

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. In this paper we apply econometric techniques to examine if a transfer of explicit power has not also been accompanied by a transfer of implicit power. We do so in the context of 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.

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 Schmitter and Karl (1991) 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 Turkey's 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 paper differs by addressing this question from an econometric perspective. It does so in the context of an important country, Turkey. Our approach is to study abnormalities in stock market responses of firms connected to the Turkish military (in non-defense industries) to exogenous changes in the probability of survival of the country's democratically elected chief executive. 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

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.

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.

As mentioned 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 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

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

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 2006a, 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 2006a, 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 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. Shocks to Ecevit's health thus raised the possibility of external actors (such as the IMF and the World Bank) playing an enhanced role in determining macro economic policy. Given that Turkey was in the midst of

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).

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 does not have 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.
- 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 has the power to constrain the succeeding government

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.

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 (including sector effects, dividends, firm size, and firm age) 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.

While our general approach resembles that of several papers that evaluate the value of political connections (most notably Fisman 2001) there is one important difference. Other papers evaluate the value of links to actors who are charged with some responsibility for economic policy.⁶ For example in Fisman's work Soeharto's relatives are linked to Soeharto who was the president of Indonesia and thus charged with responsibility for economic policy decisions. In other prominent cases the links are to candidates for the office of chief executive/legislators who would be responsible for economic policy if elected. In our case we demonstrate the value of links to an actor (in this case an organization) that is not charged with responsibility for economic policy, and is in fact not supposed to be involved in economic policy making in the first place. To our knowledge we are the first to advance the literature on political connections by demonstrating that firms' connections to

⁶ Aside from Fisman (2001) some examples include Gilligan and Krehbiel (1988), Roberts (1990), Snowberg, Wolfers, and Zitzewitz (2007), Herron (2000), Herron, Lavin, Cram, Silver (1999), Knight (2005), Matozzi (2008), Johnson and Mitton (2001), Ferguson and Voth (2008), Faccio (2006), and Faccio, McConnell, and Masulis (2006).

people/organizations who are not charged with making economic decisions also have economic value thanks to behind the scenes influence.

The question may be asked as to how high these returns for connections to an actor who is not charged with economic policy making are relative to the findings of other papers that have evaluated the value of connections to actors who are so charged. In our study abnormal returns for military connections range from approximately 2% to 5%. Keeping mind that we may be comparing apples and oranges due to the diversity of core specifications across papers our point estimates are close to those found in studies by Snowberg, Wolfers, and Zitzewitz (2007), Herron (2000), and Herron, Lavin, Cram, and Silver (1999).⁷ It is slightly lower than the point estimate of Knight (2005), and substantially lower than those of Fisman (2001) and of Matozzi (2008).⁸ We find it interesting that in the Turkish context a connection to an actor who is not charged with economic policy making is as valuable as a connection to several actors who are so charged in other national contexts.

This paper also aims to contribute to the literature on Turkish politics. The bulk of the work on the Turkish military focuses on secularism and/or ethnic politics (for example Cizre-Sakallioğlu 1997, Heper 2005, Hale 1994). This paper contributes to the smaller literature on military's economic role. Our work especially complements recent case study work by Firat Demir (2005 and forthcoming) on the military's influence on economic policy. It also expands the category of scholarly work on Turkey that falls on the cusp of economics and politics such as Parla (1974, 1998), Akca (2006), Bugra (2004), Onis and Webb (1994), Krueger and Turan (1993), Onis (2006a and 2006b), Onis and Bayram (2008), and Kulaksizoglu (2004a and 2004b).

⁷ The effect for Snowberg, Wolfers, and Zitzewitz (2007) is 3%, and for Herron (2000) it is 5%. For Herron, Lavin, Cram, and Silver (1999) the bulk of the point estimates for industries with significant coefficients fall between 2 and 5%.

⁸ The point estimate for Knight (2005) is 9% while both Fisman (2001) and Matozzi (2008) find effects exceeding 20%.

The plan of the paper is as follows. In the next section we present some background information on Turkey's explicit democratic transition. We then describe the political uncertainty surrounding Prime Minister Ecevit's health. In the following section we describe the data used in the paper, after which we discuss our methodology. The final three sections contain our abnormal returns results and evidence for the mechanisms of military influence over economic policy, followed by the conclusion.

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.⁹ 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 during our period of analysis. The industries spanned automobiles, banking, construction, chemicals, equity funds, food, insurance, and technology. (So there is little concern that we are picking

⁹ There was no additional proviso that the military would be responsible for economic policy, which suggests that the secular and economic power realms were seen as separate.

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 point from which leading measures of democracy have continuously coded 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 military interventions into leadership turnover 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.¹⁰

Let us define an explicit democratic transition as having occurred where leadership turnover follows the results of free elections without military interference, except when the elected leadership violates the constitution. By this standard Turkey was explicitly democratic from the early 1980s onwards. Let us impose an additional standard for an implicit transition to have also occurred. The military's powers must be de facto limited to those provided by the constitution. The Turkish constitution does not provide the military with power over economic decision making. So, if it does in fact turn out to be the case that the military has power over economic decision making as late as in 2001-2002 this indicates that Turkey's democratic transition falls short in the implicit realm.

We seek to find out if Turkey's democratic transition falls short in the implicit realm by examining military influence over economic policy. We do so by studying stock market responses of military connected stocks to health shocks to Prime Minister Bulent Ecevit in

¹⁰ In 1997 the military forced an excessively Islamist Prime Minister to step down.

