Corporate Political Activity and Asset Pricing

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Abstract

This study considers the implications of corporate political activity and political risk on asset pricing. It is found that firms which operate an affiliated political action committee (PAC) outperform firms that do not. Among firms that operate a PAC, we find that those that spend relatively less on politics outperform those that spend more and that political risk is successfully hedged by firms that are relatively more politically active than their peers. The difference in performance is largely (but not entirely) explained by exposure to systematic political risk, and there is a component to systematic political risk that is orthogonal to commonly considered risk factors.
1 Introduction

A great deal of media attention and scrutiny has been directed at corporate political involvement, particularly corporate financial support of candidates for federal office and political parties. The belief that politically active corporations exert a corrupting and nefarious influence over the political process, and promote unfair corporate enrichment, is widely held by various public interest groups, social commentators, and, occasionally, politicians. Despite popular interest, a market-wide study of the relative stock performance of politically active firms has never before been conducted.

Using a unique dataset, this study represents a step in filling this void and is the first to document differing return characteristics between firms with varying levels of political activity.

Initially we consider a binary treatment of political activity; a firm is considered to be “politically active” if it forms and operates an active affiliated political action committee (PAC), and “politically inactive” it does not. While this binary treatment of corporate political activity is obviously a gross simplification of reality, it is nevertheless a useful starting point in studying corporate political involvement and its implications for asset pricing.

Specifically, we find that between 1979-2002 the returns of firms (risk-adjusted or otherwise) that are politically active are usually higher than those that are not. The results are robust to time period subsamples, whether or not the portfolios are value or equal weighted, and are robust within industry and other standard portfolio groupings (such as portfolios grouped by size and book-to-market ratios).

We also consider a more refined measure of political activity which we refer to as the “comparative level of spending” or CLS measure. This rating is based on the relative level of political activity after controlling for firm size and industry. In this case, we

1A corporate PAC is formed and controlled by a firm and, among other things, is the only corporate vehicle that can legally donate money directly to federal politicians and candidates for federal office. PACs are regulated by the Federal Election Commission (FEC). Not all corporations choose to form a PAC (in fact, the majority do not), and of the ones that do, approximately 5% have zero disbursements over a given two-year election cycle (meaning the PAC did not donate to politicians, political parties, other PACs, etc.). A firm is considered to have an “active” PAC over a given election cycle if its disbursements are greater than zero over the same period.
find that firms that spend relatively less (i.e., have a low CLS rating) than their peers have higher returns than those that spend more. This result is robust to time period subsamples, to whether or not the portfolios are value or equal weighted, and to a number of methods of CLS construction.

In an efficient market, higher expected excess returns should be rewarded only for higher exposure to systematic risk. With this in mind, an immediate explanation for our results is that firms face systematic political risk in the market place, and that, on the whole, politically active firms are more exposed to this risk than others (hence their motivation to being politically active) and thus exhibit higher returns. Forming a PAC can thus be viewed as a signal to a level of political risk to which a firm is exposed.

If forming a PAC can be viewed as a signal to a level of political risk exposure, then it would be reasonable to extend a similar line of reasoning to the degree of political activity among firms that have chosen to operate a PAC. Namely, one might expect that firms whose PACs exhibit high levels of activity would be more exposed to political risk than firms with relatively lower levels of activity, and thus anticipate that the former would outperform the latter. However, working against this expectation is the possibility that firms whose PACs are relatively more active than their peers may also be more effective in hedging their political risk, and thus one could also expect that, among politically active firms, those that are more active may underperform those that are less active (since they better protect investors from bad political states of the world, for instance). Our findings suggest that the second story dominates, that particularly active firms successfully hedge their political risk.

Of course, whether or not a firm operates a PAC, and the level of funding the firm commits to its PAC, may signal something other than exposure to systematic risk, at least inasmuch as asset pricing is concerned. For example, a firm that forms a PAC may also have more internal managerial capital than its rivals and its stock enjoys higher returns not as a consequence of exposure to additional risk, but because the management team consistently delivers positive unexpected earnings announcements. Or perhaps a firm whose PAC is abnormally active has a management team that is distracted or engaged in empire-building activities and, as a consequence, is more likely to announce
negative earnings surprises.

We reject the above (in part) however, as there appears to be comovement in the returns between firms of varying degrees of political activity, and that this comovement is not explained by the usual suspects (market factor, Fama and French factors, momentum). It is, however, explained a large extent explained by a factor mimicking zero-cost portfolio with a long position in high CLS firms and a short position in low CLS firms (i.e., firms that spend relatively more on politics and firms that spend relatively less, respectively), a result we would not expect if the differences in performance were based around earnings surprises. However, the factor mimicking portfolio does not explain all of our observed performance differences, particularly for value-weighted portfolios, and thus we cannot completely rule out non-risk possibilities such as those outlined above.

The results outlined in this paper have a number of interesting implications. In particular, the earnings premium between politically active and inactive firms can be large. For example, in some industries the risk-adjusted performance differential between firms with PACs and those without can be as large as 6% per year. In the case of firms with PACs, the quintile of firms that spend the least outperforms the quintile of firms that spends the most by upwards of 10% per year, and that much of the excess returns are due to exposure to systematic risk. Our results suggests that the political process creates non-trivial systematic risk that affects asset pricing, that this risk is understood and considered by investors and is priced, that can firms can hedge against this risk through political activity, and that exposure to political risk is not just accrued at the industry level (as is commonly assumed), but also accrues at the firm level.

Recent published and working papers have begun to examine the relationship between politics and asset pricing. Santa-Clara and Valkanov (2003) find that returns are higher under Democratic presidential administrations than Republican. They speculate that the Presidency “affects the stock market through its fiscal and regulatory policies” (in other words, the Presidency affects the “political risk” in the market place) as a partial explanation for their findings.

Cheng (2005) studies the link between corporate contributions to presidential candidates and returns in the 2004 election and concludes that the stock market incorporates
political information into asset prices. Ferguson and Witte (2005) conclude that returns are lower, and volatility higher, when Congress is in session versus when it is not and suggest that this may be due to firms facing more political uncertainty while Congress meets.

There is a growing body of work surrounding the implications the political process has for asset pricing. We contribute to this literature by presenting evidence that politically active firms differ from others in their return characteristics and that this is largely due to exposure to systematic political risk.

The remainder of this paper is organized as follows: section 2 outlines reasons for corporate involvement in the political process and the role of corporate PACs in that effort, as well as a brief history of corporate PACs and a review of the literature involving their study. Section 3 introduces the data used in this study while section 4 presents a series of hypothesis, tests, and results. Section 5 concludes.

2 Corporate Political Involvement and Corporate PACs

2.1 The Role of PACs in Corporate Political Influence

The incentives for corporate political involvement are enormous. Governmental policy has the potential to influence almost every variable in a firm’s profit function.\(^2\) In no particular order, taxes, regulation (labor, environmental, safety, health, pension, etc.), education, social welfare programs, monetary policy, the government-as-customer, etc., can all impact the price a corporation can charge for its products, product demand, worker wages and hours, and the cost of capital.

As a consequence, firms frequently attempt to affect political outcomes (legislative and electoral) and one of the most visible ways in which they do this is through an affiliated PAC. A corporate PAC is established by a firm for the express purpose of funnelling money into the political process. It is the only corporate affiliated entity that can legally make direct contributions to candidates (so-called “hard money”), though it can

\(^2\)As a conceptual starting point in their study on the motivations for corporate PAC formation, Grier, Munger, and Roberts (1994) note that the profit function of firm \(i\) is \(\pi_i = P_iQ_i - r_iK_i - w_iL_i\), with \(P\), \(Q\), \(r\), and \(w\) being partially politically determined.
make other donations as well. Corporations are not allowed to fund their PACs from company revenues, exempting only administrative and overhead costs. Any PAC funding used for political purposes is restricted to voluntary donations from management, stockholders, and non-managerial employees (from whom the firm can solicit donations twice per year). PAC disbursements are controlled by management.

