McKinley plainly rejected it. Debate continued for the years to come with representatives split along party lines: Democrats (and Populists) supporting the different income-tax proposals and Republicans opposing them (Baack and Ray 1985:610).<sup>29</sup> Finally, federal budget constraints due to a series of new spending initiatives, particularly military, and an increasingly demanding veterans’ pension system, would lead to the passage of the income-tax Sixteenth Amendment in 1913. The constitutional amendment deactivated, at least temporarily, the partisan fiscal debate - giving a certain sense of predictability to redistribution policies.<sup>30</sup> Similarly, Democrats proposed many other radical reforms during the long leadership of Populist Bryan<sup>31</sup> which can easily be seen as hostile to investors’ interests.<sup>32</sup>

#### *Analysis of the 1913-2003 period*

We move now to test the implications of the theory for the period in which we can assume that both dimensions of the theory have been at play. Table 2 shows three different models for this period. Model 3 analyzes the excess stock returns for the entire 1913-2003 period. Economic variables follow the predicted sign and, this time, dividend-price ratio, inflation and interest rate appear as significant. Both WWI and the Oil Crisis affect negatively excess returns. More interestingly, political factors seem to

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<sup>28</sup> From the voting congressional records of the 1894 Income Tax we can easily derive which party would be preferred by stock investors: 196 Democrats (plus 8 Populists) voted in favor and 122 Republicans (plus 17 Democrats and 1 Populist) against.

<sup>29</sup> Taking advantage of the need to finance the Spanish-American War, Democrats proposed another income tax in 1898, which again was defeated by Republicans. The issue played an important role as well in the 1910 campaign, with (Southern) Democrats attempting to attach an income-tax amendment to the tariff bill (Fior Scott 1963:60).

<sup>30</sup> Some authors argue that, once federal government secured the funding mechanism through the income-tax amendment, political debates started to shift from Whom to tax –a primary concern for stock investors- to To Whom benefit with federal spending. The US would thus “entered the modern age of special-interest politics” (Baack and Ray 1985:610).

<sup>31</sup> He was nominated Democratic presidential candidate in three elections -1896, 1900 and 1908.

<sup>32</sup> For example, some Democrats talked of government ownership of railroads in the 1905 congressional debates on railway regulation –an initiative fiercely opposed by the “Republican Old Guard” (Fior Scott 1963:55). Despite his electoral defeats, Bryan –nicknamed “The Great Commoner”- retained control of the Democratic Party for a long period, fostering a radical agenda which conformed the meaning of the generic term “populist” as we know it today.

have a significant impact: excess stock market returns increase the *more leftist the President*, the higher the *ideological polarization*, and under *divided government*.

**Table 2. Political and Economic Determinants of US Stock Market Performance 1913-2003**

	Model 3 1913-2003	Model 4 1932-2003	Model 5 1932-2003
Inflation	-0.484* (0.272)	-1.005*** (0.351)	-1.027*** (0.343)
Dividend-price ratio (log)	0.019*** (0.005)	0.028*** (0.007)	0.024*** (0.007)
Term spread two bonds	0.001 (0.001)	-0.001 (0.002)	-0.001 (0.002)
Interest rate	-7.019*** (2.694)	-7.706*** (2.870)	-7.141** (2.852)
World War I	-0.026** (0.012)		
Great Depression	-0.008 (0.009)	-0.007 (0.010)	
World War II	-0.004 (0.007)	-0.005 (0.008)	-.0005 (0.007)
1973 Oil Crisis	-0.059* (0.034)	-0.059* (0.035)	-.0064* (0.034)
January	0.007 (0.005)	0.005 (0.006)	0.005 (0.006)
Ideology President	-0.015*** (0.004)	-0.016*** (0.005)	
Party President (1= Dem)			.0133*** (0.005)
Polarization	0.029* (0.016)	0.067** (0.027)	0.048* (0.027)
Unified Government	-0.028** (0.011)	-0.029** (0.012)	-0.025** (0.017)
Constant	-0.009 (0.010)	-0.027* (0.016)	-0.024 (0.016)
N	934	826	850

\*\*\*1% significance \*\* 5% significance, \*10% significance. Standard errors in brackets