2001-2002. Before embarking on this exercise we first provide some background on the nature of political uncertainty surrounding these health shocks.

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 elitism of his colleagues Ecevit left to form his own Democrat Left Party (DLP) in the mid 1980s (Zurcher 1997, 298). 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 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.

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.¹¹ In addition to the above we code firms that are linked to the opposition.¹² Remaining firms are placed in a residual category labeled as "other connections," meaning that they are not connected to the military, are not state

¹¹ OYAK/TSKGV does not have a stake (either by itself or in partnership with any other group) in these enterprises

¹² 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.

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.

In addition we conducted robustness checks in which Sabanci Holding, Akbank, Akisgorta, and companies connected to Suleiman Demirel were placed in the “other connections category.”¹³ Once again the results were substantively unchanged (available on request).

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, and (v) primary research into Turkish newspapers and major financial newspapers. Our

¹³ In our base coding the first three are coded as connected to the military while the last is coded as connected to the opposition.

codings are listed in Appendix Table 1. Stock market data was downloaded from Thomson Datastream.¹⁴

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.¹⁵ 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-

¹⁴ www.datastream.com

¹⁵ 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.¹⁶ (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 2002.¹⁷) 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.

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

¹⁶ 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).

¹⁷ 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>

Abnormal Return results for military linked firms, non-military connected state enterprises, 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. (Recall that the opposition category is defined as firms connected to the AK Party. As described above the third window covers the period when Dervis had temporarily displaced the AK Party as the front runner, and so for a brief period it looked like the AK Party would not gain office.) Other connections and state economic enterprises also display mixed results.

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 and extremely large for two out of three events. The row for other connections 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.¹⁸ As the column shows, the results are robust. The results are also robust to controlling for companies with foreign ownership (available on request).

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).¹⁹ In Column 7 we display matching results for the military connection treatment, after matching on event window, sector, size, dividends, and age. All except age are exactly matched, while age uses nearest neighbor matching with acceptable balance statistics.²⁰ 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

¹⁸ Summary statistics for these control variables are provided in Appendix Table 3.

¹⁹ 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.

²⁰ Event window, sector, and size are available as categorical variables, which immediately justifies exact matching. In the case of dividends, matching with the continuous version of the variable yielded non robust matching statistics thanks to the large number of firms with zero dividends. We thus resorted to exact matching with a dummy variable for positive dividend payments. Matching statistics are reported in the footnotes of Table 4.

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 at times other than those when there is high uncertainty surrounding government turnover. 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 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).²¹ 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).

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. This raises the question of the precise form of military influence, which we address in the next section.

²¹ The sharp dip in the market in February 2001, for instance, captures the effects of a major currency crisis.

WHAT FORM DOES MILITARY INFLUENCE TAKE?

In this paper we have argued that the abnormal returns for military connected firms are driven by investors' perceptions of ongoing military influence over economic policy. We believe that this influence primarily takes the form of influencing micro-economic policy decisions that have firm level effects. We begin by documenting uses of military influence in the micro-economic realm. We then go on to describe other possible forms of influence, and offer reasons for why our results are unlikely to be driven by the effects of influence in these non micro-economic policy realms.

The academic literature on Turkish political economy offers substantial evidence in support of the military having a significant influence on micro-economic policy decisions. Turkish scholars, most notably Firat Demir (forthcoming), have argued that the military has developed a powerful network of contacts within the bureaucracy that is often used to influence critical micro-economic policy decisions in OYAK's favor. For instance, one area where the military has clearly demonstrated its influence over micro-economic policy is in the realm of privatization decisions. The privatization case that has probably generated the most outrage is that of Sumer Bank. As Demir points out "despite its \$1.6 billion asset size that put it in the top six among private banks, Sumerbank was sold [to OYAK] without an auction at a cherry pick price of \$38,000. Making the deal even more controversial was that for the transaction BRSA [the bank regulation agency] lent a one year loan of \$488.2 million to OYAK...at a 15% interest rate for the first five months. This was at a time when interbank rates were over 80% and deposit rates were over 60% and consumer inflation was over 70%." (Demir forthcoming, 6.) In another notable privatization related case OYAK gained control of the massive Erdemir steel company after the government, in the face of major pressure from OYAK, excluded foreign companies from the bidding on nationalistic grounds. Within

a few months of the sale, OYAK was allowed to enter into a partnership with the foreign Arcelor-Mittal corporation (involving acquisition of 25% of shares by the latter) rendering previous nationalistic considerations moot (Demir forthcoming, 7).

Aside from privatization another micro-economic area in which the military has demonstrated policy influence is competition policy. In 2005 the government granted OYAK Bank a monopoly of banking within military barracks on security grounds, but then did not register an objection to the sale of OYAK Bank to the Dutch ING group for a massive profit two years later (Demir forthcoming, 8). The competition authority effectively argued that it was less dangerous to the country's security for foreigners to have access to military banking transactions than for domestic business groups. Questions have also been raised about the implementation of competition policy in the cement industry, in which the privatization authorities registered no objections to OYAK becoming the major player (Kulaksizoglu 2004). We have only provided a few examples here for illustrative purposes, and we direct readers to Demir's work (cited above) for numerous other examples of military influence over micro-economic policy.

