

Democratic Transitions and Implicit Power: An Econometric Approach

Gokce Goktepe (NYU)

Shanker Satyanath (NYU)

Abstract

Recent works of political economy have emphasized the importance of distinguishing between transfers of explicit and implicit power over economic decision making in democratic transitions. Scholars have so far provided interesting anecdotal evidence supporting their claims of potential divergence between transfers of explicit and implicit power. This raises the question of whether it is possible to econometrically identify when a transfer of explicit power has not also been accompanied by a transfer of implicit power. This paper offers a straightforward and easily replicable approach to addressing this question using the tools of financial econometrics. We apply this approach here to a major country where considerable uncertainty remains over the military's implicit role in economic decision making long after an explicit transfer of power to elected leaders, namely Turkey. Our findings indicate a significant gap between the explicit and implicit aspects of Turkey's democratic transition, adding support to scholars' claims about the importance of distinguishing between these aspects of transitions.

1. Introduction-

When has a democratic transition truly occurred? Standard measures of democracy consider the presence of free elections and/or turnover in government as adequate to identify the emergence of a democracy. However, these are only explicit aspects of a democratic transition. Several scholars, ranging from O'Donnell (1994) to Acemoglu and Robinson (2008), have expressed concerns that countries that have made the transition to free elections and turnover in office may still be implicitly undemocratic in that elements of the previous authoritarian regime continue to exercise substantial behind the scenes (implicit) influence over economic decision making.¹ Aside from purely normative concerns the distinction between transfers of explicit and implicit power is of special importance in deliberations about accession to the European Union, where behind the scenes military involvement in economic decision making is seen as weakening the case for allowing accession. The distinction between explicit and implicit transfers of power is thus of significance to academics as well as policy makers.

The scholars cited above have provided interesting anecdotal evidence supporting their claims of potential divergence between transfers of explicit and implicit power. This raises the question of whether it is possible to econometrically identify when the military (which is often the preceding regime) has retained substantial behind the scenes power over economic decision making even after the transition to free elections and turnover in office. To our knowledge no systematic econometric work has been done on this question, and debates about implicit power in the EU context have been notoriously vague about listing specific conditions that would clearly identify the retention of implicit power by the military. This paper offers a straightforward and easily replicable approach to addressing this question. Our approach is to study abnormalities in stock market responses of firms connected to the

¹ See Levitsky and Way (2002) for concerns with a similar flavor. Levitsky and Way provide numerous other citations of related qualitative literature that we omit here for reasons of space.

military (in non-defense industries) to exogenous changes in the probability of survival of the country's democratically elected chief executive. (The approach can of course be easily extended to non-military elements of the preceding authoritarian regime.) Our logic is as follows.

Stock market investors have powerful incentives to find out if the military continues to retain significant behind the scenes influence over economic policy making following an explicit democratic transition. Consider an environment where a transfer of explicit power has already occurred. Under conditions where the electoral opposition has a different set of policy preferences from the elected incumbent (which is often the case) stocks of firms should be vulnerable to concerns over whether the incumbent will retain office or be replaced by the opposition. However, if the military has ongoing implicit influence over economic policy making irrespective of which party is elected to office, stocks of firms that are connected to the military would be less vulnerable to such concerns. Military connected stocks can then serve as a refuge or a relative safe haven for investors in times of high uncertainty over government turnover. We can thus gain an idea of whether or not there is a shortfall in the transfer of implicit power based on whether or not military connected shares serve as a relative safe haven for stock market investors in times of high uncertainty over government turnover. We build on this logic to develop the following empirical criteria for identifying when a country has fallen short in terms of a transfer of implicit power.

Financial econometrics provides us with the tools to identify when share movements are abnormal. If the military plays no special role in economic decision making, publically traded shares of military connected firms should not display abnormally superior returns (changes in share price) to those of firms that are unconnected to the military in times of high uncertainty over government survival. Subject to controlling for alternative explanations, such abnormally superior returns are indicative of military connected shares offering

investors a relative safe haven in uncertain times because the military is expected to influence economic policies irrespective of whether the government falls or survives. Subject to surmounting numerous robustness checks we interpret these abnormal returns as indicating that military connections offer a relative safe haven from uncertainty related to government survival, which is indicative of an incomplete transfer of implicit power.

The key to econometric identification in such a study is to focus on the analysis of shocks to the survival probability of a government that are genuinely exogenous. The exogenous shocks that we study in this paper are those to the physical health of the democratically elected chief executive.² (We suggest some alternative identification strategies in the conclusion of the paper.) The causal logic is that a major shock to the health of a chief executive affects the probability of his continuation in office and raises uncertainty about the future direction of policy. We examine if the shares of firms connected to the military display abnormal positive returns in the face of this political uncertainty.

We apply this approach here to a major country where considerable uncertainty remains over the military's continued implicit role in economic decision making long after an apparent democratic transition, namely Turkey. While the Turkish constitution of 1982 provides the military with powers in the security realm via membership in the National Security Council (NSC) alongside elected officials and also provides it a special role as a defender of secularism, it offers the military no formal role in economic decision making. Neither objective (such as REG) nor subjective (such as Polity) measures of democracy see the military-related provisions in Turkey's constitution or its role in the NSC as obstacles to giving the country extremely high democracy scores since the election of 1983.

However, an exclusive focus on the usual explicit variables that are used to identify a democratic transition may mask the subtle ways in which the Turkish military can continue to

² Our identification strategy thus resembles that of Fisman (2001), who uses health shocks to estimate the value of political connections to the incumbent.

influence economic decision making. The EU, for instance, raises the possibility that “the armed forces in Turkey continue to exercise influence through a series of informal mechanisms” (Commission of the European Communities 2004, 23). The leading concern is that membership on the National Security Council provides the military with influence over decision making in non-military realms, by virtue of the somewhat elastic definition of security in the constitution such that “it could, if necessary be interpreted as covering almost every policy area” (Commission of the European Communities 2004, 23). One indication that the military may define its security mandate in exceptionally broad terms comes from the fact that military members of the NSC have felt free to influence debate on a wide assortment of political and social issues via press statements and public speeches (Commission of the European Communities 2004, 23). This makes Turkey an excellent case for econometrically examining if there is a shortfall in the transfer of implicit power following a country’s explicit democratic transition.

In our specific application we study the impact on stock market returns of serious ailments affecting the democratically elected Turkish Prime Minister Bulent Ecevit in 2001-2002. We study this period because it provides us with all the elements that are essential for an assessment of whether there is a shortfall in the transfer of implicit power over economic decision making; the presence of a) exogenous shocks to the probability of government survival, b) explicit democracy, c) listed non-defense firms that are linked to the military, and d) significant policy uncertainty surrounding potential government turnover.

On the first of these points, the elderly Ecevit’s health travails provide us with the exogenous shocks that are required for identification. On the second, as mentioned above, commonly used measures indicate that this is a period in which Turkey was an explicit democracy with free elections and turnover of chief executives in office. On the third, this is also a period in which the military and its business partners had a controlling interest in firms

across a wide range of non-defense industries. (Details are provided later in the paper.) On the fourth, Ecevit's potential departure raised the possibility of major movement from the policy-making status quo. Ecevit was a staunch secularist, like the military establishment. Despite being beyond suspicion of cronyism himself, Ecevit was reluctant to crack down on the prevalent absence of transparency in business-government relations. Ecevit was also considered to be leftist in orientation and as such had no serious objection to state involvement in business. It was widely expected that if Ecevit was unable to continue in office, his coalition government would collapse and there would be a fresh election.³ The election offered two most likely outcomes, both of which involved access to power by groups who were outsiders to the traditional way of conducting political business.