Model 4 reproduces the analysis, but this time for the period in which stock market regulation officially starts in the aftermath of the Great Depression with the enactment of the 1933 and 1934 Acts. In other words, we look more specifically at the period in which both policy dimensions of the theory may definitely be assumed as

important for investors. The results are almost identical, with the only noticeable difference that the coefficients of the political factors become slightly more important and more significant. Thus, political factors do not seem to increasingly matter less, but more. Finally, model 5 double checks the results using the standard in the literature dummy presidential variable. Again, results do not change: excess returns are larger under Democratic presidencies.<sup>33</sup>

Similar to the analysis of the pre-1913 period, the results of these models, although contradicting some findings in political science on stock market performance, coincide with accounts from historians and scholars on regulatory policy. In the first place, as it is well known, New Deal Democrats created modern securities regulation in the 1930s. As Mulherin 2007:425) reminds, although it is difficult to assess the real impact of these regulations on stock performance, this does not mean that they were not welcomed by investors after the 1929 crash.<sup>34</sup>

More recently, we can also see in regulation literature several illustrations of the workings of the theory. Regulation policies enacted by Democrats have been predictably aligned with shareholders interests. One clear example would be the record of Arthur Levitt -appointed by President Clinton as chairman of the SEC from 1993 to 2001, and who was widely known as champion of the individual investor. Under his rule, the SEC initiated a series of reforms to protect shareholders by improving managerial accountability and financial transparency (Cioffi 2006:21).<sup>35</sup> Chief among those reforms would be the 2000 Regulation Fair Disclosure, which mandated that all

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<sup>33</sup> It could be argued that higher excess returns under certain conditions are simply a compensation for the higher risk investors incur when holding them. The positive effects of Republican presidents up to 1913, of Democrats from 1913 on, and of divided government and polarization on stock market returns could be compensations for the higher volatility of returns under those conditions. Maybe what happens in those circumstances is that investors perceive higher policy inconsistency or uncertainty, what leads to higher market volatility, and, in accordance, they *demand* for a higher return.

In order to control for this possibility, we have tested for differences in the volatility of stock market returns using exponential generalized autoregressive conditional heteroskedasticity (EGARCH) models. Again, in choosing EGARCH as a robustness test for our results we follow recent finance studies (e.g. Ederer and Ederer 2006) and depart from political science ones who tend to use GARCH models (e.g. Mukherjee and Leblang 2007). The results of EGARCH tests rule out the possibility that higher excess returns are a compensation for higher risk: volatility is not significantly higher under Democrats, divided government or polarization.

<sup>34</sup> Scholars also agree that, historically the Democratic Party has been less in favor of disrupting or unpredictable reforms than its European counterparts -probably as a result of the relative lack of class-based politics in the US (Cioffi and Höpner 2005:26).

<sup>35</sup> That frequently meant direct and hostile confrontation with managers' vested interests: "They [top executives] had a fortress mentality (...) They chose to make war rather than try to work with the commission. (...) They spent a fortune of money to fight us legally and legislatively." (Interview in *The New York Times*, December 21, 2000.



publicly traded companies must disclose information to all investors at the same time, prohibiting selective disclosures which disadvantaged individual investors.

On the contrary, Republican regulatory policies have been systematically less predictable. Republicans sometimes seem to favor shareholders and other times managers. During the 1990s, Republicans, on the one hand, supported most SEC reforms to improve the mechanisms of transparency and managerial accountability. As Levitt remarked, despite Republicans had run the committees with oversight responsibility for the SEC during most of his tenure, “we did these things [pro-shareholders reforms]” and “we were not rolled back once”.<sup>36</sup> This particular example thus illustrates both Republicans’ alignment with shareholders interests as well as also the positive effects of divided government on investors’ interests.

On the other hand, voting records in two important regulatory changes during the 1990s reveal a more pro-management stance of congressional Republicans. In the first place, Republicans, following a proposal included within Newt Gingrich’s *Contract With America*, passed the Private Securities Litigation Reform Act of 1995, over a veto by President Clinton.<sup>37</sup> This Act heightened the pleading requirements for securities fraud suits, weakening one of the most important enforcement mechanisms at the disposal of shareholders to hold managers accountable. Similarly, Republicans in Congress supported the Securities Litigation Uniform Standards Act of 1998, designed in theory to reduce “frivolous” litigation by making it harder to sue for securities fraud. This Act was widely perceived as strengthening the position of corporate managers at the expense of shareholders (Cioffi and Höpner 2006:23).