Of course, a PAC is not the only vehicle at a firm's disposal with which to affect the political process. Other activities are available as well, including lobbying and, for most of the sample period used in this study, virtually unlimited so-called "soft money" donations from the corporate treasury directly to political parties. Other firm activity can be interpreted as having political objectives as well, such as corporate philanthropy, "corporate social responsibility" or "corporate citizenship" initiatives and programs, etc., inasmuch as these efforts affect the image of the corporation among opinion-makers or affects the level of access to policy makers.

Further, as noted by Milyo, Primo, and Groseclose (2000) and others, corporate PAC activity is not the largest category of corporate political activity in dollar terms; lobbying expenditures are typically an order of magnitude higher, and charitable giving is higher still, by multiple orders of magnitude. So the question could be asked, why does this study (or, for that matter, most political science and economic papers involving corporate involvement in politics) focus on PACs when attempting to gauge the level of corporate political activity? If there are other means by which a corporation involves itself in the political process, why are they excluded, particularly when the financial commitment to PACs is comparatively smaller?

There are several reasons for the focus on PACs. As a practical matter, PAC data

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3Hard money contributions are donations directly to a campaign. Hard money donations are heavily regulated and, in the case of PACs, restricted to $5,000 per candidate per election cycle. Most contributions fall well below this limit, however; Kroszner and Stratmann (2000) note that the average contribution from a corporate PAC to a political campaign during the 1978–1986 was $700.

4Soft money contributions are donations directly to political parties ostensibly for non-partisan party-building activities, such as get-out-the-vote efforts (however, they have often been used in effectively partisan ways, such as funding so-called "issue-ads" which do not specifically name candidates, but nevertheless effectively promote one candidate over another). There were typically no limits on soft money donations for most of the sample period. With the passage of the Bipartisan Campaign Reform Act of 2002 (BCRA), soft money donations have since been severely restricted.

5See Himmelstein (1997), Smith (1994), and Navarro (1988) for studies related to these issues.

6For example, Philip Morris spent $120 million on philanthropic activities between 1997 and 1998, which is close to the $140 million spent by all corporate PACs for the same period.
is simply the most readily available; data involving corporate lobbying and soft money donations from corporate treasuries are more widely disbursed, if they are available at all. These types of difficulties with the available data are even more acute in the case of corporate charitable giving and similar activity. By way of contrast, corporate PAC activity is reported in great detail and made public by the Federal Election Commission (FEC). As a consequence, the disproportionate attention given to PACs is essentially a case of “looking under the lampost.”\(^7\)

Another reason for the focus on PACs, particularly on the part of political scientists, is that most PAC disbursements are in the form of hard money contributions to congressional candidates or partisan political PACs and so their desired effects are easier to infer. This enables political scientists to study the nature of political dynamics in a way not possible with the comparatively more vague character of lobbying data, soft-money contributions, or charitable activity.

Further, we argue that even though PACs are but one component in a firms political machinery (and perhaps the smallest at that), a firms PAC activity is nevertheless a suitable proxy for overall levels of the firms political concern. Attempts have been made in the political science literature to disaggregate and explain different forms of corporate political activity (notably, Hansen and Mitchell (2000)), but there is a consensus among many researchers that differing measures of political involvement (such as lobbying, charitable giving, etc.) are highly correlated with each other and that using PAC activity as a proxy for overall levels of political involvement is therefore justified.\(^8\)

In some sense, it may be more appropriate to use PAC activity as a signal to exposure to political risk than other, even financially more substantial, political activity. For a

\(^7\)Milyo, Primo, and Groseclose (2000), page 76.

\(^8\)According to Berelson, Lazerson, and McPhee (quoted in Verba and Nie (1972) page 44): “Almost all measures of political involvement and participation are highly correlated with one another and for analytical purposes, interchangeable.” Grenzky (1989) finds that in cases where a relationship between contributions and votes are established, the donations serve as a proxy for a more important and larger package of support. Similarly, Hojnacki and Kimball (2001) conclude that, while the presence of a PAC does not necessarily increase the level of access to the sponsoring organization per se, groups that form PACs tend to have a base of support that does result in increased access (which could include lobbying and other indirect political expenditures in the case of corporate sponsors). Humphries (1991) observes that “it is not PACs per se that corporations value, but the ability of PAC money to facilitate the job of Washington representatives” and that their results “suggest that there is a strong link between what might be termed the ‘amount of lobbying’ and the amount of money contributed to corporate PACs.”
corporate PAC to receive funding, management must successfully make the case that political involvement is in the firm's best interest in order to convince employees to donate. As a consequence, PAC funding seems more likely to be a response to real economic demands and may not be as sensitive to empire building tendencies on the part of management as other forms of political activity (which can be funded from corporate revenue).

In this study I do not depart from the general tradition of past researchers on this subject. I look exclusively at corporate PAC activity as a proxy for overall corporate financial involvement in politics, recognizing it to be only a small part of the complete picture in dollar terms.

2.2 A Review of the Literature on PACs

The analysis of corporate PACs in the political science economics literature has centered around answering two central questions. First, what are the determinants of PAC formation and levels of activity? Second, what are PAC disbursement strategies and what are their effects on legislature behavior and electoral outcomes?

With regards to the first question, the majority of studies use tobit or probit type analysis in conjunction with Heckman (1976) and Heckman (1979) corrected OLS regression to identify explanatory variables that predict whether or not a firm forms a PAC and what the eventual level of funding will be. Empirically, the most important factors predicting corporate PAC formation and activity are firm size, the degree of government regulation affecting the firm, and the extent to which the government is a customer of the firm, though the explained variation of PAC formation and funding remains modest (with $R^2$ values of around 0.4). Political scientists and economists generally prefer a profit-maximization motivation for the selection of explanatory variables to PAC formation and activity, while behaviorists tend focus on other factors such as industry peer pressure, community norms, or internal politics.

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9Levels of PAC “activity” have usually been defined as level of disbursements, receipts, or contributions to candidates, all of which are highly correlated with each other (around 0.98).

10Other factors have been studied as well, such as whether or not the firm has a Washington office (Humphries (1991)), the percent of unionization at the firm, industry classification, industry and geographic concentration, etc. (see Masters and Keim (1985), Grier, Munger, and Roberts (1994), and Hart (2001) for examples).
With regards to the second question, there is a large literature that addresses why corporations give (through PACs) and what they hope to accomplish by so doing. Incidentally, the dynamics of political influence is also studied, such as whether or not there exists a spot market for political favors.\textsuperscript{11} The conclusions of these studies are mixed, with some concluding that there is an effect of PAC spending on legislative or electoral outcomes and others concluding otherwise.

\subsection{2.3 A Brief History of Corporate PACs}

Corporate financial involvement in the political process via PACs increased in 1971 with the enactment of the Federal Election Campaign Act (FECA) and its subsequent amendments later in the decade. Prior to this time the Taft-Hartley Act of 1947 placed most “official” corporate campaign finance activity on uncertain legal ground, which limited direct corporate financial involvement in politics, especially relative to unions. FECA allowed for the formation of corporate PACs which could, among other things, make hard-money donations to candidates.

After FECA, the number of corporate PACs increased rapidly, reaching a high of 2,008 in the 1988 election cycle before dropping slightly in subsequent years. Despite FECA, the majority of corporations have not formed a PAC, though many contribute to industry or trade PACs (which are not considered in this study).\textsuperscript{12}

\section{Data}

This section describes the data used in this study and is divided into two parts: financial data and PAC data. The time period considered by this study is 1979-2002 with the limiting factor being the availability of PAC data.