One possibility was that the Ecevit government would be replaced by one of the AK Party, which was already in the process of formation prior to Ecevit's first health shock.⁴ The AK Party's core support base did not include the big business and state-connected actors who constituted the traditional elite; its core support was heavily weighted towards medium and small businesses in Anatolia (Onis 2006, 211). The AK Party also emphasized the priority it placed on greater transparency in business-government relations, which was a potential source of concern to insider groups (Onis 2006, 207). (For instance, this lay directly counter to the long standing tradition of non-transparency in military accounts.) Finally, the AK Party by virtue of its moderate Islamic orientation had no particular affinity for the rigorously secular character of the military (i.e. no affinity which may cause it to favor military-linked firms).

The second possibility which emerged briefly between late May and August 2001 was that the Ecevit government would be replaced by one led by Kemal Dervis, Minister of State

³ Since Ecevit's party had no second line of leadership, the most likely outcome of his incapacitation was the collapse of his party and coalition government followed by fresh elections.

⁴ While the party was formally inaugurated in August 2001, organization of the party began in June 2001 (White 2008, 374).

for the Economy. Dervis was a former World Bank official who was brought in to rescue Turkey from its fiscal crisis; he briefly dabbled with the idea of entering electoral politics between the above dates. Dervis was a quintessential technocrat who embraced the transparency agenda of the international financial institutions and endorsed a substantial change from traditional modes of clientelistic policy making. Shocks to Ecevit's health thus raised the possibility of a significant reorientation of economic policy influence away from current insiders (including the military) to outsiders. Given that Turkey was in the midst of a massive effort to join the EU, and given that the military hierarchy included a strong pro-EU component, a military coup was not considered a likely option to alleviate this concern.⁵

In this context our decision rules for identifying the presence or absence of a shortfall in the transfer of implicit power in Turkey are based on the following possible scenarios:

- 1) Where the military has not retained implicit power over economic decision making, military connections should not offer a relative safe haven from economic policy uncertainty related to turnover in office. If military connected shares move normally in times of such uncertainty (as captured by the financial concept of Cumulative Abnormal Return which we describe later in the paper) or if returns for these shares are abnormally negative, this indicates that investors are not treating military connections as a safe haven in the face of uncertainty over government turnover. Investor behavior then indicates that the military's presence on the National Security Council does not give the military any special ability to influence economic policy making by the succeeding government in favor of military connected firms, which we interpret as consistent with the military having relinquished implicit power over economic decision making.

⁵ While there was a hard-line faction led by General Kivrikoglu which favored a coup, this faction was opposed by moderate factions led by General Buyukanit. The combination of a divided military and EU accession pressures rendered a coup a low probability event in 2001-2002.

- 2) In sharp contrast if a) military connected stocks display significant positive abnormal returns in times of uncertainty over government turnover, and b) these abnormal returns are significantly higher than those of stocks with other connections even after including controls for the economic quality of firms, this indicates that military connected stocks are an especially attractive investment in times of uncertainty over government turnover. Subject to ruling out alternative explanations the only plausible reason why military connected stocks would become especially attractive under such conditions is that the military's presence on the National Security Council gives it the power to constrain the succeeding government from making decisions that could adversely affect military connected firms. In other words investor behavior indicates that military connections offer a relative safe haven from the policy uncertainty associated with government turnover. We interpret this as indicating a shortfall in the transfer of implicit power over economic decision making.
- 3) If the data is neither consistent with scenario 1 or scenario 2, we interpret the evidence as being ambiguous.

Our findings are strongly consistent with scenario 2. The results are robust to the addition of a large number of controls as well as a matching exercise aimed at addressing identification concerns. Our findings thus suggest a significant shortfall in the transfer of implicit power over economic decision making in Turkey.

To our knowledge this paper is the first to econometrically capture the presence of a gap between the transfer of explicit and implicit power over economic decision making.⁶ Although our goals are different, our paper relates to the literature on the value of political connections. Fisman (2001) quantifies the value of firms' political connections to President

⁶ Bernhard and Leblang (2006) apply the tools of financial econometrics to address other issues (primarily in the realm of international political economy).

Suharto in Indonesia. Johnson and Mitton (2001) look at firms' political connections to the Malaysian Prime Minister at the time of the Asian financial crisis, and identify the beneficiaries of capital controls. Ferguson and Voth (2008) analyze the value of political connections to the Nazi leadership in Germany. Faccio (2006) and Faccio, McConnell, and Masulis (2006) extend this approach to the cross country realm. As mentioned, our paper differs in its goals from the above literature. Our aim is not to estimate the value of connections, but rather to infer the implicit influence of authoritarian forces on economic decision making following transfers of explicit power to elected officials. We are thus interested in behind the scenes influences on economic decision making rather than in clearly observable incumbents.

This paper also builds on a small qualitative literature on Turkish political economy looking at the relationship between the Turkish state, the Turkish military and private capital. Parla (1974, 1998) and Akca (2006) assess the role of the Turkish military in the economic arena, while Demir (2005) studies its critical role in the economic liberalization era of the Turkish economy. Bugra (2004) studies state-business relations in modern Turkey illuminating the historical roots of the role of the military in the formation of private capital in the Turkish Republic. This paper advances the above literature by systematically applying the tools of financial econometrics.⁷

The plan of the paper is as follows. In Section 2, we present some background information on Turkey's explicit democratic transition. In Section 3 we describe the political uncertainty surrounding Prime Minister Ecevit's health. In Section 4 we describe the data used in the paper. In Section 5 we discuss our methodology. Section 6 contains our results and Section 7 concludes.

⁷ Other works on Turkish political economy that are of interest include Onis and Webb, 1994 and Krueger and Turan, 1993.

2. Background – Turkey’s explicit democratic transition

Following the proclamation of a republic in 1923, Turkey experienced one party rule under the Republican People’s Party (RPP) until 1945. The principle of secularism was installed as a fundamental aspect of the country’s constitution. Massive investments were also made in the state sector. In 1946 the country held its first multiparty election (under a parliamentary system); the election was held with the proviso that the military was constitutionally charged with protecting the secular republican character of the country. In 1950 the Democrat Party replaced the RPP in office and ruled until 1960 when it was displaced by a military coup. Following the coup, in 1961, parliament created the Armed Forces Trust and Pension Fund (OYAK) which purchased shares over time in several firms that were listed on the Istanbul Stock Exchange. Its sister firm TKGSV (Foundation for Strengthening Armed Forces) also made investments in firms. OYAK additionally formed a business partnership with the Sabanci group which was closely tied to the military. The Sabanci group in turn gained controlling interests in several firms. Overall, the above web of relationships resulted in seventeen listed firms that were connected to the military. The industries spanned automobiles, banking, construction, chemicals, equity funds, food, insurance, and technology. (So there is little concern that we are picking up the effect of the military connections being present exclusively in defense related industries.) All these industries also included non-military connected firms.

The 1960s and 1970s were decades in which governments were dominated either by the center left (RPP) or center right (Justice Party). The last occasion when Turkey had a military led government was in the period 1980-83. In 1983 the center-right Motherland Party won the general election. This election marks the turning point from which leading measures of democracy begin to code Turkey as a democracy. In 1987 Turkey applied for

full membership in the European Union, effectively reducing the viability of military coups as a course of action from thereon (given the centrality of democracy to EU accession). Since 1987 explicit military interventions into politics have been limited to its special role as the defender of secularism; with one exception, involving the violation of secularism, free elections have determined the identity of governments.⁸ One could thus reasonably assert that, apart from the secular quirk of Turkey's constitution, Turkey made a transition to explicit democracy in the 1980s. The interesting question then is, is there a significant difference between the explicit and implicit levels of democracy in Turkey? This is what we seek to examine by studying stock market responses to health shocks to Prime Minister Bulent Ecevit in 2001-2002. Before embarking on this exercise we first provide some background on the nature of political uncertainty surrounding these health shocks.