Furthermore, when resigning after the Republican Presidential takeover in 2000, Levitt expressed concern about the possibility that some of his pro-shareholders actions would be rolled back during the new Bush administration. He stated that a SEC with 4 out of 5 board members appointed by a Republican President would lack zeal to push accountants to resist corporate managers’ pressures to make companies look better.<sup>38</sup> He

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<sup>36</sup> Interview in *The New York Times*, December 21, 2000.

<sup>37</sup> Every Republican in the House voted in favor of the legislation, and only four Republicans in the Senate (e.g. John McCain) voted against it. Four of the five sponsors of the Act in the House and Senate were also Republican.

<sup>38</sup> “If you don’t have an activist chief accountant (...) the competitive juices of corporate America are such that they will stay close to the line, and some of them will go over the line. It requires continual attention.” (Interview in *The New York Times*, December 21, 2000).

also admitted that the new Republican administration would be strongly tempted by corporate managers to repeal the 2000 Regulation Fair Disclosure.<sup>39</sup>

The lengthy legislative procedure that led to the approval of the 2002 Sarbanes-Oxley Act also clearly shows, first, the difficulties of Republicans to simultaneously take into account both shareholders' and managers interests. The Act was sponsored by a Democrat representative (Paul Sarbanes) and a Republican one (Michael G. Oxley), and was overwhelmingly approved in both chambers.<sup>40</sup> Nevertheless, the Act was the result of an intense political struggle. While democrats acted cohesively asking for a pro-shareholders reform, a cleavage within the congressional Republican files emerged between moderate members who followed a pro-shareholders agenda, and those who opposed any regulation to preserve their alliance with corporate managers. It was precisely the possibility of an important fracture within the Republican Party unity what led President Bush and conservative Republicans in Congress to end their resistance and gave their support to the Sarbanes-Oxley Act. Secondly, literature also emphasizes the important role played by divided government in the Act, since it was the Democrats' control of the Senate prior to the 2002 elections what ultimately allowed to pass it (Cioffi and Höpner 2006:25).

Another empirical result of our study that finds support on the regulatory literature is that, contrary to the popular view that nowadays politics matters less for economic outputs, political factors seem to be more important for the stock market performance. Our finding of increasing significant coefficients for the three political variables over the last century is linked with remarks in the regulatory policy literature that the conflict between shareholders and managers is becoming both more relevant and more politically visible. Shareholders' and manager's interests have been progressively more coming apart -especially since the late 1970s, given the scarcity of hostile takeovers before. It was the rise of the junk bond market in the 1980s what triggered the expansion hostile-takeover offers and, in response, corporate managers demanded regulations restricting shareholders rights such as takeover defenses or limits to shareholders' ability to meet or act (Gompers et al. 2003:1). Consequently, managers

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<sup>39</sup> "We have heard from corporate executives who lament being unable to do certain things because of fair disclosure (...) they never should have been doing those things anyway" (Interview in *The New York Times*, December 21, 2000).

<sup>40</sup> In the House by a vote of 423-3 and in the Senate by 99-0. President Bush not only did not veto it, but, when signing it into law, he stated that it was "the most far-reaching reform of American business practices since the time of Franklin D. Roosevelt" (*The New York Times* July 31, 2002).

and shareholders have been fighting more legal and legislative battles for the last three decades (Adams and Matheson 2001).

#### **4. Conclusions**

This paper makes several contributions to the literature. As we have seen, there are two opposing findings in previous studies: for most finance scholars stock market performs better under Democrats while political scientists tend to argue that Republicans are better. Deriving testable propositions from a theory that shows the micro-foundations linking politics and the stock market and using a well-specified empirical model with control variables from both literatures, we are able to reconcile these contradictory results. When the most relevant policy issue at stake for investors was redistribution – i.e. from the late 19<sup>th</sup> century to the 1910s-, stock market preferred the Republicans. From the 1910s onwards though, when shareholders have been exposed to both redistributive and regulatory policies, the stock market has performed better under Democrats. Not only this, but since we use a continuous ideological variable, this result could be written as follows: the more leftist a President is, the better for the stock market.