\textsuperscript{11}Other examples include Stratmann (1998) which studies whether or not PAC contributions are timed so as to influence congressional voting and Romer and Snyder (1994) which studies the extent to which PACs target donations to members and chairs of particular congressional committees.

\textsuperscript{12}McKeown (1994) reports that, for the 1975-1984 period, of the firms that do not form PACs approximately 20% contribute to the overhead expenses to a trade or professional PAC and nearly 75% permit trade association PACs to solicit their employees for donations.
3.1 Financial Data

The monthly return and market capitalization data used spans all the firms in the Center for Research in Security Prices (CRSP) database with share codes 10 or 11 (common shares for firms incorporated inside the U.S.). Other asset classes, such as ADR’s and closed-end funds, were excluded.

When financial ratios are required for the analysis, the sample consists of the intersection of all firm data as described above and COMPUSTAT databases. Book-to-market ratios were constructed from book value per share data available in the merged CRSP/COMPUSTAT database (where the book value was constructed for year $t$ using the $t-1$ fiscal year end book value) and the ending monthly market capitalization (observations with negative BTM values were eliminated). Also, financial firms (SIC codes between 6000 and 6999 inclusive) were excluded when financial ratios are required in the analysis.

Fama and French factor data and momentum data were gathered from Kenneth French’s website.

3.2 PAC Data

The FEC requires that PACs report their financial activity in great detail and at regular intervals throughout a given election cycle.\textsuperscript{13} This information is then made public through the FEC’s website (www.fec.gov). In this study, I restrict my attention to those PACs that have self-identified as being affiliated with a publicly-traded corporation.\textsuperscript{14}

The data are available from 1979 to the present and is segmented by election cycles. The data are highly detailed and includes transaction information between PACs and political campaigns, as well as records of each donation (above a minimum threshold) to a given PAC.

There exists in the data approximately 40,000 corporate PAC-years but no direct way to match corporate PAC records to a firm in CRSP. For this study, matching was

\textsuperscript{13}An election cycle consists of a two year period; for example, the 1992 election cycle spans the calendar years 1991 and 1992.

\textsuperscript{14}Corporate PACs are classified by the FEC as special interest group (SIG) PACs. Other classifications for SIG PACs include labor unions, trade groups, cooperatives, and private companies.

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performed by hand based on the name of the PAC, the name of the PACs sponsoring organization and the name of the firm in CRSP. A significant effort was also spent attempting to match PACs of subsidiary organizations to a parent firm in CRSP, matching PACs to the appropriate firms after mergers and acquisitions, etc.\textsuperscript{15} In general, matching was made conservatively; if a PAC was not unambiguously associated with a firm in CRSP based on careful investigation, a match was not specified. Once the matching of PAC data to CRSP was complete, we were able to generate data files for firms that included PAC data (in particular, whether or not a firm had an active PAC) and perform our analysis.

Approximately 60\% of PACs that have self-identified as being affiliated with a publicly traded corporation were successfully matched to a firm in CRSP for each election cycle. Further, approximately 80\% of PAC disbursements have been traced to a firm in CRSP.\textsuperscript{16} There are a number of reasons more corporate PACs were not matched to CRSP: the matching scheme was simply not exact, many PACs have incorrectly self-identified as being sponsored by a corporation with capital stock (the sample includes numerous activist groups, law firms, etc.), and not all capital stock trades on the NYSE, NASDAQ, or AMEX (the markets from which the CRSP sample is drawn). Nevertheless, the majority of corporate PAC money is accounted for.

4 Political Activity and Asset Pricing

There are a number of reasons the political process can affect asset pricing. The effect of the political business cycle on the macroeconomy has been studied in great detail.\textsuperscript{17} This study does not examine the political business cycle per se; we do not focus on the relationship between politics and the macroeconomy (i.e., market returns and volatility, inflation, employment, etc.), but rather the effect of corporate political activity on the pricing of individual firms. In this section we outline reasons why we should expect

\textsuperscript{15}Delisting codes in CRSP (such as for mergers and acquisitions) and various web resources, such as corporate affiliation websites as well as the official websites for individual firms, were also invaluable in this effort.

\textsuperscript{16}The matching success rates reported here are similar to those in Grier, Munger, and Roberts (1994) which matched 50-60\% of corporate PACs and approximately 80\% of donations to firms in COMPUS-TAT for the 1978-1986 time period.

\textsuperscript{17}For surveys of the literature in this area, see Alesina, Roubini, and Cohen (1997) and Drazen (2000).
political risk to systematically affect the pricing of assets beyond the contribution of the political process to the movement of already identified risk factors. We also discuss the plausibility of corporate political activity as a signal to the level of exposure to political risk, develop a set of hypothesis as to what this would imply with regards to asset pricing, and test them empirically.

4.1 Political Risk as a Systematic Risk Factor

We propose that the political process can have a systematic effect on asset returns. This effect is influenced by, among other things, the changing legislative mood of the Congress, cases important to business that are before the courts, election cycles, etc. For example, a large number of corporations operate under heavy pension and health care liabilities. Proposals to expand Medicare to cover prescription drugs, as well as court cases that at least partially determine the ability of a corporation to default on its pension liabilities, have the potential to affect a large enough number of firms so as systematically affect asset prices.

We recognize that a large portion of what we view as political risk is absorbed in already identified risk factors. It is reasonable to posit that there is a political component to the what we refer to as market risk. For instance, were the Legislature to consider changing the corporate tax rate, we would expect to see this reflected in the various market indices. Further, it is also reasonable to suggest that there is a political component to other identified risk factors, such as the Fama and French factors. For example, legislation and regulation does not always affect firms of differing size equally. Compared to large firms, small firms are often exempted from certain statutory and regulatory obligations such as providing health care to employees, and are less likely to receive the type of negative public scrutiny that leads to lawsuits and detrimental legislative action. However, smaller firms do not enjoy economies of scale in complying with regulatory burdens (such as Sarbenes-Oxley), and typically have fewer employees (or, in the eyes of politicians, voters) from whom to draw political support, etc.\textsuperscript{18}

\textsuperscript{18}Santa-Clara and Valkanov (2003) find evidence that the “Presidential premium”, or the difference in the equity premium between Democratic and Republican administrations, is higher for smaller firms than larger firms. Beck, Demirgüç-Kunt, and Maksimovic (2005) suggest that smaller firms may face higher legal hurdles to growth than larger firms.
Other factors which may not be “priced” in asset returns, in that they do not contribute to the unconditional expected risk premia for assets that are exposed to them, may nevertheless useful in “pricing” assets, in that they help explain the variance of asset returns. These types of non-priced factors may also have politically driven components. It is well known that the stock returns of firms within industry groupings are more highly correlated than the returns of firms between industry groupings, even though industries typically do not command a premium beyond that which is accounted for by exposure to seemingly more pervasive, non-industry based factors. This implies the existence of non-priced industry “factors” which likely have political components. For instance, legislation affecting the so-called dumping of foreign steel surely has an impact that is felt in the domestic steel industry. And the possibility of “windfall taxes” targeted at domestic oil firms likely has an impact in the pricing of that industry as well.

The above notwithstanding, we consider it unlikely that the effects of political risk are completely explained by already well-understood risk factors. We propose that there is a component of political risk that is orthogonal to these factors.

For example, changes in depreciation schedules may have an effect that can be measured at the market level, and hence somewhat captured by a movement in the market factor. However, even among firms with similar market betas, the effect will likely be more pronounced among capital-intensive businesses; thus there is a component to political risk that is orthogonal to the market factor.

Political risk is commonly thought of as accruing at the industry level. Indeed, numerous studies of corporate political activity take the industry as the unit of analysis and yield useful results. Certainly a great deal of political risk is captured in industry movements. However, it is reasonable to expect that, even within industry groupings, political effects are not equally felt. In fact, there is reason to believe that even within industry groupings firms may use the political process against each other, and that the competition within industry groupings for political attention may even constitute an “arms race”, as suggested by Gray and Lowrey (1997).