3) Political uncertainty surrounding health shocks to Prime Minister Ecevit-

Prior to serving as the Prime Minister of Turkey as leader of the Democrat Left Party, Bulent Ecevit was a long time leader of the RPP. He served as the Minister of Labor from 1961-1965. Subsequently he was appointed the General Secretary of the RPP in 1966 and became the leader of the RPP in 1972, serving as Prime Minister on several occasions. As RPP leader Ecevit upheld a platform emphasizing social justice, social security financed by taxation of big capital, state directed investment over private investment, and limits on foreign participation in the Turkish economy (Tachou 1991, 107-112). In response to excessive clientelism in the RPP, Ecevit left the RPP to form the Democrat Left Party (DLP) in the mid 1980s. As leader of the DLP he continued to pursue a center-left platform, incorporating a harsh critique of the free-market economy and cronyism. Ecevit's leftist ideology began to soften in the early 1990s as he began to accept some measures aimed at liberalizing the economy (Tachou 2002, 121). He also revealed openness to negotiating with

⁸ In 1997 the military forced an excessively Islamist Prime Minister to step down.

the IMF over structural adjustment programs in the wake of major currency crises (the last of which was in February 2001). However, he was broadly considered to be supportive of state enterprise (Tachou 2002, 117-118) and was a staunch defender of secularism to the end of his political life (Tachou 2002, 120-121).

In the 1999 elections the DLP won the plurality of the vote and seventy three year old Ecevit came to lead a new coalition government. Ecevit was known to be in fragile health at the time. The Istanbul Stock Market was roiled on three occasions by concerns about Ecevit's health and his ability to continue in office. On July 6, 2001 rumors circulated that Ecevit was sick and may have passed away and the ISE 100 Index dropped by 9.01%. On May 17, 2002 Ecevit was hospitalized and the stock market fell by 5.43%. On June 26, 2002 Ecevit was once again hospitalized and the market fell again by 5.14%. Ecevit eventually left office (without any further health shock) in November 2002.

The shocks to Ecevit's health had such adverse effects on the market because he was a known quantity. His potential departure was a source of concern to the market because it raised the prospect of a government that was largely composed of outsiders, who could potentially diverge from traditional and well known modes of policy making (as described above). Ecevit's health shocks thus serve as useful events to exogenously capture periods of high uncertainty about the likely future direction of policy.

4. Data and Sample-

The main coding exercise is to identify the political connections of enterprises that are traded on the Istanbul Stock Exchange. Military linked firms in Turkey are a) those in which OYAK (the military pension fund mentioned earlier) owns a majority share, b) firms in which OYAK and/or its sister company TSKGV controls the firm along with a partner firm, and c) firms controlled by the Sabanci group which is closely tied to OYAK. Non-military connected state economic enterprises are those firms that were established in the country's

statist development period in 1930-1950 and its five year planning period in the 1960s and 1970s and subsequently created subsidiaries.⁹ In addition to the above we code firms that are linked to the opposition.¹⁰ Remaining firms are placed in a residual category labeled as “other connections,” meaning that they are not connected to the military, are not state enterprises, and are not connected to the opposition, but are connected to other politicians. (In the Turkish context it is understood that all firms of reasonable size need to cultivate relationships with politicians, so our sample does not include an unconnected category.) Note that we do not have a variable for crony links to Prime Minister Ecevit, because he was widely considered to be an honest individual (Tachou 2002, 114). We also do not have a variable for crony links to Dervis for similar reasons.

We also experimented with various ways of narrowing the other connections category, for instance by separating out connections to prominent politicians who were part of the incumbent government (such as Mesut Yilmaz). The results were similar for the other connections and the incumbent categories and the results for other connections were robust. Since the results did not give us a basis for separating these incumbent connections from the other connections category we only report results for the other connections variable constructed as described in the previous paragraph.

Connections are identified from; (i) the “share holder” and/or “board of directors” information disclosed at the ISE, (ii) percentage public/private/foreign shares for top 1000 biggest firms disseminated by Istanbul Industrial Chamber (ISO), (iii) similar ownership information disclosed at the Privatization Administration (PA) for firms to be privatized in which the state has stakes, (iv) work on Turkish political economy cited earlier in the paper,

⁹ OYAK/TSKGV does not have a stake (either by itself or in partnership with any other group) in these enterprises

¹⁰ Opposition linked firms are those linked to the A.K. Party or its Islamist predecessors. Firms linked to Suleiman Demirel, who headed the main rural conservative opposition to the progressive secular RPP for much of the multi-party democracy era, are also included in the opposition category given their affinity to Anatolian Islamist groups (Arat 2002, 88 and 100). Firms connected to ANAP, which was part of Ecevit’s coalition government, are not included in the opposition category.

and (v) primary research into Turkish newspapers and major financial newspapers. Our codings are listed in Appendix Table 1. Stock market data was downloaded from Thomson Datastream.¹¹

5. Methodology-

Our analysis is in two steps. We first examine whether share of military connected firms display abnormally positive movements surrounding Ecevit's health shocks. We capture abnormal returns by calculating the Cumulative Abnormal Return (CAR) for military and non-military connected firms. The CAR procedure involves first using an estimation window (in our case six months prior to the event as recommended by Henderson, 1990) to estimate the coefficient for the relationship between the return on the Istanbul 100 Stock Exchange index and the return for each firm.¹² This coefficient is used to predict the normally expected return for each firm's shares on the day of and the two working days following each of the three health shocks (the event window). (We also conduct robustness checks with wider event windows.) The cumulative difference between the actual and the predicted normal returns for the event window constitutes the cumulative abnormal return (CAR) for each firm's shares. Having computed CAR for each firm we then compute the average CAR for each type of connection (military, opposition, other etc). If we consistently find a significant positive CAR for military connected firms, but not for firms with connections to the other groupings this constitutes preliminary evidence of military connections providing a relative safe haven in the face of political uncertainty, which is consistent with the retention of implicit power by the military.

After establishing the above, we move on to run multivariate OLS regressions which allow us to capture the incremental abnormal return that derives from a military vs. a non-

¹¹ www.datastream.com

¹² We use the Single Index Market Model (SIMM) described in Henderson (2003, 289). For a detailed description of the CAR technique see Cuthbertson and Nitzsche (2004, 206-209), MacKinlay (1997) or any other financial econometrics textbook.

military connection. The multivariate set up allows us to conduct robustness checks with industry fixed effects and several controls, as well as to conduct a matching exercise.

Outliers are identified and dropped using the Belsley, Kuh, and Welch technique, in which studentized residuals are used to identify outliers (Belsley, Kuh, and Welch 1980).

Our empirical expectations are as follows. Recall that the opposition (AK Party) was one of the two groups that was expected to take power in the event of Ecevit's departure from office. Except for a few months, which only cover the third of Ecevit's health shocks, the AK Party was the front runner to replace the Ecevit government.¹³ (As mentioned, the technocrat Kemal Dervis was briefly the front runner for the Prime Ministership when he flirted with entering the electoral fray between late May 2002 and August 2002.¹⁴) We should thus expect firms connected to the opposition to display superior abnormal returns to those of other firms. If, among non-opposition connected firms, military connections uniquely offer significant positive abnormal returns this is indicative of military connections offering a relative safe haven from political uncertainty. This, in turn, is indicative of a shortfall in the transfer of implicit power over economic decision making in Turkey.