Similarly, data shows us an increasing impact of two traditionally neglected political factors: divided government and ideological polarization. Unlike some preceding political science predictions that divided government could lead to stock market downturn (Bernhard and Leblang 2006:1), we show divided government as having a positive effect on stock market performance. As well, ideological polarization, in the light of the results presented here and against the prevailing view about the negative economic consequences of polarization, exerts a positive impact on the stock market.

Also quite opposite to both finance and political science approaches, this paper is grounded on qualitative findings from public policy and economic history literatures. They have helped us, first, identify our theoretical mechanisms and, second, take the relevant decisions on the empirical design. In general, similar to public policy literature, this paper has shown that politics matters –and it seems that increasingly more- for the stock market. Regulations are not the consequence of economic forces, but of political calculus. The ones who have taken the lead in recent pro-shareholders regulations in OECD countries have not been so much unions (not so directly interested), shareholders (poorly organized) or other interest groups, but parties who have seen an opportunity in

exploiting the conflict within the ranks of business between managers and shareholders (Cioffi and Höpner 2006:33).

Inferences of these results outside the US cannot be made easily though. The US is a paradigmatic example of “liberal market economy” –with market-driven financial system, liquid markets, diffuse share ownership that separates corporate ownership from control, among other features. Thus the American form of shareholders-managers conflict is difficult to find in other economies with the same impetus (Fligstein 2001). Nevertheless, as long as there has been an increase in both the diffusion of share ownership as well as its extension to middle and working classes in many countries, scholars in comparative regulatory policy have already started to detect policy coalitions along the lines of the ones pointed out here for the US. Center-left parties in countries like Germany, France and Italy have been increasingly overcoming their traditional opposition to shareholders’ requests, becoming the main driving force behind the latest pro-shareholders regulatory reforms. At the same time, long-lasting established alliances with corporate managers have constrained right-wing parties in those countries for clearly endorsing pro-shareholders regulations (Cioffi and Höpner 2006).

Many outcomes of this new alliance between shareholders’ interests and center-left parties –like the French 2001 “New Economic Regulations” Act, the 1998 “Dragui reforms” in Italy,<sup>41</sup> or the German Corporate Governance Commission in 2000- are probably too recent to have significantly affected investors’ behavior to the same extent as in the US -where the origins of this coalition can be traced back many decades ago. But it is likely to expect similar results for other OECD countries in analyses focused on the latest years.

The normative implications of this paper, if any, run against Leblang and Mukherjee’s remark that “right-wing parties arguably have a greater ability and willingness for priming the economy in ways that has a positive impact on stock returns” (2005:800). They claim -“perhaps provocatively” (2005:783)- that Republicans are likely to have better electoral prospects in the future.” Although sharing their assumptions on Democrats’ commitment to redistribution and Republicans’ generally closer position to the preferences of the stock market, this paper shows that they are not enough to explain the impact of political factors over investors’ calculations. The predictability of policy preferences may play an even more important role than the

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<sup>41</sup> Mario Dragui, a former vice-chairman of Goldman Sachs in London, was the main pro-shareholder economic reformer within the 1996-1998 left-wing government of Massimo D’Alema.

starting party policy preferences. In the light of the results of this paper, our predictions on future electoral fortunes would thus be more in line with those comparative regulatory policy studies pointing out the rising constraints faced by center-right parties in OECD countries to address mainstream business concerns (Cioffi and Höpner 2006). Instead of responding to widespread public concerns about corporate scandals, center-right parties are increasingly perceived as protective of traditional features of managerialism. Changing economic conditions during the last decades have sharpen the conflict of policy interests between shareholders and managers and that seriously diminishes the capacity of center-right parties to simultaneously appeal to both constituencies.

On the contrary, center-left parties seem to have been able to take advantage of the unpredictability of center-right's policies. Furthermore, center-left's alliance with shareholders does not seem to be increasingly weakening, but, quite the opposite, increasingly reinforcing center-left's traditional coalition with employees. Nowadays, more employees own shares and, with the crisis in public old age pension systems in several OECD countries, there are reasons to expect further increases in shareholdings by employees as an alternative form of saving. Therefore, the general rise in shareholding among the electorate, the increasing role of regulatory policy to solve the deepening cleavage between shareholders and managers, and the growing convergence of left parties and shareholders' interests should lead us to predict, in contrast to Leblang and Mukherjee (2005), better future electoral prospects for center-left than for center-right parties.

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