All of the above examples relate to influence over **micro**-economic policy. This raises the question of whether the abnormal results that we observe could be attributed to other types of anticipated policy influence. An extensive search of the academic and non-academic literature provides no convincing evidence to support the idea that the military actually influences **macro**-economic policy. The absence of military influence in the macro-economic realm is in line with the fact that this realm was subject to close scrutiny from the IMF, since the country was subject to the rigorous conditions of IMF structural adjustment loan programs. (In fact macro-economic policies have displayed substantial orthodoxy in line with the IMF's dictates.)

We now address some potential alternative explanations for our results. Could our results be driven by the military's ability to trade on insider information on macro-economic policy (as opposed to influence over macro-economic decisions per se)? There is some evidence that the military (or its close associates) might be present when important macro-economic decisions are made. Of all the major business groups OYAK alone turned all of its Turkish lira into dollars in the week before the massive devaluation of February 23, 2001. The literature strongly insinuates that this was driven by insider information, and the profits were massive (Demir forthcoming, 9, Ilıcak 2001, 2). OYAK linked firms also generated exceptional profits on financial transactions during the 1994 financial crisis (Demir forthcoming, 9). However, in the absence of information from wiretaps (which are generally central to conclusively establishing the presence of insider information) we are unable to rule out that the trading was purely driven by sound judgment about the lira's prospects.²² (As we detail later in this section, the fact that our estimation period for the first event includes the post currency crisis months suggests that our abnormal returns results are not driven by immediate post crisis profits.²³)

Could our results be simply capturing superior results for large vs. small corporations. We are addressing this possibility by controlling for firm size in our robustness checks. In addition the results for opposition connected firms (which tended to be small) also suggest that our results are not subject to this form of omitted variables bias. Consistent with the view that our results are not driven by size, other large corporations perceive OYAK as a different category of beast from themselves. For example "when Coskun Ulusoy, the CEO of OYAK group, claimed in 2005 to have surpassed Koc and Sabanci holdings (that are the two largest holdings in the country) in profitability and productivity, Bulend Ozaydinli, the CEO

²² The OYAK portfolio manager attributes her extreme trading decision to "gut feeling" rather than a technical analysis (Demir forthcoming, 9).

²³ Recall that we are finding abnormal returns even relative to the first half of 2001.

of Koc holdingly reportedly replied back saying that ‘apple and pear cannot be compared equally’” (Demir forthcoming, 12).

Finally, is it possible that our results are driven by OYAK’s well known outstanding performance following the February 2001 devaluation? We rule this out as an alternative explanation because our estimation strategy for the first event effectively controls for this possibility. It was well known in the first half of 2001 that OYAK’s performance in the crisis was outstanding (Ilicak 2001, 2). We are effectively controlling for this post crisis perception because our estimation period for the first event covers the post crisis months; when we find abnormal returns for the first event (July 6-10, 2001) we are finding excess returns over and above the predicted return drawn from the relationship between military connected stocks and the ISE for the first half of 2001.²⁴ For the same reason as above, we are effectively controlling for OYAK’s greater ability to infuse funds into its firms in times of crisis.

CONCLUSION

The literature on democratic transitions emphasizes the importance of distinguishing between explicit and implicit transfers of power, but has so far been limited to anecdotal approaches to identifying gaps between the two. This paper differs by using the tools of financial econometrics. We hypothesize 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 find robust support for military connections offering a relative safe haven

²⁴ The same logic would apply when considering various other permanent benefits enjoyed by OYAK, such as tax exemptions.

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.

REFERENCES

- Acemoglu, Daron and James Robinson. 2008. Persistence of Power, Elites, and Institutions. *American Economic Review*, 98(1):267-293.
- Akca, Ismet. 2006. *Militarism, Capitalism and the State: Putting the Military in its Place in Turkey*. PhD. Dissertation, Bogazici University.
- Alberto Abadie and Javier Gardeazabal. 2003. The Economic Costs of Conflict: A Case Study of the Basque Country. *American Economic Review*, 93(1):113-132.
- Arat, Yesim. 1991. Politics and Big Business: Janus-Faced Link to the State. In *Strong State and Economic Interest Groups: The Post-1980 Turkish Experience*. ed. Metin Heper, 135-147. Berlin, New York : Walter de Gruyter.
- Arat, Yesim. 2002. Suleiman Demirel: National Will and Beyond. In *Political Leaders and Democracy in Turkey*, eds. Metin Heper and Sabri Sayari, Lanham, Md.: Lexington Books, pp. 107-125.
- Belsley, David A., Edwin Kuh and Roy E. Welch. 1980. *Regression Diagnostics*. New York:

- Wiley.
- Bernhard, William and David Leblang. 2006. *Democratic Politics and Financial Markets: Pricing Politics*. New York: Cambridge University Press.
- Bugra, Ayse. 2004. *State and Business in Modern Turkey: A Comparative Study*. New York: State University of New York Press.
- Cizre-Sakallioglu, Umit. 1997. The Anatomy of the Turkish Military's Autonomy. *Comparative Politics* 29 (2): 151-156.
- Commission of the European Communities. 2004. *Regular Report on Turkey's Progress Towards Accession*.
http://ec.europa.eu/enlargement/archives/pdf/key_documents/2004/rr_tr_2004_en.pdf
- Cuthbertson, Keith and Dirk Nitzche. 2004. *Quantitative Financial Economics*. New York: John Wiley and Sons.
- Demir Firat. 2005. Militarization of the Market and Rent-Seeking Coalitions in Turkey. *Development and Change*, 36(4): 667-690.
- Demir, Firat. Forthcoming. A Political Economy Analysis of the Turkish Military's Split Personality: The Patriarchal Master or Crony Capitalist? In T. Cetin and F. Yilmaz Eds., *Understanding the Process of Institutional Change in Turkey: A Political Economy Approach*.
<http://www.docstoc.com/docs/20114306/A-POLITICAL-ECONOMY-ANALYSIS-OF-THE-TURKISH-MILITARYS-SPLIT>
- Faccio, Mara. 2006. Politically Connected Firms. *American Economic Review*, 96(1):369-386.
- Faccio, M.,R. W. Masulis, J.J. McConnell. 2006. Political Connections and Corporate Bailouts. *Journal of Finance*, 61(6): 2597-2635.
- Ferguson, Thomas and Hans-Joachim, Voth. 2008. Betting on Hitler-The Value of Political Connections in Nazi Germany. *Quarterly Journal of Economics*, 123(1): 101-137.
- Fisman, Raymond. 2001. *Estimating the Value of Political Connections*. *American Economic Review*, 91(4): 1095-1102.
- Gilligan, Thomas and Keith Krehbiel. 1988. Complex Rules and Congressional Outcomes: An Event Study of Energy Tax Legislation. *Journal of Politics* 50: 625-654.
- Library of Congress. 1996. Country Studies. <http://memory.loc.gov/frd/cs/trtoc.html>
- Gunes-Ayata, Ayse. 2002. The Republican People's Party. In *Political Parties in Turkey*. eds. B. Rubin and M. Heper, 102-121. London; Portland, OR : Frank Cass.
- Hale, William. 1994. *Turkish Politics and the Military*. New York: Routledge.

- Henderson, Glenn V., Jr. 1990. *Problems and solutions in Conducting Event Studies*. *Journal of Risk and Insurance*, 57(2):282-306.
- Heper, Metin. 2005. The Justice and Development Party Government and the Military in Turkey. *Turkish Studies* 6 (2): 215-231.
- Herron, Michael. 2000. Estimating the Economic Impact of Political Party Competition in the 1992 British Election. *American Journal of Political Science* 44 (2): 326-337.
- Herron, Michael C., James Lavin, Donald Cram, and Jay Silver. 1999. Measurement of Political Effects in the United States Economy: A Study of the 1992 Presidential Election. *Economics and Politics* 11 (March): 51-81.
- Ilicak, Nazli. 2001. Dolar Tirmanista. *Yeni Safak* 4/19/2001.
<http://yenisafak.com.tr/arsiv/2001/nisan/19/nilicak.html>
- ISE Database: Company Profiles, 2002, <http://www.ise.org>
- Istanbul Industrial Chamber Database, “Turkey’s Top 500 Industrial Enterprises”
<http://www1.iso.org.tr/en/>
- Johnson, Simon and Todd Mitton. 2003. Cronyism and capital Controls: Evidence from Malaysia. *Journal of Financial Economics*, 67(2): 351-82.
- Karabelias, Gerassimos. 2008. Military Class and Perpetual State Control in Turkey. EUI Working Paper RSCAS 2008/12.
http://cadmus.eui.eu/dspace/bitstream/1814/8449/3/RSCAS_2008_12.pdf
- Karpat, Kemal H. 1991. The Republican People’s Party, 1923-1945. In *Political Parties and Democracy in Turkey*, eds. Metin Heper and Jacob M. Landau, New York: St. Martin's Press, 42-64.
- Knight, Brian. 2006. Are Political Party Platforms Capitalized into Equity Prices? Evidence from the Bush/Gore 2000 Presidential Election. *Journal of Public Economics* 90: 751-773.
- Krueger, Anne O. and Ilter Turan. 1993. The Politics and Economics of Turkish Policy Reforms in the 1980s. In *Political and Economic Interactions in Economic Policy Reform: Evidence from Eight Countries*, eds. Robert H. Bates. and Anne.O. Krueger, Cambridge, Mass.: Blackwell, pp. 333-386.
- Kulaksizoglu, Tamer. 2004a. Competition Policy in Turkey.
<http://www.mpra.ub.uni-munchen.de/357/>
- Kulaksizoglu, Tamer. 2004b. Competition Policy in Turkey.
<http://www.mpra.ub.uni-munchen.de/179/>
- Levitsky, Steven and Lucan Way. 2002. The Rise of Competitive Authoritarianism. *Journal of Democracy*, 13(2): 51-65.