6. Results-

Table 1 provides a summary picture of the turbulence in the Istanbul Stock Exchange during our three event windows. While Table 1 has descriptive value in showing that the Istanbul's stock market experienced turbulence in response to Ecevit's health shocks (and associated rumors concerning his likely continuation in office), what is of ultimate interest is not shifts in share values per se. Rather, we are interested in finding out if there are any abnormal share movements contained in these shifts. Table 2 displays the Cumulative Abnormal Return results for military linked firms, non-military connected state enterprises,

¹³ While the AK Party was only formally constituted in August 2001, the putative leaders of the party had already embarked on organizing themselves from June 2001 onwards (White 2008, 374).

¹⁴ For information on Dervis's politicking in the immediate wake of the second health shock see Turkey Update May 24, 2002. <http://www/csis/media/csis/pubs/tu020524.pdf>

opposition linked firms, and firms with other connections (as described above). The table shows that of all categories, military connections alone display significant positive abnormal returns in every event window. For the first event window alone CAR amounts to over 5% of share value. Opposition linked firms show significant positive CAR in the first window, but significant negative CAR in the third window. (As described above the third window covers the period when Dervis had temporarily displaced the AK Party as the front runner.) Other connections display significant negative CAR in the third event window, while state economic enterprises do not display significant CAR in any window.

We now check if the positive abnormal returns that we observe for military connections in Table 2 are spread across several sectors and firms. Table 3 shows that military connections display positive abnormal returns in all eight sectors in which the military is represented. The table also shows that the abnormal returns for military connected firms exceed that for non-military connected firms in all these sectors. In Appendix Table 2 we move from the sectoral to the firm level. We find that for each event window close to two-thirds of military connected firms display positive abnormal returns. Overall the cumulative abnormal returns results are suggestive of military connections providing a relative safe haven in times of political uncertainty, which indicates a shortfall in the transfer of implicit power.

We now explore the marginal effect on CAR of military vs. non-military connections (see Table 4). Note that military connections are the excluded category for the first six columns in this table. Negative coefficients for the state enterprise and other connections variables would thus be supportive of a gap between the levels of explicit and implicit democracy, because they indicate that military connections offer significantly higher CAR. We do not expect a significant negative coefficient for the opposition since the opposition

was (for the most part) expected to replace Ecevit in the event of his departure, and this should offer opposition connected firms some insulation from stock market turmoil.

We begin by presenting the relationship between connections and Cumulative Abnormal Returns when the data is pooled over all three event windows (column 1). The left hand side of this specification is the CAR for firm i in event window j , while the right hand side includes dummy variables to capture the different types of connections. The specification includes event dummies and standard errors are clustered by firm. As column 1 shows the coefficients for state enterprises and other connections are both negative and significant at the 1% level indicating that military connections offer significantly higher abnormal returns than state enterprises and other connections. While this specification addresses the effects of individual events via event dummies, it is useful to see if the coefficients for the individual events show the expected sign. Columns 2-4 address each of the events separately. As the row for state enterprises shows, the coefficients are negative for all events and significant at 1% for the first event. The row for other connections also displays negative coefficients for all events and the coefficients are significant at 1% for the first and third events. The row for connections to the opposition presents a more mixed picture which is to be expected given that the opposition was (for the most part) expected to replace Ecevit in office if he was unable to continue.

Are the above results driven by the military having its investments in less vulnerable sectors? We address this form of omitted variable bias in column 5 where we add sector fixed effects to our core column 1 specification. We find that state connections and other connections display significant negative coefficients (at 1%) as before. Opposition connections display a negative but insignificant coefficient.

It is conceivable that larger, longer lived, or more profitable firms become refuges for investors in time of high uncertainty. It is thus important to ensure that our results are not

being driven by a flight to economic quality as captured by these firm level attributes. The Istanbul Stock Exchange identifies the top thirty, thirty first to fiftieth, fifty first to hundredth, and hundred and first to five hundredth firms on the basis of market capitalization. It also provides the year of establishment of each firm, and dividend yields (a commonly used proxy for profitability). So, in column 6 we control for these variables in addition to sectoral fixed effects and event dummies.¹⁵ As the column shows, the results are robust.

Are we using the appropriate counterfactuals? Matching is the appropriate technique to address this issue. We use Jasjeet Sekhon's genetic matching program for this purpose (Sekhon 2009).¹⁶ In Column 7 we display matching results for the military connection treatment, after matching on event window, sector, size, age, and dividend yield. The former three are matched exactly since they are categorical variables, while the latter two continuous variables are matched to their nearest neighbor with acceptable balance statistics.¹⁷ As column 7 shows, the military connections treatment has a significant positive effect on CAR.

In Table 5 we conduct a series of additional robustness checks. Could the results we are seeing at times of uncertainty over government turnover be driven by the strength of the military's lobbying operation, its credibility as a technocratically run organization, or by some unobservable characteristics of military linked firms which make them economically superior to other firms? If so we should also see military connections offer superior **abnormal** returns (as always of course defined relative to their usual performance) at key junctures other than those when there is high uncertainty surrounding government turnover.

¹⁵ Summary statistics for these control variables are provided in Appendix Table 3.

¹⁶ Genetic matching permits a search of the space of distance metrics for the optimal distance metric to achieve balance. The space which is searched is a set of generalized weighted decomposed Mahalanobis metrics of which the standard Mahalanobis distance is the simplest. Unfortunately, this creates a very difficult matching problem in that the function being maximized is nonlinear and often discontinuous. Therefore, standard derivative based methods (e.g. Newton-Raphson) will frequently fail to find the actual maxima. Sekhon's Genoud maximizer uses evolutionary operators (with some local hill-climbing) to maximize these functions. The value of using the genetically matched estimates is greatest in small samples and when the covariates are not normally distributed, and in an infinite sample converges to the same results as using a simple Mahalanobis distance would.

¹⁷ Matching statistics are reported in the footnotes of Table 4.

We conducted several tests of this and were unable to find convincing support for the above alternative explanations. For instance we checked if military connections consistently offer superior abnormal returns in calm periods for the stock market, on the understanding that government turnover is unlikely to be a concern in such periods. Column 1 of Table 5 shows the results for one such calm period. The three successive trading dates are May 6, 7, and 10 of 1999 (there is an intervening weekend between May 7 and 10). The ISE 100 stock index moved by 0.19%, 0.28%, and 1.11% respectively on the three days of our event window. Military connected firms do not show superior abnormal returns relative to non-military firms. We also analyzed CAR for other calm periods (three day periods in which the absolute change in the ISE 100 Index was less than 3%) as well as some turbulent periods (change >3%) where government turnover was arguably not at stake and we were unable to identify any pattern of abnormal returns that would justify the above alternative claims (not shown).

The results in Table 4 all used event windows which consisted of the day of the health shock and the two succeeding trading days (i.e. three days per window). We picked this event window size for our core specifications because our study of the Turkish financial press suggests that concerns about Ecevit's health alleviated substantially within a couple of days of the initial shock. However, a study of the movements of the ISE 100 stock index shows that on some occasions there was turbulence five or six days after the first day of the health shock (see Appendix Table 4). This would justify conducting robustness checks using five and seven day event windows. In the second and third columns of Table 5 we display the results for our most extensive specification (sectoral effects, event dummies, and controls), using a five and a seven day event window respectively. As the columns show, the results are robust.

