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Ghosh, Saibal

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# **Price jitters: Do markets punish political stocks?**

**Saibal Ghosh<sup>1</sup>**

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<sup>1</sup>The views expressed and the approach pursued in the paper reflects the personal opinion of the author. Email: sai\_ghosh@ hotmail.com

# Price jitters: Do markets punish political stocks?

**Abstract:** The paper examines the impact of firms exhibiting political connection on their stock market performance. The results appear to suggest that the performance of ‘political’ stocks has been significantly weak. This is apparent in simple univariate tests that compare the political stocks across various industry categories or even comparisons of political versus apolitical stocks. The regression analysis indicates that the returns on political stocks are on average, over 20% lower as compared to stocks without any political association.

*JEL classification:* G 32; P 52

*Key words:* political connection; buy-and-hold abnormal returns; India

## I. Introduction

In recent years, the issue of interface between business and politics has gained significant currency. Several recent studies have documented the prevalence of connections between politicians and firms around the world (Fisman, 2001; Johnson and Mitton, 2003; Sapienza, 2004; Faccio, 2010). These studies veer around the view that political connections grant firms certain privileges, which makes investors factor these considerations into account while making decisions on stock prices. However, an aspect not factored into account has been whether such process can work in the reverse. More specifically, if a stock is perceived has exhibiting strong political links – defined as those with direct political involvement or are dependent upon a government license – then investors can end up avoiding such ‘political’ stocks so much so that their prices actually decline. This can occur especially when the market views such nexus between business and politics as part of a wider economic malaise of misgovernance and corruption that imposes significant costs on the economy (See, for example, Fan *et al.*, 2007).

The present paper examines this aspect, using India as a case study. In particular, we investigate three questions. First, we explore how ‘political’ stocks have performed *vis-a-vis* the overall market over varying time frames. Second, we look into the performance of such ‘political’ stocks as compared to stocks perceived as apolitical. And finally, we employ a regression framework to explore the set of factors influencing the returns on such stocks.

India offers a unique laboratory among emerging markets to examine this issue. First, the country is one of the leading emerging economies, where a vibrant media and civil society coupled with a strong democracy play an important role to inform the market of any financial irregularities. These often help shape public opinion and can play an important role in the elections. Second, the economy has a large corporate sector with over 5,000 companies being listed on the Bombay Stock Exchange (BSE).<sup>2</sup> Such a large corporate sector offers opportunities for both politicians and business to forge nexus to achieve

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<sup>2</sup> Established in 1875, Bombay Stock Exchange (BSE) is the oldest stock exchange in India with over 5,000 listed companies and among the top ten global exchanges in terms of market capitalization ([www.bseindia.com/about/introbse.asp](http://www.bseindia.com/about/introbse.asp))

mutually beneficial gains. And finally, India has a long history of a reliable corporate database, which can be exploited for purposes of analysis. The findings could be representative of those obtaining in other emerging markets.

The misgovernance in public dealings has not been without its echo in international and local media. The *Economist*, in an article in December 2010, began with the following observation “In India, not only the economy is booming; so, it appears, is graft”. More recently, the *Financial Times* noted the following:

Investors in India’s stock markets are starting to avoid companies with strong political connections after corruption scandals.. India is one of the most heavily regulated economies in the world, making political connections important in securing government contracts. But the share price data comes as opposition politicians continue to complain about a “malignant nexus” between business leaders and politicians. In previous years, leading companies with strong political connections – some of which have politicians or their relatives on their boards – had outperformed the index (*Financial Times*, June 21, 2011).

To briefly anticipate the findings, the results suggest that ‘political’ stocks have underperformed the market index by over 40% during the financial year. The regression results, based on a sample of BSE-listed entities, indicates that the returns on political stocks are on average, over 20% lower as compared to stocks without any political association.

The remainder of the paper proceeds as follows. We briefly review the relevant literature (Section 2), followed by the data and empirical strategy (Section 3) and results (Section 4) before making certain concluding remarks (Section 5).

## II. Literature

The literature on the role of economic policies to influence electoral outcomes can be traced to the work of Nordhaus (1975). The subsequent literature contrasted between the development and political view of public ownership. According to the former, the importance of state intervention was important to overcome market failures, especially in cases where social benefits make certain otherwise unprofitable projects desirable for the society as a whole. In contrast, the ‘political’ view argues that politicians are primarily focused on achieving their own personal goals rather than maximizing social welfare (Shleifer and Vishny, 1994). Evidence on the political view of state ownership is primarily of indirect nature and based on lower inefficiencies of state-owned enterprises.