For example, advocacy on the part of large retailers for raising the minimum wage
may be viewed as creating a higher barrier to entry for some its smaller competitors. Or, consider the auto industry; it is commonly thought that raising the corporate average fuel economy (CAFE) standards would be detrimental to the industry as a whole. However, U.S. automakers rely on gas-guzzling SUV’s and light trucks to generate the majority of their profits and, in some cases, even lose money on their smaller, more fuel-efficient cars. This is not as true for Japanese manufacturers, who make a reasonable profit even on their small and mid-sized sedans. With this in mind, it may be in the best interest for Japanese automakers to actually lobby for raising CAFE standards as they have a competitive advantage in profitably producing more fuel-efficient vehicles.

Finally, consider the utility industry. A large portion of the energy consumption in the U.S. is generated by coal and gas fired powerplants which produce CO$_2$, a “greenhouse gas” that is drawing increasing scrutiny from legislators and regulators. One might reasonably conclude that raising emissions standards would therefore hurt the utility industry, requiring costly upgrades to existing plants and investment in less economical production capacity in the future. However, raising emissions standards may be in the interest of utility companies whose power generation portfolio is more heavily weighted towards nuclear or hydro power and who, as a consequence, already produces small amounts of CO$_2$.

Measuring a firm’s exposure to political risk is difficult and we propose a proxy in this regard, namely the level of a firm’s political activity. This is discussed in the following sections.

4.2 Binary Treatment of Political Activity: Corporate PAC Formation as a Signal to Political Risk Exposure

We propose that the decision to form a PAC is a suitable signal to a level of exposure to political risk. We make a prediction in this regard, discuss its implication for asset pricing, and test this implication empirically.

Corporate political involvement comes at a cost; the public does not look favorably on corporate political activity, and a perceived greediness on the part of a corporation may negatively affect business. Political activity also requires managerial capital in terms of time and attention, in addition to the required financial commitment (while
PAC revenue does not come from corporate coffers, the lobbying and public relations efforts that usually accompany it does). Therefore the decision to form and fund a PAC should contain information as to the level of political risk to which the firm is exposed in that the firm has estimated it to be sufficiently high so as to warrant political involvement (which can be interpreted as a hedging effort) in spite of the costs. This leads us to our first prediction: *firms with PACs should, on the whole, outperform firms without as a consequence of their being exposed to greater levels of systematic political risk (as signaled by their decision to form a PAC)*.

This, of course, seems to ignore questions as to the effectiveness of political involvement as a hedging activity. If political activity can completely hedge the exposure to political risk, the above proposition need not be true. However, we view market for political favors as being limited (not every company can be successful in negotiating tax loopholes, for example, without drawing attention to the legislators that are responsible for them) and that, on the whole, firms cannot completely hedge away their political risk. Certain classes of firms may be able to do this, and we revisit this possibility later on, but we expect this prediction to be true in aggregate.

### 4.2.1 Tests of Binary Treatment of Political Activity on Asset Pricing

In order to test the hypothesis that firms with PACs should outperform firms without, we form zero-cost portfolios with long positions in firms that operate an active affiliated PAC and a short position in remaining firms and analyze their return characteristics. We create both equally weighted and value weighted portfolios. Any firm that operates an active PAC at any time during a given election cycle is included in the PAC portfolio over the same period. For example, if Microsoft operated an active PAC for the 1996 election cycle, it was included in the PAC portfolio for the years 1995 and 1996. The portfolios are updated each election cycle (every two years). In order to test for abnormal returns, we consider a a Fama & French three factor test and a four factor test that includes a momentum factor as follows

\[
R_{PAC,t} - R_{NonPAC,t} = \alpha + bMKT_t + sSMB_t + hHML_t + \epsilon_t
\]

\[
R_{PAC,t} - R_{NonPAC,t} = \alpha + bMKT_t + sSMB_t + hHML_t + mUMD_t + \epsilon_t
\]
The interpretation of the \( \alpha \)'s in the above regressions is an abnormal return; if the factors fully capture the risks to which an asset is exposed, this term should be zero. The Fama and French three-factor model has been shown to explain a large portion of portfolio returns.\textsuperscript{19} It consists of a market factor, \( MKT_t \) (the market return in excess of the risk free rate, or \( R_{m,t} - R_{f,t} \)), a small-minus-big factor, \( SMB_t \) (which consists of a difference between a portfolio of small stocks minus a portfolio of large stocks), and a high-minus-low factor, \( HML_t \) (which consists of the difference between a portfolio of high book-to-market stocks minus the return of a portfolio of low book-to-market stocks).

In addition, Jegadeesh and Titman (1993) show that there exist momentum effects in stock returns, where for certain horizons (less than a year) stocks with positive past returns tend to have positive future returns, and vice-versa. Carhart (1997) demonstrates the importance of momentum in explaining expected returns and, as a consequence, we include a momentum factor \( UMD_t \) (or up-minus-down) in the standard Fama and French three-factor model and subsequently refer to it as the Carhart four-factor model, though there is some controversy as to whether or not this factor actually captures risk.\textsuperscript{20}

In order to control for industry effects (which are already well understood in terms of their implications for asset pricing), we sort firms by industry in order to determine whether or not levels of political activity have any further explanatory power for returns within each industry category. For this study we use the 12 Fama and French industry groupings (which we consider to be economically more sensible that creating a similar number of groupings based on the first SIC digits). We also examine the relative performance between PAC and non-PAC firms in the market as a whole (within CRSP).

Results of the above tests can be seen in Table I for the full sample period (1979 - 2002) and appear to support our hypothesis. Most of the \( \alpha \)'s in the regressions are positive, and many are significant, particularly for the value weighted cases. We also compute the Gibbons, Ross, and Shanken (1989) \( F \)-statistic with the null hypothesis being that all the \( \alpha \)'s in the industry portfolios are equal to zero and is rejected in 3 out

\textsuperscript{19}See Fama and French (1993).
\textsuperscript{20}For example, Moskowitz and Grinblatt (1999) consider the possibility that the “momentum effect” is an artifact of non-priced industry effects, while many others consider it to be a behavioral phenomenon.
of 4 cases, the only exception being the test involving the equal weighted Carhart results (the \( \alpha \) in the tests that considers the overall market is not included in the computation of the \( F \)-statistics).

The industries with the largest \( \alpha \)'s include the consumer non-durables (food, tobacco, textiles, apparel, leather, toys, etc.), business equipment (computers, software, electronics, etc.), shops (wholesale, retail, and some services), and healthcare (medical equipment, pharmaceuticals, etc.) industries. This result should not be interpreted as indicating that these industries are exposed to the greatest level of political risk, of course, but it does support the idea that the component of political risk that is orthogonal to the tested factors and industry considerations is the largest among these industries.

It is also apparent from Table I that our tests appear to have low power. Consider the equal weighted Carhart test for consumer non-durables. The monthly \( \alpha \) in this test is 0.29% which amounts to an annual excess return of approximately 3.6%. This is economically large and yet our test fails to reject the null hypothesis that \( \alpha = 0 \) even at the 10% level. There are at least two contributors to this apparent lack of power. First, PAC formation is possibly a noisy signal to exposure to political risk. Indeed, many studies considering PAC formation indicate that there non-economic sociological factors can significantly explain PAC formation. Second, it may be the case that our binary treatment of political activity is too crude; firms whose PACs spend more may be more exposed to political risk (and hence have higher returns), or better hedged against it (and hence have lower returns), than their low spending peers, and this may add noise to the results in Table I. We consider this second possibility shortly, but first discuss some robustness checks for our results in Table I.