- Mackinlay, A.Craig. 1997. *Event Studies in Economics and Finance*. *Journal of Economic Literature*, (35):13-39.
- Mattozzi, Andrea. 2008. Can We Insure Against Political Uncertainty: Evidence from the U.S. Stock Market. *Public Choice* 137: 43-55.
- Onis, Ziya. 2006a. The Political Economy of Turkey's Justice and Development Party. In *The Emergence of New Turkey: Islam, Democracy, and the A.K. Party*, eds. M. Hakan Yavuz. Salt Lake City: University of Utah Press.
- Onis, Ziya. 2006b. Beyond the 2001 Financial Crisis: The Political Economy of the New Phase of Neo-Liberal Restructuring in Turkey. <http://home.ku.edu.tr/~zonis/publications.htm>
- Onis, Ziya and Ismail Emre Bayram. 2008. Temporary Star or Emerging Tiger? Turkey's Recent Economic Performance in a Global Setting. <http://home.ku.edu.tr/~zonis/publications.htm>
- Onis, Ziya and Steven B. Webb. 1994. Turkey: Democratization and Adjustment from Above. In *Voting for Reform: Democracy, Political Liberalization, and Economic Adjustment*, eds. Stephan Haggard and Steven Webb, San Francisco: ICS Press, pp. 128-184.
- Parla, Taha. 1998. *Mercantile Militarism In Turkey: 1960-1998*. *New Perspectives on Turkey* 19 (Autumn): 29-52.
- Privatization Administration Office Database, http://www.oib.gov.tr/index_eng.htm
- Roberts, Brian. 1990. Political Institutions, Policy Expectations, and the 1990 Election: A Financial Market Perspective. *American Journal of Political Science* 34 (2): 289-310.
- Schmitter, Philippe and Terry Lynn Karl. 1991. What Democracy Is...and Is Not. *Journal of Democracy* 2:3, pp. 75-88.
- Snowberg, Erik, Justin Wolfers, and Eric Zitzewitz. 2007. Partisan Impacts on the Economy: Evidence from Prediction Markets and Close Elections. *Quarterly Journal of Economics* (May), pp. 807-829.
- Sekhon, Jasjeet S. Forthcoming. Multivariate and Propensity Score Matching Software with Automated Balance Optimization: The Matching package for R. *Journal of Statistical Software*. <http://sekhon.berkeley.edu/papers/MatchingJSS.pdf>
- Tachou, Frank. 2002. Bulent Ecevit: From Idealist to Pragmatist. In *Political Leaders and Democracy in Turkey*, eds. Metin Heper and Sabri Sayari, Lanham: Lexington Books, pp. 107-125.
- Tachou, Frank. 1991. The Republican People's Party Party, 1945-1980. In *Political Parties and Democracy in Turkey*, eds. Metin Heper and Jacob M. Landa, New York: St Martin's Press, pp. 119-132.

Thomson Datastream. <http://www.datastream.com>

White, Jenny B. 2008. Islam and Politics in Contemporary Turkey In *The Cambridge History of Turkey, Volume 4: Turkey in the Modern World*, ed. Resat Kasaba, Cambridge: Cambridge University Press, pp. 357-380.

Zurcher, Erik J. 1997. *Turkey: A Modern History*. London: I.B. Tauris and Company

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

		Event 1 (2001)*			Event 2 (2002)*			Event 3 (2002)		
	N	July 6	July 9	July 10	May 17	May 20	May 21	June 26	June 27	June 28
Military Connection	17	-4.588	-0.438	-4.125	-4.629	0.996	3.361	-3.456	3.988	3.432
State Economic Enterprises	15	-8.521	0.316	-7.090	-6.671	2.908	3.679	-5.776	1.544	4.784
Opposition Connection	10	-4.849	1.283	0.617	-2.925	-0.536	2.245	-3.430	1.257	2.085
Other Connection	115	-7.429	-0.665	-4.416	-5.353	1.686	2.231	-4.794	3.452	2.366
Market Index ISE-100	100	-9.010	-1.188	-5.758	-5.430	1.431	1.245	-5.139	4.425	4.115

*Non consecutive days are on account of intervening weekend.

Table 2- Cumulative Abnormal Returns

	Event 1	Event 2	Event 3
Military linked Firms (n=17)	+5.037*** (1.228)	+1.661** (0.788)	+1.585* (0.897)
State Economic Enterprises(n=15)	-3.902* (2.199)	+1.878 (1.312)	-3.202 (4.109)
Opposition-linked Firms (n=10)	+5.858** (2.255)	+0.415 (1.384)	-2.738** (1.119)
Other connection (n=115)	-0.373 (0.523)	+0.248 (0.460)	-1.880*** (0.593)

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

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

	Military	Non-military	Difference
Technology	0.726	-3.640	-4.366
Food & Beverages	2.237	-0.537	-2.773
Auto	3.441	0.262	-3.179
Construction	3.604	-0.325	-3.930
Chemicals	1.030	-0.493	-1.079
Banking	5.641	-3.388	-9.029
Equity Funds	0.564	-0.379	-0.943
Non-life Insurance	0.293	-0.712	-1.005

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)							+3.671*** (0.946)
State Economic Enterprises	-4.503*** (1.475)	-8.938*** (2.467)	0.217 (1.504)	-4.787 (4.117)	-4.574*** (1.590)	-3.549** (1.700)	
Opposition	-1.583 (1.157)	0.821 (2.480)	-1.246 (1.540)	-4.323*** (1.391)	-1.548 (1.345)	-0.788 (1.307)	
Other	-3.430*** (0.653)	-5.410*** (1.317)	-1.414 (0.903)	-3.465*** (1.0655)	-3.606*** (0.743)	-2.720*** (0.805)	
Size						-0.587** (0.232)	
Log-Age						0.411 (0.621)	
Log- Dividend Yield						0.185 (0.115)	
R²	0.0356	0.155	0.0164	0.0278	0.0927	0.104	
N	471	157	157	157	471	471	390

Standard errors are reported in parentheses. *** significant at 1%, ** significant at 5%, * significant at 10%. Robust standard errors are used clustered around 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. Balance statistics for the latter is 0.965 (Kolmogorov-Smirnov bootstrap p-value). 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	0.868 (2.608)	-4.711*** (1.500)	-4.880*** (1.715)	-3.672** (1.671)
Opposition	1.209 (2.938)	0.664 (1.496)	1.045 (1.487)	-0.365 (1.345)
Other	-0.446 (1.908)	-2.499*** (0.938)	-2.272** (0.969)	-2.872*** (0.805)
Size	0.139 (0.621)	-1.212*** (0.349)	-1.359*** (0.317)	-0.573** (0.240)
Log age	-0.272 (0.805)	0.181 (0.828)	0.279 (0.804)	0.406 (0.655)
Log Dividend Yield	0.0453 (0.193)	0.393*** (0.116)	0.467*** (0.130)	0.196 (0.117)
R²	0.272	0.177	0.156	0.109
N	130	471	471	438