A recent strand of literature attempts to rectify this drawback by providing more direct evidence on the interlinkage between political motivation and business behavior, not only for state-owned enterprises, but also for publicly-traded companies. Country-specific studies point to several benefits of political connections, such as preferential access to credit (Johnson and Mitton, 2003; Khwaja and Mian, 2005), preferential interest rates to government-owned banks (Sapienza, 2004), higher leverage ratio (Faccio, 2003) or even employment benefits (Bertrand *et al.*, 2007). This is consistent with prior studies

which report a strong nexus between politics and business. Fisman (2001) for instance, finds that politically well-connected businesses enjoyed greater value. Agarwal and Knoeber (2001) shows that US firms with strong political interest appoint directors whose political background enables them to deal with government bureaucrats. Cross-country studies suggest that politically connected firms are more likely to be bailed out in situations of financial distress (Faccio *et al.*, 2006) or alternately, the performance of connected firms improves subsequently to the establishment of a connection.

In the Indian context, early studies focused on the issue of political budget cycles and found evidence to suggest an increase in the growth of real government expenses (and therefore, an increase in budget deficits) during the time of elections (Karnik, 1990; Sen and Vaidya, 1996). Using information on 14 major Indian states for 1960-96, subsequent analysis by Khemani (2004) found evidence to support political cycles in public policy. Arulampalam *et al.* (2009) also finds that Indian states ruled by the same party that is at the helm at the Federal government receive more grants. A common thread running through these studies is their emphasis on the response of Federal government finances to the Federal elections.

In perhaps the only study exploring the interlinkage between bank lending and political cycles in India, Cole (2009) demonstrated that the growth rate of agricultural credit provided by state-owned banks is 5-10 percentage points higher in election years than in years after an election. None of these studies however, examined the impact of political connections on the stock performance of publicly traded firms and this is central to the empirical enquiry of the paper.

### **III. Data and empirics**

#### *III.1 The data*

Given that the issue of ‘political’ stocks is of recent origin, our study covers the period 2010-11. We rely on three sets of data. First, using newspaper reports and internet sources, we identify the set of ‘political’ stocks. This provides us with a total of 22 such stocks spanning across infrastructure, energy and real estate sectors (Table 1). From *Reuters*, we obtain daily data on the closing price of these stocks along with the BSE index for the period 2010 (April) to 2011 (March). In cases where the listing is of recent origin, the data is available for the shorter time span. Next, we select the list of BSE-100 companies<sup>3</sup> and within it, focus on manufacturing companies alone. This provides us with a total of 77

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<sup>3</sup> BSE-100 denotes the list of 100 companies selected on the basis of specific criterion such as trading frequency (the company should have been traded on 95% of the trading days during the last three months), final rank (the company should figure in the top 200 companies listed by final rank, arrived at by assigning a weight of 75% on the basis of three-month average full market capitalization and a 25% weightage to the liquidity rank based on three-month average daily turnover and three-month average impact cost), besides industry representation and acceptable track record. As at end 2010, these companies accounted for over 70% of the market capitalization of all BSE-listed companies.

companies, which includes 11 companies with political connections.<sup>4</sup> For these companies, we obtain data for five quarters beginning 2010 (March) to 2011 (March) on reported variables, including their revenue, profit after tax, promoter's share (from the BSE website) and a measure of leverage: long-term debt-to-equity ratio (from the *Reuters* screen). Finally, using newspaper reports and internet sources, we identify the probable date when the political connection of the company became public knowledge. Unlike previous studies (Faccio and Parsley, 2009), this process was much more challenging, since in many cases, although the investigations into the alleged wrong-doings by these companies began much earlier, the actual names of the companies were reported in the media much later. Likewise, in other instances, the political connections became manifest only at a later date once investors began to investigate the consistent underperformance of the company stocks. This varied across companies, from the beginning of 2010 in certain cases to towards the end of the year in other instances. As a result, it is difficult to precisely identify the event and fix a time frame around the event window.

**Table 1: List of firms with political connections**

<b>Panel A: Industry</b>	N.firms	Percent to total	<b>Panel B: BSE sample firms</b>	N.firms	Percent to total
No. of firms with political connections	21	100	No. of firms with political connections	10	100
<i>of which:</i>			<i>of which</i>		
Energy	3	14.3	Energy	3	30
Infrastructure	5	23.8	Infrastructure	2	20
Real estate	8	38.1	Real estate	4	40
Telecom	2	9.5	Telecom	1	10
Others	3	14.3	Memo: Total firms	77	

### III.2 The empirics

We proceed in three steps in the empirical section. First, and as is commonplace in the literature, we construct the buy and hold abnormal returns (BHAR) of all the companies.<sup>5</sup> This includes the 77 BSE-listed sample companies plus the additional 11 'political' stocks, which are not part of the BSE sample. We compare the performance of the 'political' stocks *vis-a-vis* the market index (proxied by the BSE Sensex) over varied trading days. Since we are studying events that played out over a period of time and were not one-shot events, the event window in the study is quite different to those employed in previous research (See, for instance, Gupta and Goldar, 2005). Second, we compare the BHAR of the 'political' stocks with the apolitical stocks over varied trading days, as earlier. If the performance of 'political'

<sup>4</sup> We delete 19 banks and finance companies, and 4 companies dealing with trading, hotel, travel and media. Data on one company, which has recently been listed on the stock exchange and is part of the 77 companies, is not available for the entire time period. Therefore, our effective sample becomes 76 companies.