### 4.2.2 Robustness Checks: Tests of Binary Treatment of Political Activity on Asset Pricing

In order to check the robustness of our results in Table I we perform a number of tests, none of which are included in this study but are available on request. First, we examine time period subsamples in order to see if only a few time periods are driving our results. We find this not to be the case. The \( \alpha \)'s for various industry groupings do move in
Table I

This table contains the monthly risk-adjusted returns for equal and value weighted zero cost portfolios consisting of firms with and without PACs within the 12 Fama and French industry groupings and for the entire market (within CRSP). The mean number of firms in each portfolio, with the minimum number in parentheses, is also reported. A Fama & French 3-factor test is considered along with a Carhart 4-factor test:

\[ R_{PAC,t} - R_{NonPAC,t} = \alpha + b(R_{m,t} - R_{f,t}) + sSMB_t + hHML_t + \epsilon_t \]

Monthly \( \alpha \)'s are reported with ***, **, and * denoting significance levels of 1%, 5%, and 10%, respectively (with Newey and West (1987) \( t \)-stats in parenthesis). Gibbons, Ross, and Shanken (1989) \( F \)-statistics are reported at the bottom of the table, with the \( p \)-values in parenthesis, for the null hypothesis that all \( \alpha \)'s = 0 (the \( \alpha \) for the overall market is not considered in this test).

<table>
<thead>
<tr>
<th>Industry</th>
<th>Fama &amp; French 3-Factor Test</th>
<th>Carhart 4-Factor Test</th>
<th>Mean firms w/ PAC</th>
<th>Mean firms w/o PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \alpha_{vw} )</td>
<td>( \alpha_{vw} )</td>
<td>( \alpha_{vw} )</td>
<td>( \alpha_{vw} )</td>
</tr>
<tr>
<td>Non-durables</td>
<td>0.35% **</td>
<td>0.43% ***</td>
<td>0.31% *</td>
<td>0.29%</td>
</tr>
<tr>
<td></td>
<td>(2.04)</td>
<td>(2.66)</td>
<td>(1.80)</td>
<td>(1.60)</td>
</tr>
<tr>
<td>Durables</td>
<td>0.31%</td>
<td>0.07%</td>
<td>0.12%</td>
<td>0.05%</td>
</tr>
<tr>
<td></td>
<td>(1.13)</td>
<td>(0.37)</td>
<td>(0.45)</td>
<td>(0.20)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>−0.07%</td>
<td>−0.17%</td>
<td>−0.08%</td>
<td>−0.14%</td>
</tr>
<tr>
<td></td>
<td>(−0.52)</td>
<td>(−1.17)</td>
<td>(−0.48)</td>
<td>(−0.82)</td>
</tr>
<tr>
<td>Energy</td>
<td>0.58% **</td>
<td>0.16%</td>
<td>0.57% *</td>
<td>0.25%</td>
</tr>
<tr>
<td></td>
<td>(2.03)</td>
<td>(0.63)</td>
<td>(1.96)</td>
<td>(1.01)</td>
</tr>
<tr>
<td>Chemicals</td>
<td>−0.01%</td>
<td>−0.01%</td>
<td>0.06%</td>
<td>−0.03%</td>
</tr>
<tr>
<td></td>
<td>(−0.07)</td>
<td>(−0.07)</td>
<td>(0.28)</td>
<td>(−0.13)</td>
</tr>
<tr>
<td>Business equip</td>
<td>0.53% ***</td>
<td>0.21%</td>
<td>0.42% **</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>(2.74)</td>
<td>(0.87)</td>
<td>(2.12)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Telecom</td>
<td>−0.36%</td>
<td>0.23%</td>
<td>−0.38%</td>
<td>0.19%</td>
</tr>
<tr>
<td></td>
<td>(−1.44)</td>
<td>(0.94)</td>
<td>(−1.46)</td>
<td>(0.64)</td>
</tr>
<tr>
<td>Utilities</td>
<td>−0.14%</td>
<td>−0.22%</td>
<td>−0.21%</td>
<td>−0.27% *</td>
</tr>
<tr>
<td></td>
<td>(−0.91)</td>
<td>(−1.51)</td>
<td>(−1.39)</td>
<td>(−1.68)</td>
</tr>
<tr>
<td>Shops</td>
<td>0.38% **</td>
<td>0.46% ***</td>
<td>0.28% *</td>
<td>0.35% **</td>
</tr>
<tr>
<td></td>
<td>(2.32)</td>
<td>(2.75)</td>
<td>(1.77)</td>
<td>(1.99)</td>
</tr>
<tr>
<td>Healthcare</td>
<td>0.45% **</td>
<td>0.23%</td>
<td>0.47% **</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>(2.27)</td>
<td>(0.81)</td>
<td>(2.40)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Finance</td>
<td>0.06%</td>
<td>−0.09%</td>
<td>0.09%</td>
<td>−0.06%</td>
</tr>
<tr>
<td></td>
<td>(0.62)</td>
<td>(−0.82)</td>
<td>(0.80)</td>
<td>(−0.42)</td>
</tr>
<tr>
<td>Other</td>
<td>0.08%</td>
<td>0.01%</td>
<td>0.26%</td>
<td>0.04%</td>
</tr>
<tr>
<td></td>
<td>(0.45)</td>
<td>(0.08)</td>
<td>(1.53)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>All firms</td>
<td>0.17% **</td>
<td>0.03%</td>
<td>0.10%</td>
<td>−0.07%</td>
</tr>
<tr>
<td></td>
<td>(2.32)</td>
<td>(0.24)</td>
<td>(1.51)</td>
<td>(−0.42)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.32</td>
<td>2.02</td>
<td>2.23</td>
<td>1.44</td>
</tr>
<tr>
<td>(p-value)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.01)</td>
<td>(0.14)</td>
</tr>
</tbody>
</table>

17
and out of significance (statistical or economical) as the time period changes, but on
the whole, the results do not change. By way of example, the $\alpha$ for the consumer
non-durable industries is significant for the first half of the sample period, for instance,
but not the second half. Conversely, the $\alpha$ for the business equipment industry is
significant for the second half of the sample period, but not the first. The Gibbons,
Ross, and Shanken (1989) $F$-statistics usually reject with $p$-values of 1 or 2%, with the
only exception being the equal weighted portfolios at the end of the sample period.

We also consider selection bias in our results. We include a firm in the PAC portfolio
if it operated an active PAC during an election cycle. However, we do not consider at
what time during the election cycle the firm actually formed its PAC. So, if Duke Energy
operated a PAC for the first time in the 1986 election cycle, we include it in the PAC
portfolio from January of 1985 through December of 1986. However, it may be the case
that Duke Energy did not actually form its PAC until December 31, 1986. To control
for this we lag our portfolio formation by one election cycle with virtually no impact
on our results (in some instances it actually strengthens them). This is partially due to
there being very little turnover in the PAC portfolios; 90-95% of the firms included in
election cycle are also included in the next. Also, PACs report their activity throughout
the election cycle and so a new PAC is likely to report its creation prior to the end of
the cycle. In any case, the movement of firms in and out of the portfolios of firms that
have PACs does not appear to be driving our results.

We use a contemporary portfolio formation approach to prevent data loss (which,
while small on aggregate, can have a large effect on certain of our portfolio groupings
which can consist of as few as 14 firms) with the justification that exposure to polit-
ical risk is likely understood by industry analysts independent of whether or not they
actually consider PAC data in accessing political risk. If anything, industry analysts
likely consider stronger and contemporarily more visible (at least to the analyst, not
the academic researcher!) signals to levels of political risk exposure, such as lobbying
efforts, current litigation, legislation pending before Congress, etc. This possibility is
supported by the fact that, while PAC data has received little attention in the finance
literature with regards to valuing firms, the potential effects of legislation and litigation
on business are widely discussed in the popular press.