Standard errors 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 Kutsan	Paper
Ihlas Gayrimenkul Yatırım Ortaklığı	Real estate

Others

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
Pinar Sut	Food
Selçuk Gıda	Food
Altınyag Kombinaları	Food
Anadolu Efes	Food
Ersu Gıda	Food
Pinar Su	Food
Erbosan Erciyes 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

Others (continued)	
Anadolu Isuzu	Auto
Alarko Carrier	Auto
Klimasan Klima	Auto
Parsan	Auto
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

Others(continued)	
Pimas Plastik infaat	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
Others (continued)	
Ak Enerji	Energy
Zorlu Enerji	Energy
Dogan Holding	Energy
Petrol Ofisi	Energy
Ayan Enerji	Energy
Isik Ambalaj	Paper
Ipek Matbaa	Paper
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 Kiymetler Y.O	Equity Funds

Others (continued)	
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	+6.773
Netas Telecommunications	Technology	-2.514
Tukas	Food	+11.692
Brisa Tires	Auto	+8.133
Goodyear	Auto	+7.132
Adana Cement	Construction	+11.394
Akcansa Cement	Construction	-0.678
Bolu Cement	Construction	+12.142
Cimsa Cement	Construction	-0.243
Mardin Cement	Construction	+5.006
Nuh Cement	Construction	+1.273
Oysa Nigde Cement	Construction	-0.857
Unye Cement	Construction	+11.507
Hektas	Chemicals	+6.227
Akbank	Banking	+6.451
Sabancı Holding	Equity Funds	+3.843
Aksigorta	Non-life Insurance	-1.656

Event 2

<u>Company Name</u>	<u>Industry</u>	<u>CAR</u>
Aselsan	Technology	+0.184
Netas Telecommunications	Technology	-1.670
Tukas	Food	-2.473
Brisa Tires	Auto	+4.554
Goodyear	Auto	-0.0173
Adana Cement	Construction	-1.337
Akcansa Cement	Construction	+5.299
Bolu Cement	Construction	+4.973
Cimsa Cement	Construction	+5.170
Mardin Cement	Construction	+1.275
Nuh Cement	Construction	+4.186
Oysa Nigde Cement	Construction	+2.869
Unye Cement	Construction	+8.655
Hektas	Chemicals	-0.5983
Akbank	Banking	-0.727
Sabancı Holding	Equity Funds	-1.631
Aksigorta	Non-life Insurance	-0.308

Event 3

<u>Company Name</u>	<u>Industry</u>	<u>CAR</u>
Aselsan	Technology	+3.944
Netas Telecommunications	Technology	-2.363
Tukas	Food	-2.509
Brisa Tires	Auto	+1.068
Goodyear	Auto	-0.242
Adana Cement	Construction	+1.707
Akcansa Cement	Construction	+2.372
Bolu Cement	Construction	+2.079
Cimsa Cement	Construction	+4.233
Mardin Cement	Construction	-2.449
Nuh Cement	Construction	+0.435
Oysa Nigde Cement	Construction	+7.476
Unye Cement	Construction	+0.212
Hektas	Chemicals	-2.540
Akbank	Banking	+11.199
Sabancı Holding	Equity Funds	-0.520
Aksigorta	Non-life Insurance	+2.844