Another question which arises in such studies is whether some of the zero returns reflected in the dataset are a consequence of a stock not being traded at all in the event

window. The direction of bias from this is unknown, so it is worth checking if the results change when stocks that are not traded in the event windows are excluded from the sample. In column 4 we show that our results are unchanged when we exclude such stocks.

A final concern is that our results may be affected by the fact that the estimation periods include many days of high stock market turmoil. It is indeed the case that there were many sharp jumps and drops in the ISE 100 Index generated by endogenous shocks during our estimation periods, primarily as a consequence of fiscal crises and associated currency turmoil (see Figure 1).¹⁸ In order to address this concern we conducted several robustness checks in which we dropped from our estimation periods all days with absolute changes in the ISE 100 Index that exceeded the absolute change in our event windows. The results remain unchanged (not shown). A visual comparison of raw returns for military and non-military shares surrounding our windows also increases our confidence that our results are not driven by idiosyncrasies in our estimation periods; raw returns dropped more for military unconnected firms than for military connected firms at the time of all three of our events (Figures 2, 3, and 4).

For those who, despite all the data and contextual evidence provided above, still adhere to the belief that our data is capturing an anticipated coup, our only comment is that the ability to credibly threaten a coup is also a source of implicit power and our fundamental conclusions are thus not altered.

Overall, our results indicate that military connections offered a relative safe haven from uncertainty over government turnover in Turkey, which is consistent with a shortfall in the transfer of implicit power over economic decision making by the military.

¹⁸ The sharp dip in the market in February 2001, for instance, captures the effects of a major currency crisis.

7. Conclusion-

The literature on democratic transitions emphasizes the importance of distinguishing between explicit and implicit transfers of power, but does not provide an econometric strategy to identify when there is a shortfall in the transfer of implicit power. This paper attempts to fill this gap in the literature by offering a potential solution to this problem, using the tools of financial econometrics. We hypothesized that where implicit power has been transferred from the military to elected officials a connection to the military should not offer a relative safe haven from stock market turmoil in times of uncertainty over government turnover. Significant evidence of military connections offering such insulation should then be indicative of a shortfall in the transfer of implicit power. We applied our approach to the Turkish context, where concerns about implicit power are especially acute in the context of EU accession. We found robust support for military connections offering a relative safe haven in the stock market suggesting that in spite of the presence of free elections and turnover of parties in government, Turkey falls short in the realm of the transfer of implicit power.

Our analysis of Turkey in the early part of this decade is aimed at suggesting a systematic way forward to address the important empirical questions raised by the formal and qualitative literature on explicit vs. implicit power. There are several other countries in the world where the explicit elements of democracy are present, but there are concerns about implicit power. (Thailand, the Philippines, Indonesia, and Pakistan are prominent examples.) Even if health shocks do not conveniently present themselves in these cases to serve identification, alternative exogenous shocks could be used (for instance assassinations, natural disasters, or commodity price shocks). The application of our relatively straightforward and replicable approach to such cases can serve to add nuance to our understanding of democracy worldwide, as well as provide a rigorous basis for assessing the

underlying nature of a polity without relying excessively on the purely procedural aspects of its functioning.

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Table 1- Stock Market Turbulence During the Event Windows (% Change in Average Stock Price)

	N	Event 1 (2001)*			Event 2 (2002)*			Event 3 (2002)		
		July 6	July 9	July 10	May 17	May 20	May 21	June 26	June 27	June 28
<u>Military Connection</u>	17	-4.59	-0.44	-4.13	-4.63	1.00	3.36	-3.46	3.99	3.43
<u>State Economic Enterprises</u>	15	-8.52	0.32	-7.1	-6.67	2.91	3.68	-5.78	1.54	4.78
<u>Opposition Connection</u>	10	-4.85	1.28	0.62	-2.93	-0.54	2.25	-3.43	1.26	2.09
<u>Other Connection</u>	115	-7.43	-0.67	-4.42	-5.35	1.69	2.23	-4.79	3.45	2.37
<u>Market Index ISE-100</u>	100	-9.01	-1.19	-5.76	-5.43	1.43	1.25	-5.14	4.43	4.12

* Non consecutive days for event are on account of intervening weekend.

Table 2- Cumulative Abnormal Returns

	<u>Event 1</u>	<u>Event 2</u>	<u>Event 3</u>
<u>Military-linked Firms</u> (n=17)	+5.35*** (1.27)	+1.63** (0.78)	+1.57* (0.86)
<u>State Economic Enterprises</u> (n=15)	-3.96 (2.29)	+1.61 (1.27)	-3.64 (4.33)
<u>Opposition</u> (n=10)	+5.90** (2.22)	+0.44 (1.40)	-2.66** (1.09)
<u>Other connection</u> (n=115)	-0.06 (0.54)	+0.14 (0.47)	-1.92*** (0.60)

Standard errors in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 3: Comparison of Cumulative Abnormal Returns for military connected firms and military unconnected firms in sectors with military connected firms (three events pooled)

	<u>Military</u>	<u>Non-military</u>	<u>Difference</u>
Technology	0.69	-3.88	-4.57
Food & Beverages	2.45	-0.74	-3.18
Auto	3.52	0.28	-3.24
Construction	3.71	-0.30	-4.01
Chemicals	1.29	0.08	-1.21
Banking	5.59	-3.54	-9.13
Equity Funds	0.43	-0.40	-0.83
Non-life Insurance	0.38	-0.60	-0.99

Table 4: Multivariate OLS- Dependent Variable Cumulative Abnormal Returns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pooled	Event 1	Event 2	Event 3	Pooled & FE	Pooled & FE & Controls	Matching (ATT)
Military (excluded category in columns 1-6)							3.204*** (1.00)
State							
Econ. Ent.	-4.85*** (1.58)	-9.31*** (2.59)	-0.02 (1.46)	-5.21 (4.32)	-4.95*** (1.70)	-3.92** (1.82)	
Opposition	-1.70 (1.15)	0.33 (2.47)	-1.20 (1.55)	-4.23*** (1.35)	-1.64 (1.36)	-0.87 (1.32)	
Other	-3.50*** (0.67)	-5.49*** (1.36)	-1.46 (0.90)	-3.55*** (1.04)	-3.68*** (0.76)	-2.78*** (0.82)	
Size							
Log-Age							
Log- Dividend Yield							
R ²	0.037	0.15	0.015	0.028	0.091	0.107	
N	471	157	157	157	471	471	390

Standard errors are reported in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%. All models use robust standard errors clustered at the firm level. Event dummies included in Columns (1), (5), and (6). Columns (5) and (6) include sectoral fixed effects for all 12 sectors. Constant included in all specifications. Matching results on the pooled sample reported in column (7) use matching variables (size, log-age, log-dividend yield, event dummies, and sector dummies with exact matching on all variables except log-age and log-dividends. Balance statistics for the latter two are (Kolmogorov-Smirnov p-value) are 0.22 for each. The matching universe for column 7 is N=471.

Table 5: Robustness Checks- Dependent variable: Cumulative Abnormal Returns

	(1)	(2)	(3)	(4)
	Calm period placebo	5 day event window	7 day event window	Positive trading volume
State	1.20 (2.58)	-5.23*** (1.63)	-5.47*** (1.89)	-4.03** (1.78)
Opposition	1.21 (2.82)	0.64 (1.51)	1.03 (1.51)	-0.37 (1.35)
Other	-0.51 (1.87)	-2.56*** (0.95)	-2.37** (0.98)	-2.92*** (0.82)
Size	0.03 (0.62)	-1.20*** (0.36)	-1.35*** (0.33)	-0.57** (0.25)
Log age	-0.52 (0.80)	0.16 (0.84)	0.21 (0.82)	0.42 (0.67)
Log Dividend Yield	0.06 (0.19)	0.38*** (0.12)	0.45*** (0.14)	0.20 (0.12)
R ²	0.27	0.175	0.154	0.113
N	130	471	471	438

P-values are reported in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%. Robust standard errors are used clustered around firm level. All columns include event and sectoral fixed effects. Constant included in all specifications.