We also examine relative the relative performance between firms with and without PACs within portfolio grouped on criteria other than industry. Corporate PAC formation may serve as a proxy for firm characteristics whose implications for asset pricing are also widely studied and understood. In order to control for possible size and book-to-market effects beyond considering the Fama and French factors, we also create portfolios based on NYSE breakpoints for size and book-to-market ratios and run our tests within them. We find that our general result persists, and remains robust to time period subsamples and whether or not the portfolios are equal or value weighted. We also find that the effects are somewhat stronger for smaller firms than for larger ones.

4.3 The Level of Corporate PAC Activity as a Signal to Political Risk Exposure

Our treatment of corporate political activity up to this point is admittedly coarse. It seems useful to us to also consider the degree to which a firms PAC is active in assessing the political risk facing the firm and forming an expectation as to what this may imply for asset pricing.

The extent to which a corporate PAC is active is, in some sense, a separate decision than the one to form a PAC. Forming a PAC is easy; it requires the filing of a few reports and not much else. Funding a PAC is more difficult and includes top level management making the case to junior managers and workers that it is in their best interest to contribute to it. The disbursements of a PAC are a good indicator of management’s success at making such a case and may contribute to PAC disbursements being a stronger signal than most to levels of political risk exposure; management cannot fund a PAC based on empire building tendencies alone; employees need to be convinced an economic need exists before they are willing to contribute, particularly if the firm supports candidates the employee would otherwise oppose.

21 For seminal work on this topic, see Basu (1977), Banz (1981), Fama and French (1992), Daniel and Titman (1997), and Brennan, Chordia, and Subrahmanyam (1998).

22 In this study we consider the total disbursements by a PAC to indicate its degree of activity. Total disbursements consist of all expenditures made by a PAC, including donations directly to politicians (typically around 60% of the total), donations to political parties, contributions to other PACs, etc.
To examine the effects of differing levels of political activity we calculate a “comparative level of spending” (CLS) measure. We are interested in identifying firms that spend more than they “should” based on the level of activity of their peers in order to make a judgement as to the level of political risk and/or effectiveness of their political hedging efforts should be relative to other firms, controlling for non-economic explanatory variables to PAC formation (or explanatory variables that have already been identified as having asset pricing implications). For instance, we do not calculate a CLS measure based solely on the notional amount of PAC expenditures for each election cycle as larger firms will superficially have larger PACs based on size considerations alone, and size is already understood as influencing asset prices. Therefore, for each firm $j$, we assign a CLS rating as the of the standardized residuals of the following regression:

$$
\ln (\text{PAC disbursements}_{jt}) = \text{Industry Dummies}_{jt} + \ln (\text{Size}_{jt}) + \ln (\text{PAC Age}_{jt}) + \epsilon_{jt}
$$

(3)

Each firm is assigned a CLS rating each election cycle $t$. In order to be sure we are not capturing industry effects in our rankings, and to account for the possibility of economically-superficial industry norms in PAC activity, we also include firm fixed effects. Also, the age of a PAC may superficially account for some level of PAC funding: younger PACs may be smaller solely because the firms employees have not yet made a habit of contributing.

When examining the cross section, all of the above variables are significant predictors of PAC activity each election cycle. Regressions of this type have been used to explain PAC activity in scores of studies in the political science and economics literature. In those studies firm size, extent to which the government is a customer of the firm, and the degree to which the firm is regulated are the most significant predictors of PAC activity, and creative researchers have found many other predictors as well. Admittedly, our regression seems crude by comparison but it nevertheless explains the essential elements of PAC activity as inspired by previous research and is sufficient for our purposes; we account for size (by far the largest predictor of PAC activity, economically and statistically), and government as customer and industry regulation (both controlled for
by industry fixed effects). Additionally, other independent variables commonly studied are implicitly accounted for, such as the extent of industry unionization and industry concentration (both somewhat captured by the industry fixed effects), even though their effects are not disaggregated (which is not our objective in this exercise in any event).

We anticipate that firms whose affiliated PACs are more active than their peers (as captured by the firms CLS rating) may be relatively more exposed to political risk. As a consequence, we might expect that firms with high CLS ratings to have higher returns than their low CLS peers. However, political activity ought to have a hedging effect, otherwise there would be no incentive to political activity. With this in mind, it is also foreseeable that firms with high levels of political activity may also better hedge their political risk in which case we might expect high CLS firms to have lower returns than their low CLS peers. It is unlikely that these two possible effects exactly cancel out though, ex ante, it is difficult to foresee which story is dominant. This leads to our next prediction: excess returns for politically active firms should be increasing or decreasing with increasing CLS ratings, but, unless the hedging effect exactly cancels out the level of risk exposure signaled by PAC activity, should not stay constant.

4.3.1 Tests of the CLS Measure as a Signal to Political Risk Exposure

To test this prediction we create portfolios by sorting firms into quintiles based on their CLS ratings and run a series of tests to measure excess returns. The general form of a K factor test for CLS-ranked portfolio i is

\[ R_{PAC,i}^t - R_{NonPAC,i}^t = \alpha + \sum_{k=1}^{K} \beta_k R_k^t + \epsilon_t \]  

In addition to the Fama and French and Carhart tests already outlined, we also consider a difference in means test \((K = 0)\) and a CAPM test (which only includes a market factor). The results these tests are summarized in Table II and are for the 1981 - 2002 time period (we lose the first election cycle when calculating the CLS measure due to the consideration of PAC age). Panel A display the results for value weighted portfolios, Panel B displays the results for equal weighted portfolios. Both panels contain Fama and French and Carhart tests augmented with a factor mimicking portfolio which will be discussed shortly.
This table contains regression results for the equal and value weighted zero cost portfolios consisting of firms with and without PACs within five portfolios based on the comparative level of spending (CLS) of a firm’s PAC for the sample period (1979 - 2002). The measure of comparative spending for firm \( j \) is determined for each 2-year election cycle as the standardized residuals from the following regression:

\[
\ln (\text{PAC disbursements}_j) = \text{Industry Dummies}_j + \ln (\text{Size}_j) + \ln (\text{PAC Age}_j) + \epsilon_j
\]

The firms are sorted into portfolios based on their CLS measure with those in portfolio 1 comprising the quintile of firms with the lowest CLS ratings, and those in portfolio 5 the highest. A difference in means test, CAPM, Fama & French, Carhart, and a Fama & French and Carhart test augmented with a political factor (\( AMI \)) are considered. The political factor mimicking portfolio was constructed by sorting firms with PACs by their CLS rating and taking the difference between the equal weighted returns of the top 50% and the bottom 50%. The general form of the tests for portfolio \( i \) is

\[
R_{PAC,i,t} - R_{NonPAC,i,t} = \alpha + \sum_{k=1}^{K} \beta_k R_{kt} + \epsilon_t
\]

Panels A and B report the monthly \( \alpha \)'s from the above regressions. Newey and West (1987) \( t \)-stats are in parenthesis with ***, **, and * denoting significance levels of 1%, 5%, and 10%, respectively. Gibbons, Ross, and Shanken (1989) \( F \)-statistics are reported at the bottom of the table, with the \( p \)-values in parenthesis, for the null hypothesis is that all five \( \alpha \)'s = 0 (the \( \alpha \) for difference between the first and last portfolio is not considered in this test). There are an average of 153 firms in each portfolio, with a minimum of 109.