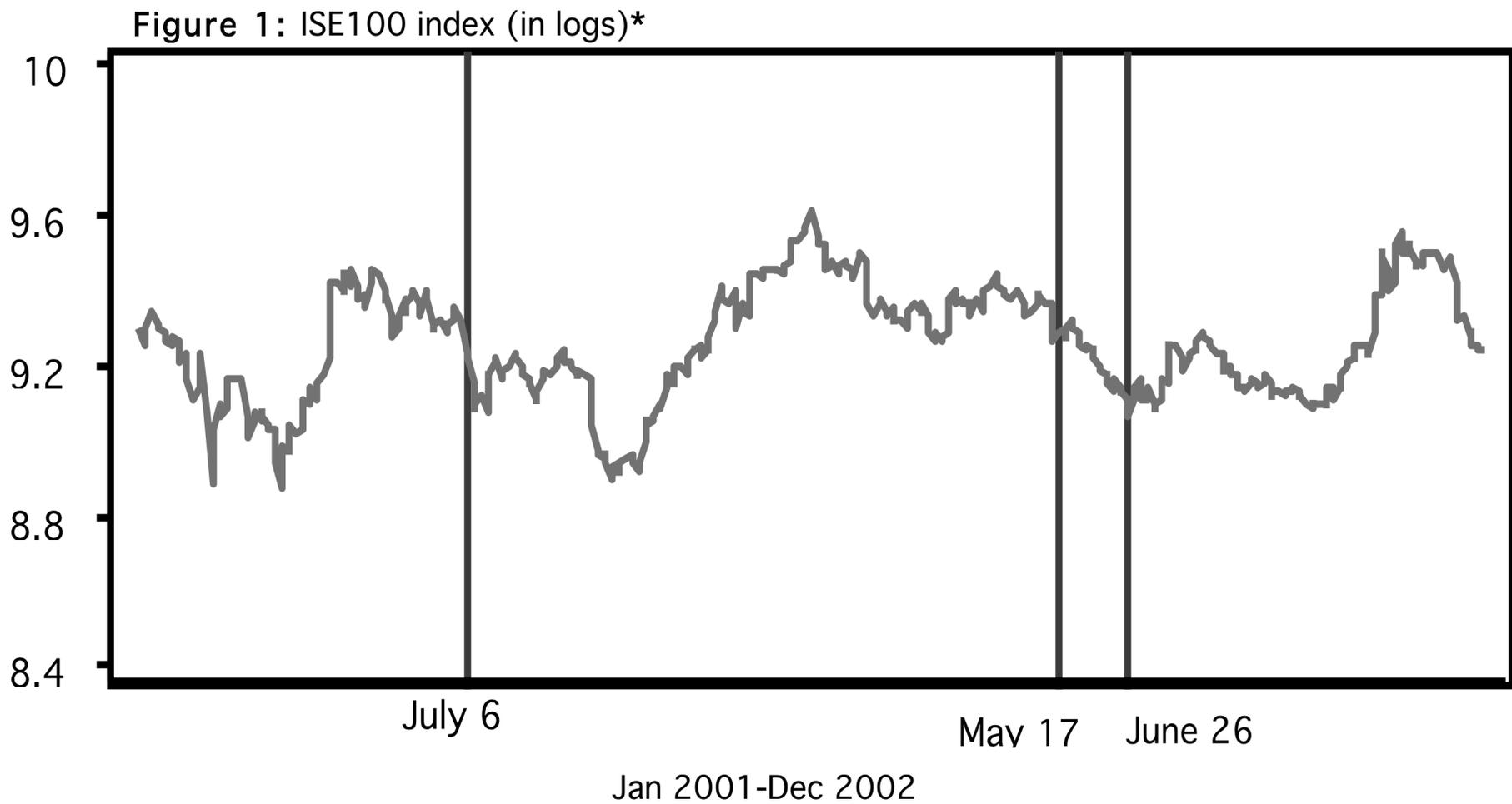
Appendix Table 3: Summary Statistics for Control Variables

	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Minimum</u>	<u>Maximum</u>
<u>Size</u>	471	3.299	1.0707	1	4
<u>Log-Age</u>	471	3.142	0.732	0.6938	4.511
<u>Log Dividend Yield⁺⁺</u>	471	-2.412	3.031	-4.605	4.139
<u>Yield Dummy</u>	390	0.367	0.483	0	1

⁺⁺ 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

	Day -1	Day -2	Day -3	Day 1	Day 2	Day 3	Day +1	Day +2	Day +3	Day +4
Event 1	-3.131	-0.635	0.844	-9.01	-1.188	-5.758	-7.809	4.496	-1.992	1.557
Event 2	-0.474	-1.823	-1.607	-5.429	1.431	1.245	-2.684	1.612	1.114	2.798
Event 3	0.448	-2.558	1.226	-5.139	4.425	4.115	1.973	-4.496	-1.386	0.573