<sup>5</sup> Following Barber and Lyon (1997), for stock  $j$  at time  $t$ , this is computed as  $BHAR_{j(a-b)} = \prod_{t=a}^b (1 + R_{j,t}) - \prod_{t=a}^b (1 + MR_t)$  where ER = market-adjusted returns, R=the firm's daily stock price returns; MR=market's daily index returns (captured by the BSE Sensex) and  $t$  (a to b) = relevant time frame, beginning with the closing price on the first working day of 2010.

stocks is weaker as compared to the apolitical ones, one would expect the returns on such stocks to be relatively lower as compared to the non-political ones. Finally, we run a cross-section regression to ascertain the impact of political connection on firm performance.

#### IV. Results and discussion

It needs to be borne in mind that unlike several other studies of this genre (Fisman, 2001; Faccio, 2009), the focus is not on a single event, but a set of events with politics-business interface as the common thread that panned out over a period of time. As a result, the event window in the study is much wider than those considered in previous research. Table 1 shows the BHAR of the ‘political’ stocks over several time frames classified according to peer groups.

**Table 2. BHAR of political stocks over different windows**

Window	Energy	Infrastructure	Real estate	Telecom	Others	All stocks
1 – 10 days	0.015 (0.057)	0.007 (0.109)	0.021 (0.031)	0.053 (0.006)	-0.018 (0.064)	0.014 (0.062)
1 - 30 days	-0.013 (0.116)	-0.0002 (0.081)	-0.025 (0.059)	-0.022 (0.058)	0.026 (0.094)	-0.009 (0.073)
1 – 60 days	-0.034 (0.156)	-0.057 (0.089)	-0.105 (0.077)	-0.087 (0.065)	0.031 (0.157)	-0.062 (0.105)
1 – 90 days	-0.053 (0.252)	-0.073 (0.142)	-0.165 (0.109)	-0.219 (0.051)	0.129 (0.115)	-0.091 (0.166)
1 – 180 days	-0.078 (0.501)	-0.214 (0.179)	-0.311 (0.353)	-0.209 (0.084)	0.425 (0.275)	-0.141 (0.381)
0 - 1 Year	-0.101 (0.501)	-0.337 (0.172)	-0.435 (0.377)	-0.262 (0.117)	0.823 (0.757)	-0.168 (0.569)
Greater than 1 Year	-0.141 (0.453)	-0.439 (0.125)	-0.557 (0.300)	-0.400 (0.052)	0.451 (0.269)	-0.310 (0.428)
Financial Year*	-0.227 (0.199)	-0.535 (0.067)	-0.609 (0.242)	-0.484 (0.025)	-0.018 (0.246)	-0.441 (0.281)
Number of firms	3	5	8	2	3	21

\*April 2010 (first working day) – March 2011 (last working day)

The table shows that, in most cases, although the returns are positive over a smaller time frame (1-10 days), they are typically negative over larger periods. By way of example, for the financial year 2010-11 as a whole, returns on ‘political’ real estate stocks were lower by roughly 61% as compared to the market. As compared to this, investors holding all these ‘political’ stocks would have obtained returns that were about 44% lower as compared to the market. This lends credence to the belief that investors tend to shun stocks that exhibit political connections with wider societal ramifications.

Next, as mentioned earlier, we explore the differences in BHAR of ‘political’ *versus* apolitical stocks of the sample BSE companies, classified according to various characteristics (Table 3). The evidence appears to suggest that companies without political connections fare much better as compared to their political counterparts (Table 3, Panel A). By way of example, the BHAR of political companies was -31.5% as compared to -3.6% in case of non-political ones, indicating that as compared to the market, the returns on ‘political’ stocks were nearly 32% lower. The difference was observed to be statistically significant at the 0.01 level. No such perceptible difference is discernible across ownership groups (Table 3, Panel B), although certain differences, primarily in respect of infrastructure stocks *vis-a-vis* other industry groups were in evidence (Table 3, Panel C).<sup>6</sup>

<sup>6</sup> Instead of reporting the t-statistics across all industry groups, in order to conserve space, we report these statistics across industry groups, which contain the ‘political’ stocks.