### PANEL A: Value Weighted Portfolios

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Means</th>
<th>CAPM</th>
<th>FF 3-Factor</th>
<th>Carhart 4-Factor</th>
<th>FF 3-Factor + AMI</th>
<th>Carhart 4-Factor + AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.61% ***</td>
<td>0.72% ***</td>
<td>0.50% ***</td>
<td>0.50% ***</td>
<td>0.39% ***</td>
<td>0.39% ***</td>
</tr>
<tr>
<td></td>
<td>(3.70)</td>
<td>(4.81)</td>
<td>(4.67)</td>
<td>(4.31)</td>
<td>(2.91)</td>
<td>(2.92)</td>
</tr>
<tr>
<td>2</td>
<td>0.30% *</td>
<td>0.41% ***</td>
<td>0.29% ***</td>
<td>0.29% ***</td>
<td>0.09%</td>
<td>0.09%</td>
</tr>
<tr>
<td></td>
<td>(1.85)</td>
<td>(2.68)</td>
<td>(2.59)</td>
<td>(2.67)</td>
<td>(0.72)</td>
<td>(0.78)</td>
</tr>
<tr>
<td>3</td>
<td>0.24%</td>
<td>0.40% **</td>
<td>0.17%</td>
<td>0.02%</td>
<td>0.07%</td>
<td>0.06%</td>
</tr>
<tr>
<td></td>
<td>(1.12)</td>
<td>(2.04)</td>
<td>(1.52)</td>
<td>(0.23)</td>
<td>(0.44)</td>
<td>(0.47)</td>
</tr>
<tr>
<td>4</td>
<td>0.17%</td>
<td>0.28%</td>
<td>0.01%</td>
<td>0.04%</td>
<td>0.17%</td>
<td>0.17%</td>
</tr>
<tr>
<td></td>
<td>(0.87)</td>
<td>(1.54)</td>
<td>(0.10)</td>
<td>(0.35)</td>
<td>(1.41)</td>
<td>(1.42)</td>
</tr>
<tr>
<td>5</td>
<td>-0.15%</td>
<td>-0.02%</td>
<td>-0.30% **</td>
<td>-0.31% **</td>
<td>-0.05%</td>
<td>-0.06%</td>
</tr>
<tr>
<td></td>
<td>(-0.71)</td>
<td>(-0.11)</td>
<td>(-2.53)</td>
<td>(-2.51)</td>
<td>(-0.38)</td>
<td>(-0.40)</td>
</tr>
<tr>
<td>5 - 1</td>
<td>-0.76% ***</td>
<td>-0.74% ***</td>
<td>-0.81% ***</td>
<td>-0.81% ***</td>
<td>-0.45% ***</td>
<td>-0.45% ***</td>
</tr>
<tr>
<td></td>
<td>(-5.23)</td>
<td>(-5.09)</td>
<td>(-5.79)</td>
<td>(-5.41)</td>
<td>(-3.17)</td>
<td>(-3.17)</td>
</tr>
</tbody>
</table>

**F-statistic**

| (p-value) | 8.76 | 7.76 | 7.25 | 2.57 | 2.64 |
|           | (0.00) | (0.00) | (0.00) | (0.03) | (0.02) |

CONTINUED
It can be seen that, in both panels, there is a strong downward trend in excess returns; in fact, with only one exception, excess returns are monotonically decreasing with increasing CLS ratings, for all tests considered. Statistically, and economically, the results are highly significant, with low CLS firms having positive excess returns, and high CLS firms having slightly negative excess returns compared to a portfolio of firms without PACs. The equal weighted portfolios more evenly straddle the 0% excess return line, which partially explains the seemingly insignificant results for the equal-weighted portfolios in Table I.

Further, the difference in excess returns between the highest CLS quintile and the lowest quintile is highly significant, being approximately 0.75% per month for the value weighted case and 0.90% for the equal weighted case. Also, note that this difference does not typically change based on the model used for risk adjustment; this is a consequence of the risk factor betas for the PAC portfolios being similar to the betas in the non-PAC portfolio for each test (the only noteable exception occurs in the equal weighted Carhart test).

Gibbons, Ross, and Shanken (1989) $F$-statistics reject the null hypothesis that all the $\alpha$’s in each set of portfolios are equal to zero in every instance with $p$-values < 1%. These results support the notion that, among corporations with PACs, firms with relatively
high levels of political activity do a better job of hedging their political risk than firms with low relatively low levels of political activity.

To check for robustness we examine time period subsamples with no change in our results. We also consider sorting into 10 and 100 CLS-based portfolios with similar results. Finally, we examine alternatives to constructing the CLS measure (such as including the number of employees as an independent variable, allowing industries to have their own coefficients of firm size, eliminating industry effects entirely, etc.) with no substantive change to our results.

4.4 A Political Risk Factor Mimicking Portfolio

Up until this point we have argued that the return differential between firms of differing levels of political activity owes to exposure to systematic political risk, though we have not explicitly tested this possibility. To do this we construct a zero-cost factor mimicking portfolio by taking the difference between the equal weighted portfolio of the top 50% of CLS rated firms minus the bottom 50% and refer to it as \( AMI \), or active-minus-inactive. We use equal weighted portfolios as they tend to place relatively more weight on smaller firms for whom we consider PAC activity to be a stronger signal to political risk (the non-economic sociological forces affecting PAC formation and activity are more pronounced for larger firms which enjoy economies of scale in mounting political efforts).

Creating a factor mimicking portfolio to capture the effects of systematic political risk has the advantage of allowing us to abstract away from the complex process that actually generates political risk and capture the net impact of that process on asset returns.

Some of the characteristics of our \( AMI \) factor are summarized in Table III. It can be seen that the \( AMI \) factor is not highly correlated with any of the other factors in the table over the 1981-2002 sample period. Also, the mean of the factor is significantly different which suggests that the factor is \textit{priced} in assets which are significantly sensitive to it.

How does it perform in explaining the results of our difference in excess returns for CLS sorted portfolios? We augment a Fama and French and Carhart test with the \( AMI \) factor and show the results Table II. It can be seen that the factor does not completely
Table III
Factor Sample Correlation Matrix and Summary Statistics (1981 - 2002)

This table contains the correlation matrix between the Fama & French, UMD, and AMI factors. Also shown are summary statistics including the monthly mean of the factor portfolios, the $t$-stat for the null hypothesis that the mean is equal to zero, and the monthly standard deviations.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>t-stat</th>
<th>StdDev</th>
<th>Mkt</th>
<th>SMB</th>
<th>HML</th>
<th>UMD</th>
<th>AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mkt</td>
<td>0.50%</td>
<td>1.76</td>
<td>4.59%</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMB</td>
<td>0.03%</td>
<td>0.15</td>
<td>3.38%</td>
<td>0.16</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HML</td>
<td>0.49%</td>
<td>2.40</td>
<td>3.33%</td>
<td>-0.54</td>
<td>-0.43</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UMD</td>
<td>0.90%</td>
<td>3.35</td>
<td>4.36%</td>
<td>-0.07</td>
<td>0.12</td>
<td>-0.11</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>AMI</td>
<td>-0.47%</td>
<td>-8.10</td>
<td>0.95%</td>
<td>0.23</td>
<td>-0.11</td>
<td>0.11</td>
<td>-0.41</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The evidence outlined above supports the conclusion that the political process injects systematic risk into the marketplace. Further, the evidence supports the conclusion that this risk can be hedged, at least by those that are particularly active in politics as measured by their CLS rating. However, the failure of our political risk factor to
### Table IV
AMI Factor Loadings in CLS Sorted Portfolios (1981 - 2002)

This table contains the AMI factor loadings for Fama and French and Carhart tests augmented with the AMI political risk factor mimicking portfolio on the portfolios described in Table II. Results for value and equal weighted portfolios are reported.