Appendix Table 1
Firms and their Connections

Military Connected Firms

Company Name	Industry
Aselsan	Technology
Netas Telecommunications	Technology
Tukas	Food
Brisa Tires	Auto
Goodyear	Auto
Adana Cement	Construction
Akcansa Cement	Construction
Bolu Cement	Construction
Cimsa Cement	Construction
Mardin Cement	Construction
Nuh Cement	Construction
Oysa Nigde Cement	Construction
Unye Cement	Construction
Hektas	Chemicals
Akbank	Banking
Sabancı Holding	Equity Funds
Aksigorta	Non-life Insurance

State Economic Enterprises

Company Name	Industry
Eregli Demir Celik (Iron& steel)	Metals
Dogusan Boru (Pipes)	Construction
Usak Seramik (Tiles)	Construction
Petkim Petro-chemicals Holding	Energy
Tupras Turkiye Petrol Rafinerileri (Oil)	Energy
Sekerbank	Banking
Turkiye Sinaii ve Kalkinma Bankasi	Banking
Creditwest Factoring	Banking
Vakif Finansal	Equity Funds
Vakif Risk	Equity Funds
Vakif Menkul Kiymetler Yatirim Ortakligi	Equity Funds
Atakule Gayrimenkul	Real Estate
Vakif Gayrimenkul	Real Estate
Gunes Sigorta	Non-life Insurance
Ray Sigorta	Non-life Insurance

Opposition Connected Firms

Company Name	Industry
Kent Gıda	Food
Kristal Kola	Beverages
Türk Tuborg	Beverages
Cemtas Çelik (Steel)	Metals
Bursa Çelik Dokum	Metals
Ege Endüstri	Auto
Bursa Cement	Construction
Gölpazarı Çimento Sanayii	Construction
Tire Kütan	Paper
İhlas Gayrimenkul Yatırım Ortaklığı	Real estate

Other

Company Name	Industry
Alcatel Teletas Communications	Technology
Escort Computers	Technology
Link Computers	Technology
Arena Bilgisayar (Computers)	Technology
Tat Konserve	Food
Banvit	Food
Dardanel	Food
Frijo Pak	Food
Kerevitas	Food
Konfrut Gıda	Food
Merko Gıda Sanayii	Food
Penguen Gıda	Food
Seker Piliç	Food
Pınar Su	Food
Selçuk Gıda	Food
Altınyag Kombinaları	Food
Anadolu Efes	Food
Ersu Gıda	Food
Pınar Su	Food
Erbosan Erziyes Boru	Metals
Fenis Alüminyum	Metals
Sarkuysan Elektrolitik Bakır	Metals
Çelik Halat	Metals
İzmir Demir Çelik	Metals
Bosch Fren	Auto
Ege Plastik	Auto
Federal Mogul İzmit Piston	Auto
Anadolu Isuzu	Auto
Alarko Carrier	Auto
Klimasan Klima	Auto
Parsan	Auto

Others(continued)	
Demisas Dokum Emaye	Auto
Makina Takim	Auto
Karsan	Auto
Ditas Dogan	Auto
Doktas Dokum	Auto
Otokar	Auto
Ford Oto	Auto
Borusan Boru	Auto
Tofas	Auto
Eczacibasi Yapi Gerecleri	Construction
Hanedar Refrektar	Construction
Izocam	Construction
Turk Demir Dokum	Construction
Trakya Cam	Construction
Afyon Cement	Construction
Lafarge Aslan Cement	Construction
BatiCim Bati Anadolu (Cement)	Construction
Bati Soke Cement	Construction
Borova Yapi	Construction
CBS Boya Kimya Sanayii	Construction
Cim Beton	Construction
Cimentas Izmir Cement	Construction
DYO Boya Fabrikalari	Construction
Ege Profil	Construction
Ege Seramik	Construction
Enka Insaat	Construction
Konya Cement	Construction
Marshall Boya ve Vernik	Construction
Meges Boya	Construction
Pimas Plastik insaat	Construction
Aksa Akrilik Kimya	Chemicals
Alkim Alkali Kimya	Chemicals
Bagfas Bandirma Gubre Fabrikalari	Chemicals
CBS Holding	Chemicals
Ege Gubre	Chemicals
Gubre Fabrikalari	Chemicals
Soda Sanayii	Chemicals
Emek Elektrik	Energy
Turcas Petrol	Energy
Aksu Enerji	Energy
Ak Enerji	Energy
Zorlu Enerji	Energy
Dogan Holding	Energy
Petrol Ofisi	Energy
Ayan Enerji	Energy
Isik Ambalaj	Paper
Ipek Matbaa	Paper

Others(continued)	
Alternatif Bank	Banking
Disbank/Fortis	Banking
Garanti Bankasi	Banking
Tekstil Bankasi	Banking
Is Bank	Banking
Turkiye Ekonomi Bankasi (TEB)	Banking
Yapi Kredi Bankasi	Banking
Finans Bank	Banking
Alternatif Yatirim	Equity Funds
Borusan Yatirim Pazarlama	Equity Funds
Ata Yatirim Ortakligi	Equity Funds
Avrasya Yatirim Ortakligi	Equity Funds
Finans Finansal Kiralama	Equity Funds
Finans Yatirim	Equity Funds
Gedik Yatirim Ortakligi	Equity Funds
Oz Finans Factoring	Equity Funds
Mustafa Yilmaz Yatirim Ortakligi	Equity Funds
Eczacibasi Yatirim Holding	Equity Funds
Eczacibasi Yatirim Ortakligi	Equity Funds
Garanti Factoring	Equity Funds
Garanti Yatirim Ortakligi	Equity Funds
Is Finansal Kiralama	Equity Funds
Global Menkul Kiyemetler Y.O	Equity Funds
Koc Holding	Equity Funds
Tekstil Finansal Kiralama	Equity Funds
Yapi Kredi Finansal Kiralama	Equity Funds
Yapi Kredi Portfoy Isletmeciligi	Equity Funds
Yatirim Finansman	Equity Funds
Transturk Holding	Equity Funds
Alarko Holding	Real Estate
Nurol GMYO	Real Estate
Garanti Gayri Menkul Y.O.	Real Estate
Is Gayri Menkul Y.O.	Real Estate
Yapi Kredi Koray	Real Estate
Anadolu Sigorta	Non-life Insurance
Yapi Kredi Sigorta	Non-life Insurance
Aviva Sigorta	Non-life Insurance

Appendix Table 2

Cumulative Abnormal Returns (CAR) for Military Connected Firms

Event 1

<u>Company Name</u>	<u>Industry</u>	<u>CAR</u>
Aselsan	Technology	+7.16
Netas Telecommunications	Technology	-3.02
Tukas	Food	+12.33
Brisa Tires	Auto	+8.44
Goodyear	Auto	+7.08
Adana Cement	Construction	+12.10
Akcansa Cement	Construction	-0.39
Bolu Cement	Construction	+12.65
Cimsa Cement	Construction	-0.04
Mardin Cement	Construction	+5.43
Nuh Cement	Construction	+1.20
Oysa Nigde Cement	Construction	-0.39
Unye Cement	Construction	+11.76
Hektas	Chemicals	+6.80
Akbank	Banking	+6.83
Sabancı Holding	Equity Funds	+3.69
Aksigorta	Non-life Insurance	-1.29