**Table 3. Differences in BHAR of sample BSE firms across various characteristics**

Firm characteristics	N.Obs	Mean (SD)
<b>Panel A: By political connection</b>		
Political	11	-0.315 (0.170)
Apolitical	65	-0.036 (0.238)
<i>t-test of difference</i>	4.725***	
<b>Panel B: By ownership</b>		
Group	42	-0.057 (0.262)
Indian private	18	-0.102 (0.266)
Foreign private	2	0.068 (0.339)
State-owned	14	-0.024 (0.179)
<i>t-test of difference</i>		
Group vs. Indian private	0.602	
Group vs. Foreign private	0.513	
Group vs. State-owned	1.002	
Indian private vs. Foreign private	0.685	
Indian private vs. State-owned	0.227	
Foreign private vs. State-owned	0.767	
<b>Panel C: By industry group</b>		
Capital goods	16	0.0005 (0.284)
Chemicals and petroleum	3	-0.042 (0.221)
Diversified	7	0.029 (0.173)
Energy	8	-0.188 (0.116)
Fast moving consumer goods	3	-0.091 (0.411)
Healthcare	8	0.052 (0.146)
Information technology (IT)	6	-0.009 (0.406)
Infrastructure	2	-0.395 (0.028)
Metals, metal products and mining	6	-0.217 (0.216)
Oil & gas	7	0.032 (0.095)
Real estate	5	-0.344 (0.209)
Textiles	2	-0.132 (0.051)
Telecom	4	-0.149 (0.225)
<i>t-test of difference</i>		
Energy vs. IT	1.044	
Energy vs. Infrastructure	4.544***	
Energy vs. Real estate	1.531	
Energy vs. Telecom	0.323	
IT vs. Infrastructure	2.311**	
IT vs. Real estate	1.759	
IT vs. Telecom	0.697	
Infrastructure vs. Real estate	0.527	
Infrastructure vs. Telecom	2.156**	
Real estate vs. Telecom	1.335	

\*\*\*, \*\* and \* denote statistical significance at 1, 5 and 10%, respectively

Finally, we report the cross-sectional results from regressing two measures of firm performance - the one year BHAR and the one-year change in profit-after tax (PAT) - to ascertain the impact of political connection on firm performance. The set of independent variables include, size (proxied by log revenues), leverage (proxied by long-term debt-to-equity ratio) as well as dummies for firm ownership (state-owned firms is the control category) and industry (diversified firms is the control category). The independent variables of interest is *Political*, a dummy that equals one if a firm is one with political connection, else zero. If political proximity causes investors to avoid such companies (thereby lowering their BHAR), the



coefficient on this variable would be negative. Additionally, if lack of interest in such stocks is also reflected in the company's profits, the coefficient on *Political* with PAT as dependent variable would be negative as well.

The results are reported in Table 4. Among the control variables, bigger firms are observed to have larger movements in the dependent variable and leverage appears to dampen profits. Our variable of interest is *Political*. With BHAR as dependent variable, the coefficient on *Political* is negative and statistically significant; no such response is in evidence when the dependent variable is PAT. What is would suggest that investors typically 'punish' political stocks in terms of their market performance, the long-term impact on profits, is limited. In terms of magnitude, the BHAR on firms with political connections is on average 21% lower as compared to apolitical firms. Summing up, the results indicate that the performance of firms with political connections has been significantly lower as compared to the market, judged in terms of their stock market performance.

Table 4: Cross-sectional regression of firm performance

Variable	Dep var = Change in PAT	Dep var = One-year BHAR
<b>Political</b>	<b>-1.539 (1.613)</b>	<b>-0.209 (0.083)***</b>
Log Revenue	0.598 (0.308)*	0.058 (0.031)*
Long-term debt/Equity	-0.540 (0.312)*	-0.022 (0.068)
Promoter's share	1.110 (1.439)	0.017 (0.181)
Ownership dummies	YES	YES
Industry dummies	YES	YES
Constant	-1.887 (2.088)	-0.274 (0.324)
<i>Diagnostics</i>		
N.Obs; firms	76;	76
R-squared	0.437	0.336

Robust standard errors within parentheses

\*\*\*, \*\* and \* denote statistical significance at 1, 5 and 10% respectively

## V. Conclusions

The paper examines the impact of 'political' stocks on their performance, using data for the period March 2010 – April 2011. The results appear to suggest that the performance of 'political' stocks have been much weaker. This is apparent in simple univariate tests that compares the political stocks across various industry categories and even in comparisons of political versus apolitical stocks. The subsequent regression results, based on a sample of BSE-listed entities indicates that the returns on political stocks are on average, over 20% lower as compared to stocks without any political association. While there is abundant evidence in the literature which highlights the political connections that firms forge to leverage benefits, the present paper points to a contrary example: how politically connected stocks can end up with lower returns.

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