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Fama &amp; French 3-Factor + AMI</th>
<th>Carhart 4-Factor + AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta_{AMI, vw}$</td>
<td>$\beta_{AMI, ew}$</td>
</tr>
<tr>
<td>1</td>
<td>-0.20 (−1.55)</td>
<td>-0.73 ** (−2.35)</td>
</tr>
<tr>
<td>2</td>
<td>-0.36 *** (−2.63)</td>
<td>-0.67 ** (−2.37)</td>
</tr>
<tr>
<td>3</td>
<td>-0.18 (−1.02)</td>
<td>-0.33 (−0.93)</td>
</tr>
<tr>
<td>4</td>
<td>0.29 ** (2.03)</td>
<td>0.10 (0.32)</td>
</tr>
<tr>
<td>5</td>
<td>0.44 *** (2.86)</td>
<td>0.72 *** (3.00)</td>
</tr>
<tr>
<td>5 - 1</td>
<td>0.64 *** (4.44)</td>
<td>1.44 *** (11.60)</td>
</tr>
</tbody>
</table>

explain the $\alpha$’s in the value weighted portfolios in Panel A in Table II, and the fact that there is still a significant $\alpha$ in the high-minus-low CLS equal weighted portfolio in Panel B suggest that our factor is not completely sufficient to explain the pricing anomalies incident to politically active firms.

### 4.5 AMI Performance in Pricing Assets

In this section we test the ability of our political factor to price a wider range of assets. To do this, we construct portfolios based on firm characteristics that have known relationships to asset pricing and run Fama and French and Carhart tests with the additional AMI factor as an independent variable. We create portfolios based on three way sorts; we first sort by size (small or large), book-to-market ratio (high or low), and finally by CLS rating (high, medium, and low). As is common practice for these types of portfolio groupings involving book-to-market ratios, financial firms (SIC codes 6000
Table V

This table contains summary statistics for portfolios that are progressively sorted on market capitalization, book-to-market ratio, and CLS rating where the CLS rating is calculated as the normalized residuals from the following regression:

\[
\ln(\text{PAC disbursements}) = \text{Industry Dummies} + \ln(\text{Size}) + \epsilon
\]

Financial firms (SIC codes 6000 - 6999) are not considered. Included are the average market capitalization, book-to-market ratio, CLS rating, and value and equal weighted monthly excess returns for each portfolio (or returns in excess of the risk free rate). There are an average of 46 firms in each portfolio with a minimum of 36.

Financial firms (SIC codes 6000 - 6999) are not included. Summary statistics for our portfolios can be seen in Table V. Note that average excess returns, or return in excess of the risk free rate, is monotonically decreasing in CLS for each portfolio grouping based on size and book-to-market.

Table VI contain the AMI factor loadings on augmented Fama and French and Carhart tests on the value and equal weighted portfolios described above. The loadings are statistically significant and increase monotonically with the average CLS rating of each portfolio within size and book-to-market groupings. As before, these results indicate that our AMI factor contains information that is useful in pricing assets.

\[23\text{Though not shown, this is also true for risk adjusted returns where risk adjusting is performed with CAPM, Fama and French, and Carhart models.}\]
Table VI
Regression Results for Asset Portfolios (1981 - 2002)

This table contains regression results for portfolios described in Table V. AMI factor loadings are reported each portfolio $i$ as part of augmented Fama & French and Carhart tests:

$$ R_{it} - R_f = \alpha + b(R_{mt} - R_{ft}) + sSMB_t + hHML_t + \beta_{AMI}t + \epsilon_t $$

Both value and equal weighted portfolios are considered. Newey and West (1987) t-stats are in parenthesis with ***, **, and * denoting significance levels of 1%, 5%, and 10%, respectively. There are an average of 46 firms in each portfolio with a minimum of 36.

<table>
<thead>
<tr>
<th>Size</th>
<th>BTM</th>
<th>CLS</th>
<th>Fama &amp; French 3-Factor + AMI</th>
<th>Carhart 4-Factor + AMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\beta_{AMI,vw}$</td>
<td>$\beta_{AMI,ew}$</td>
</tr>
<tr>
<td>Small</td>
<td>Low</td>
<td>Low</td>
<td>−0.40 *</td>
<td>−0.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>0.11</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>0.83 ***</td>
<td>1.03 ***</td>
</tr>
<tr>
<td>Small</td>
<td>High</td>
<td>Low</td>
<td>0.36</td>
<td>0.51 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>1.04 ***</td>
<td>1.08 ***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>2.01 ***</td>
<td>2.23 ***</td>
</tr>
<tr>
<td>Large</td>
<td>Low</td>
<td>Low</td>
<td>−0.35 **</td>
<td>−0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>−0.29</td>
<td>−0.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>0.31 **</td>
<td>0.42 **</td>
</tr>
<tr>
<td>Large</td>
<td>High</td>
<td>Low</td>
<td>0.33 *</td>
<td>0.24 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>0.54 ***</td>
<td>0.55 ***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>0.70 ***</td>
<td>0.97 ***</td>
</tr>
</tbody>
</table>

Despite the AMI factor being useful in pricing assets, and despite the factor being priced in expected asset returns that are sensitive to it (as $E[AMI] \neq 0$), this factor mimicking portfolio does not completely explains the excess returns present in these
portfolios, just as it does not completely explain the excess returns in Table II for value weighted portfolios. If the AMI factor is not included in the tests of these assets, the $\alpha$ for each portfolio is decreasing in the average CLS rating for the portfolio and are significant. The inclusion of the AMI factor eliminates this trend, but has limited success in eliminating the significance of the $\alpha$'s in general. These results are not shown but are available upon request.

While we interpret our results surrounding our construction of a political risk factor as supporting the idea that systematic political risk is present and priced in the market, and that it to some degree orthogonal to common risk factors, it is clear that we do not capture all of this risk. In addition, difference in firm performance may not be due to risk exposure at all, but by a propensity for politically active firms to chronically report positive or negative earnings surprises. We have run tests to examine this possibility and, after controlling for industry and size, found that firms with PACs are more likely than firms without to report negative earnings surprises, particularly through the 1990's. However, this finding works in opposition to the results reported in this study which are that firms with PACs tend to outperform those without, and thus a risk story would appear to dominate. However, much remains to be studied in this regard.

5 Conclusion

We conclude that the return characteristics of politically active firms are different than politically inactive firms. In particular, that the returns of firms that operate affiliated PACs tend to have higher returns than firms that do not. Among firms that operate PACs, those whose PACs spend the most have lower returns than those that spend the least.

It is likely the case that a portion of systematic, aggregate political risk is a component in what we commonly refer to as “industry” risk or other firm characteristic-associated risk. We find that even within groupings based on these indicators, differences between politically active and inactive firms persist, with the difference usually being positive. We speculate that, even within standard portfolio groupings, firms still differ in their levels of exposure to systematic political risk and investors are compensated
accordingly. We also find evidence that, not only is there systematic political risk in the market, but that this risk can be hedged by certain categories of firms.

While we find evidence of systematic political risk, our results are not so conclusive as to preclude other possible explanations to the pricing anomalies we report. In general, however, we favor a risk story over a non-risk or behavioral story for several reasons, including the ability of our political risk factor mimicking portfolio to price assets. Also, the results of Santa-Clara and Valkanov (2003), Cheng (2005), and Ferguson and Witte (2005) and other recent work are consistent with the idea that political risk is priced into the market and do not suggest other mispricings.

Even though it is only a small part of a firm's overall political effort, we also suggest that a firm's PAC activity is a suitable proxy for assessing their level of political risk, in a way that may be superior to other, monetarily larger efforts. On the whole, political involvement on the part of management may be related to non-economic, empire building activity. However, PACs are not chiefly funded through the corporate treasury; the money a corporate PAC uses for political purposes must come from voluntary donations from employees and shareholders. Presumably, then, in order for a management to convince its employees and shareholders to donate non-trivial amounts of money to a firm's PAC, it must successfully make the case that political involvement is in the best interest of the corporation. As a consequence, PAC funding seems more likely to be a response to real economic demands.

We are only beginning to understand empirically the ways in which the political cycle affects asset prices. This study represents the first large-scale exercise of its kind in attempting to document aspects of this risk in terms of examining the differing return characteristics of politically active and inactive firms. We leave many interesting questions open in this study and much to future research.
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