Event 2

<u>Company Name</u>	<u>Industry</u>	<u>CAR</u>
Aselsan	Technology	+0.30
Netas Telecommunications	Technology	-1.95
Tukas	Food	-2.47
Brisa Tires	Auto	+4.49
Goodyear	Auto	-0.03
Adana Cement	Construction	-1.28
Akcansa Cement	Construction	+5.30
Bolu Cement	Construction	+4.99
Cimsa Cement	Construction	+5.19
Mardin Cement	Construction	+1.27
Nuh Cement	Construction	+4.18
Oysa Nigde Cement	Construction	+2.87
Unye Cement	Construction	+8.13
Hektas	Chemicals	-0.58
Akbank	Banking	-0.65
Sabancı Holding	Equity Funds	+1.72
Aksigorta	Non-life Insurance	-0.28

Event 3

Company Name

Industry

CAR

Aselsan	Technology	+3.90
Netas Telecommunications	Technology	-2.22
Tukas	Food	-2.52
Brisa Tires	Auto	+1.22
Goodyear	Auto	-0.09
Adana Cement	Construction	+1.61
Akcansa Cement	Construction	+2.25
Bolu Cement	Construction	+2.36
Cimsa Cement	Construction	+4.04
Mardin Cement	Construction	-2.22
Nuh Cement	Construction	+0.59
Oysa Nigde Cement	Construction	+7.36
Unye Cement	Construction	+0.13
Hektas	Chemicals	-2.34
Akbank	Banking	+10.60
Sabancı Holding	Equity Funds	-0.67
Aksigorta	Non-life Insurance	+2.71

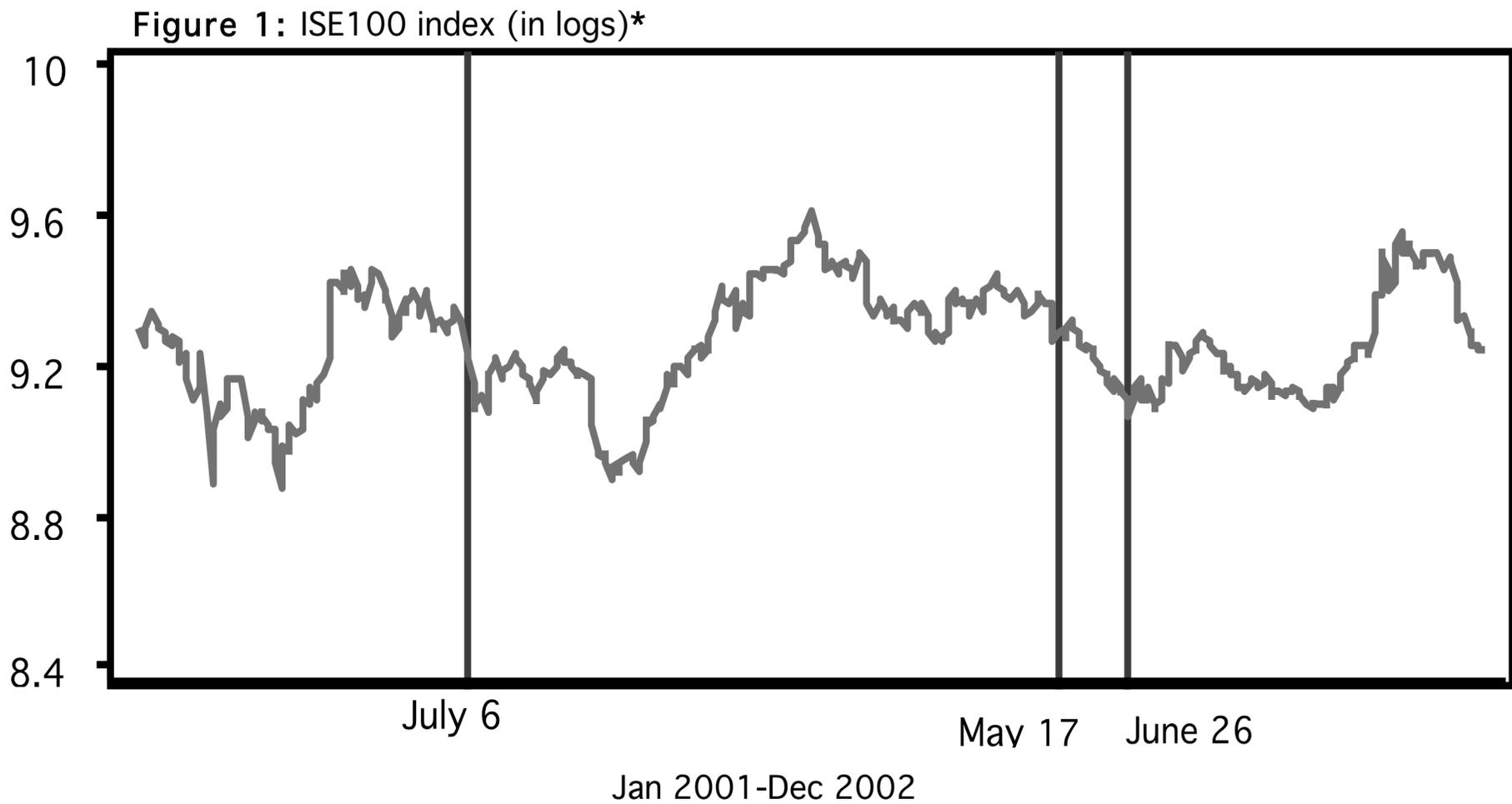
Appendix Table 3: Summary Statistics for Control Variables

	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Minimum</u>	<u>Maximum</u>
<u>Size</u>	157	3.31	1.07	1	4
<u>Log-Age</u>	157	3.16	0.71	1.10	4.51
<u>Log Dividend Yield⁺⁺</u>	157	-2.50	3.09	-4.61	4.04

⁺⁺ 2/3 of firms in our sample have not paid dividends. Log dividend yield is negative only in logs. (.01 added to dividend yield values for purposes of logging dividend yield of 0.)

Appendix Table 4**Changes in ISE 100 Index During and Surrounding Each Event**

	3 Days Preceding Event			Event				4 Days Post-Event 1			
	Day-3	Day-2	Day-1	Day 1	Day 2	Day 3	Day+1	Day+2	Day+3	Day+4	
Event 1	-3.13	-0.64	0.84	-9.01	-1.19	-5.76	-7.81	4.50	-1.99	1.56	
Event 2	-0.47	-1.82	-1.61	-5.43	1.43	1.25	-2.68	1.61	1.11	2.80	
Event 3	0.45	-2.56	1.23	-5.14	4.43	4.12	1.97	-4.50	-1.39	0.57	



* ISE100 index (logs), January 2001-December 2002. The vertical lines indicate the first event day for Event 1 (July 6, 2001), Event 2 (May 17, 2002) and Event 3 (June 26, 2002) respectively.