* 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

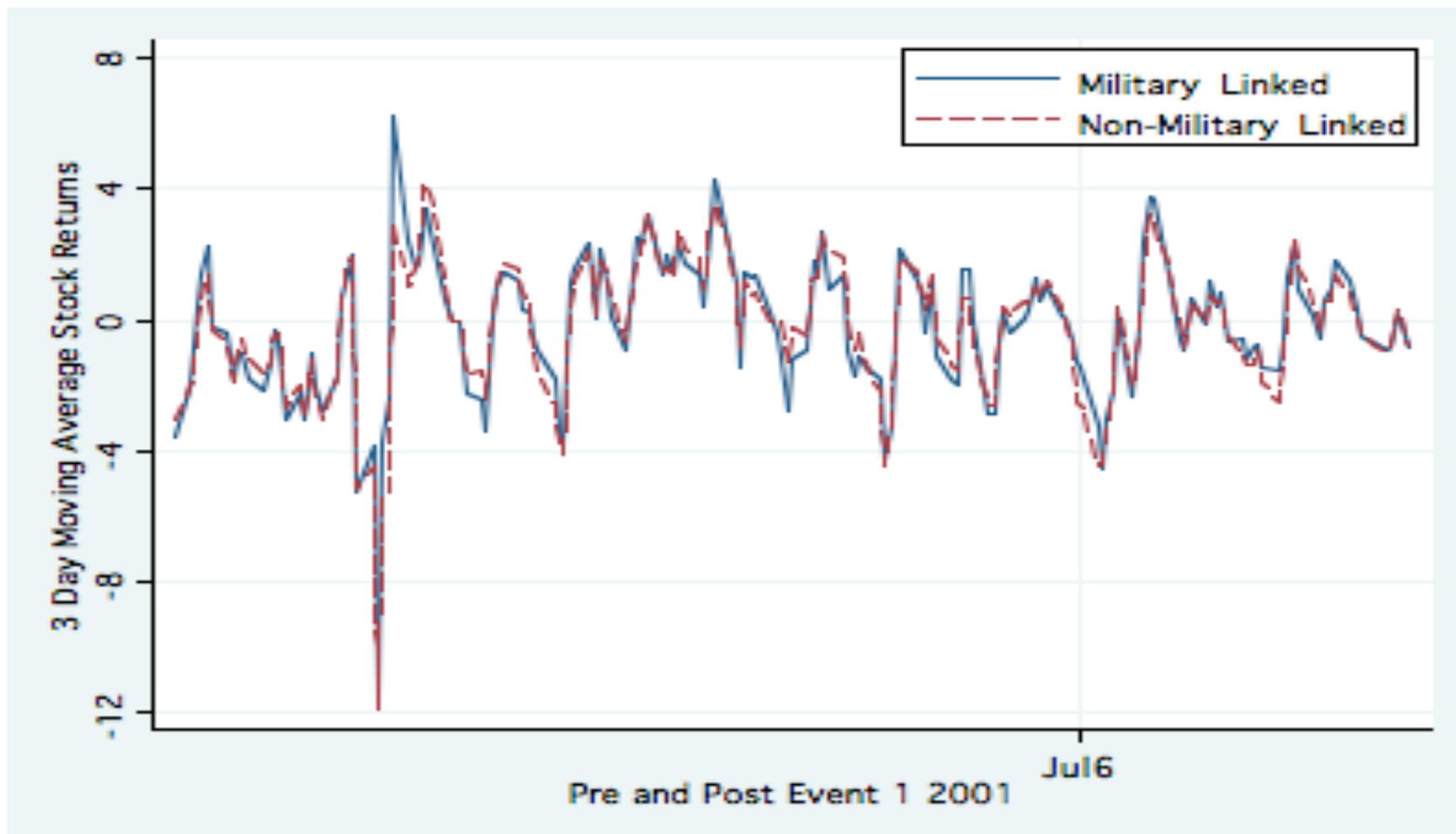


Figure 3: Comparison of Military and Non-Military Share Returns (3 day Moving Average) Event 2

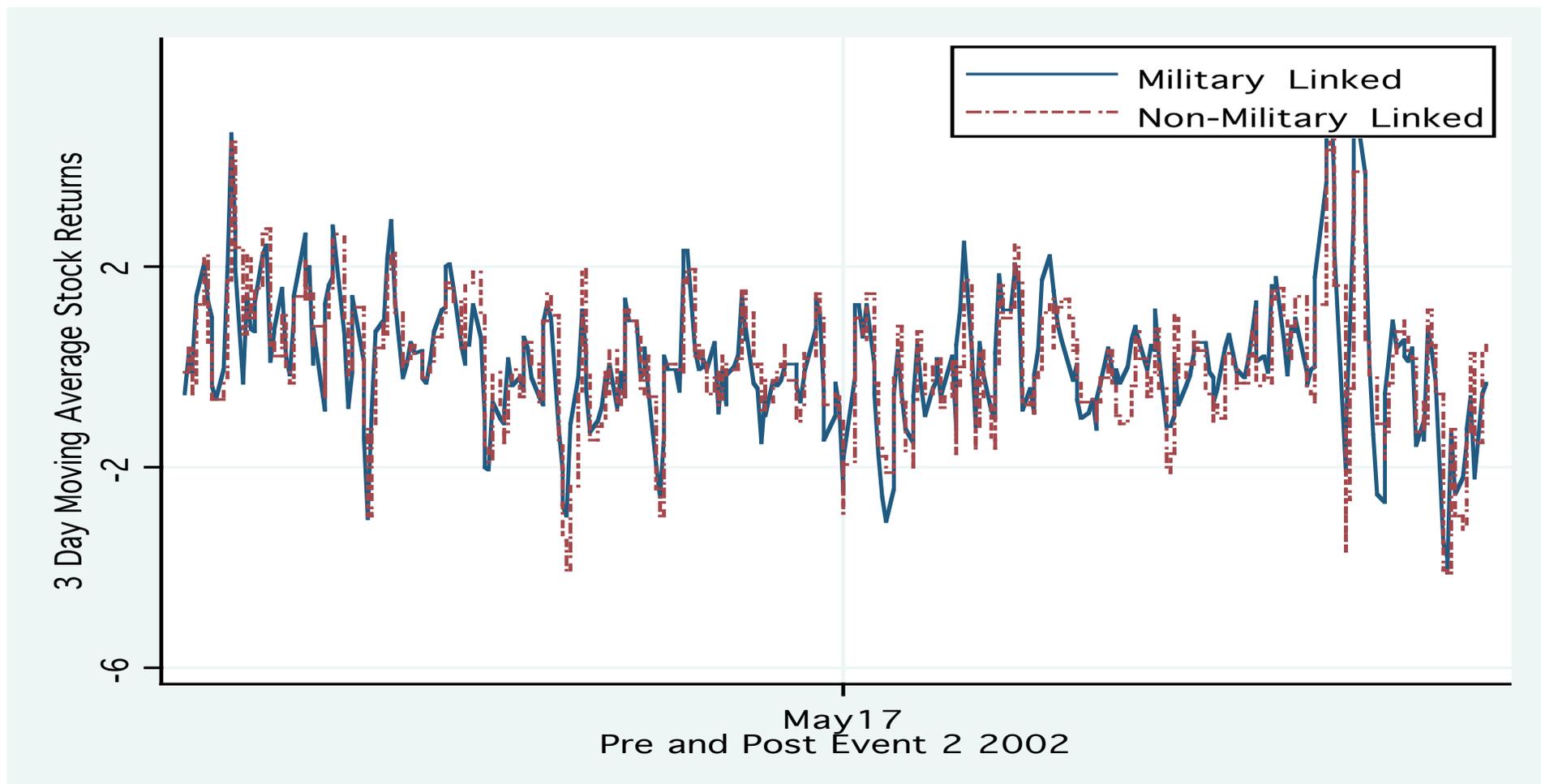


Figure 4: Comparison of Military and Non-Military Share Returns (3 day Moving Average) Event 3