Figure 2: Comparison of Military and Non-Military Share Returns (3 day Moving Average) Event 1

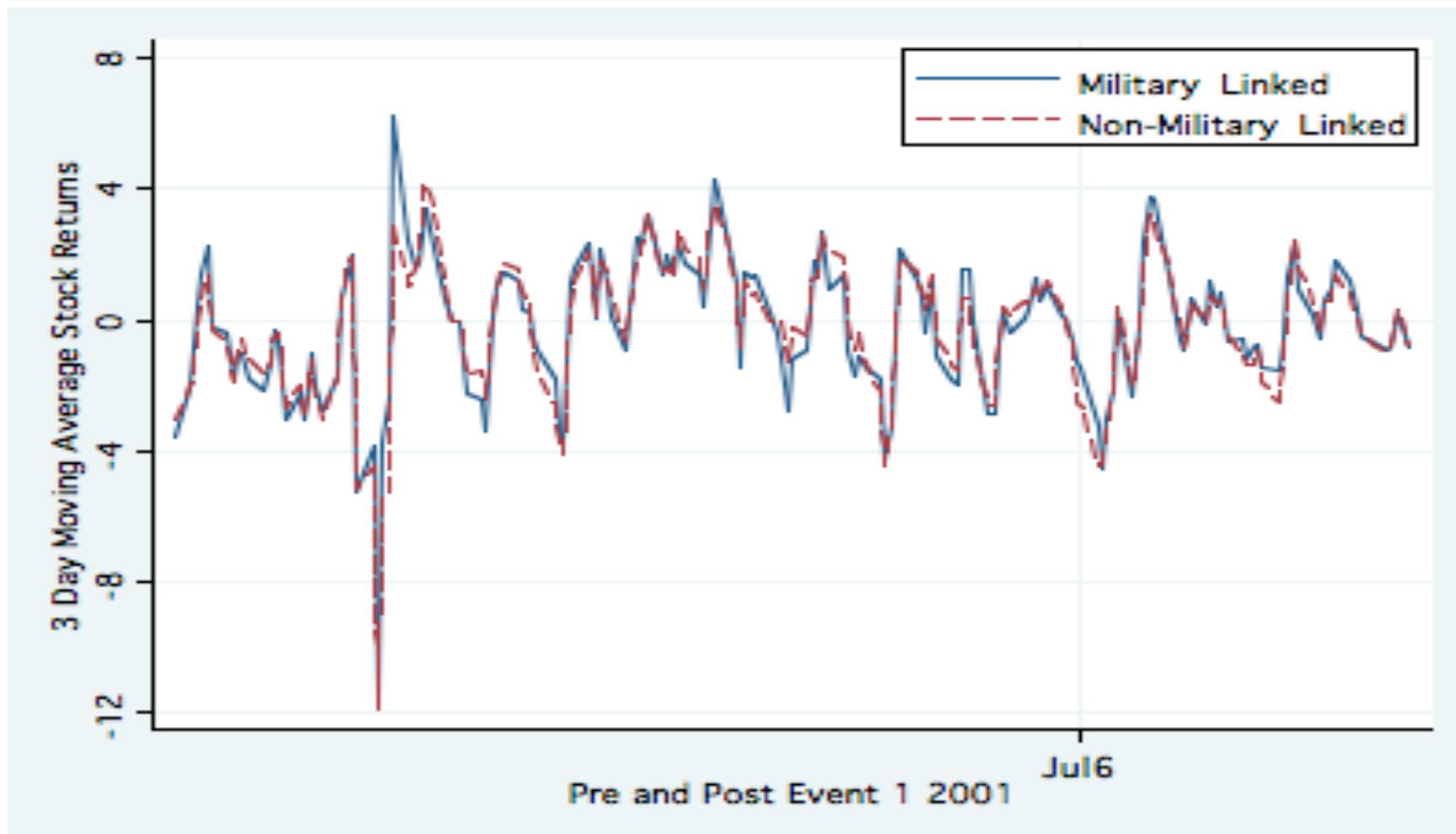


Figure 3: Comparison of Military and Non-Military Share Returns (3 day Moving Average) Event 2

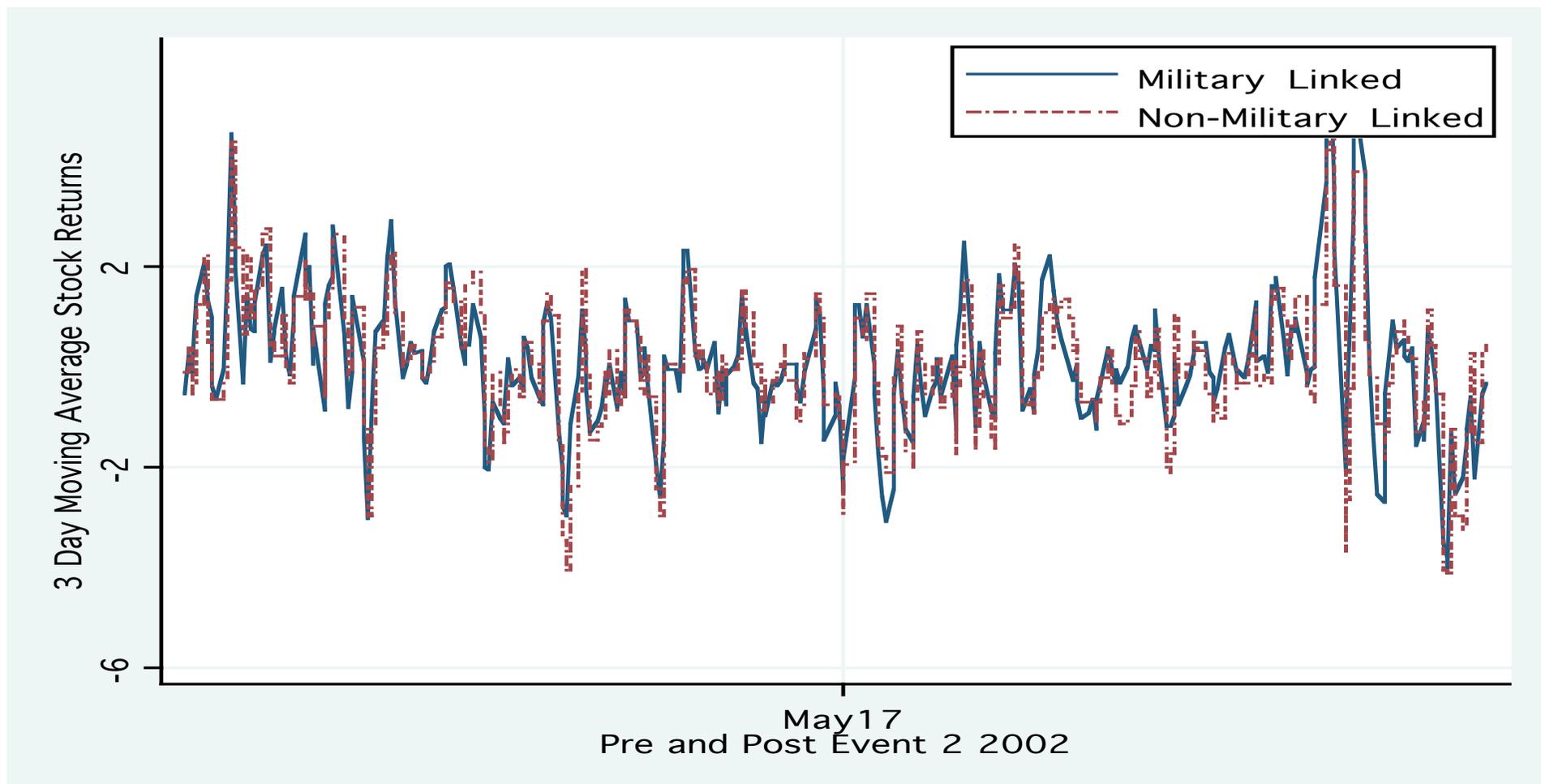


Figure 4: Comparison of Military and Non-Military Share Returns (3 day Moving Average) Event 3

