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Political connections and depositor discipline

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Mustafa Disli, Koen Schoors and Jos Meir

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Mustafa Disli, Koen Schoors and Jos Meir

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Abstract

We examine the effects of political connections on depositor discipline in a sample of Turkish banks. Banks with former members of parliament at the helm enjoy reduced depositor discipline, especially if the former politician's party is currently in power – less so if the former politician served as a minister. Banks with structural problems are more likely to appoint former politicians, but our results remain robust after controlling for selection effects. Ministers may reduce depositor discipline less because they signal severe problems and because the additional government deposits they bring to the bank during their term tend to leave with them.

Keywords: Depositor discipline, political connections, banks

JEL: G1, G2, D7

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1 Introduction

For the sake of financial stability, nearly every aspect of banking is shaped by regulation. Government policy affects banks' competitive position, profitability, and risk taking behavior by imposing entry and exit barriers, by setting deposit rate ceilings, by directly restricting bank activities to a safety set, by guaranteeing deposits, and by changing tax rules. Banks' activities and risk taking behavior may also be restricted indirectly by capital, liquidity or leverage requirements, accompanied by appropriate monitoring and supervision provisions to ensure enforcement of regulations. This set of government-imposed constraints provides strong incentives for banks to develop a corporate political strategy that addresses some of the constraints. This is especially the case if institutions are weak enough for regulatory bodies to be subject to political capture (Hellman et al. 2003).¹ Further, the empirical literature suggests that highly concentrated and regulated industries (e.g., Masters and Keim 1985; Schuler et al. 2002) characterized by a few large firms (Salamon and Seigfried 1977) are more likely to engage in lobbying and campaign activities.² This suggests that the banking industry, which is typically highly concentrated, regulated and dominated by big banking firms, is particularly suited to establishing political connections and other lobbying activities. One good example of political capture is provided by Laeven (2004) and Demirgüç-Kunt et al. (2008), who find that generous deposit insurance schemes are adopted mainly by countries with poorly capitalized banks and result from extensive lobbying efforts.

Besides influencing policymaking by lobbying, banks may even appoint politically connected directors in order to extract more direct and bank-specific rents from the government, which would not otherwise be available to the bank. In particular, a strong political relationship can be considered an important intangible asset for dismantling bureaucratic obstacles, attracting public deposit accounts, and receiving preferential treatment in the form of bank-specific reduced supervisory oversight, regulatory forbearance or even bailouts. Depositors may even perceive the presence of politically connected banks' directors or chairmen as a signal of an implicit government guarantee. As a consequence of

¹ Especially in weak institutional environments, the state has been viewed as a predatory instrument for transferring resources from one group to another (e.g., North 1981, Shleifer and Vishny 1998, Olson 2000). Hellman et al. (2003) report the emergence of a capture economy in many transition countries, where politicians sell rent-generating benefits to private firms. Acemoglu and Johnson (2005), who find that institutions that protect against expropriation by politicians and other powerful groups have a first order effect in explaining income per capita, have further emphasized the importance of strong institutions.

² Consistent with these conjectures, Stigler (1971) argues that industries with substantial political influence and cohesiveness circumvent/disrupt government regulation to its advantage.

cheap government funding, more flexible supervisory and regulatory boundaries and the presence of an implicit government guarantee, politically connected banks may be expected to be subject to less market discipline from depositors. The aim of this paper is to test the conjecture that political connections reduce depositor discipline.

The idea behind market discipline is that investors in bank liabilities actively reward or punish banks in regard to their risk taking behavior. In the case of excessive risk taking, investors can demand higher returns on bank liabilities or withdraw their funds. The disciplining of banks involves both price and quantity adjustments in bank liabilities. By making risk taking more costly for banks, depositors reduce banks' incentive to take excessive risk, which should promote the stability of the financial system. This incentive-compatible regulatory design has been greatly stimulated by the Basle II reforms, aimed in part at remedying the moral hazard cost of the mispriced government guarantees inherent in the regulatory paradigm of 1934–1984, which featured safety nets and crisis prevention. Market forces can also remedy other deficiencies of the supervisory framework, such as information asymmetries. Even though bank supervisors can conduct on-site examinations, markets may jointly know more than the inspections can reveal.

Much of the evidence of depositor discipline is from countries with mature and relatively transparent banking sectors³. Both price and quantity discipline have been shown to exist in the US banking sector, particularly with respect to deposits that are not fully insured. A recent study using cross-country panel data from thirty-two OECD countries confirms the presence of disciplining behavior in other mature institutional environments (Nier and Baumann, 2006). Demirgüç-Kunt and Huizinga (2004) use data from a sample of both OECD and developing countries and find a negative relationship between the implicit cost of bank funds and prior period measures of bank capitalization, profitability and liquidity. The evidence for quantity disciplining is less convincing in their study. Martinez Peria and Schmukler (2001) investigate Central and Latin American countries (Argentina, Chile and Mexico) and demonstrate that banks' deposits increase and their deposit rates generally decrease with a reduction in the percentage of non-performing loans and improvements in liquidity and capitalization. Karas et al. (2010) show that surprisingly sophisticated and capital-based depositor discipline is also present in a European emerging market – Russia.

By verifying whether depositors impose less discipline on politically connected banks, this paper connects two hitherto separate strands of the literature. The deposit insurance literature suggests that deposit insurance entails a tradeoff between greater protection

³ See, amongst others, Flannery and Sorescu 1996, Park and Peristiani 1998, Calomiris and Powell 2001, Evanoff and Wall 2001, Goldberg and Hudgins 2002, Maechler and McDill 2003, and Sironi 2003.

against bank runs and an increasing propensity of banks to take on additional risk, because depositors no longer have incentives to monitor banks and, hence, do not claim an interest payment commensurate with the bank's risk choice. For instance, Demirgüç-Kunt and Detragiache (2002) find evidence that explicit deposit insurance schemes tend to increase the likelihood of banking crises in a sample of 61 countries over 1980–1997. Most empirical studies do confirm that explicit deposit insurance indeed undercuts market discipline. The cross-country study conducted by Demirgüç-Kunt and Huizinga (2004) shows that the introduction of a blanket guarantee disturbs market incentives too deeply to discipline banks via deposit rates. Karas et al. (2013) conduct a natural experiment to show convincingly that this is also the case for Russia. On the other hand, Martinez Peria and Schmukler (2001) provide evidence that small insured depositors still react to bank risk after the introduction of deposit insurance. This indicates that depositors are not only concerned about individual bank insolvency, but also about the solvency of the insurance fund and willingness of the government to support the insurer (Flannery 1998). These insights may also extend to the effect of political connections on market discipline. If political connections imply an implicit government guarantee, or increase the likelihood of bailout in any other way, they may disturb efficient price formation in deposit markets and hence reduce depositor discipline. This will, however, only occur if depositors believe political connection will help the connected bank to secure government support.

Our work is also related to an emerging body of research that focuses on the economic value of political connections. Fisman (2001) finds that stock prices of firms connected to the Suharto regime are negatively affected by rumors about Suharto's health. In a cross-country setting, Faccio (2006) examines internationally active firms and finds a positive value effect from the entry of a shareholder or director into politics, whereas politicians joining company boards do not increase firm value.⁴ Further, it is documented that firms with political ties enjoy preferential treatments such as, soft budget constraints (Claessens et al. 2008 for Brazil; Khwaja and Mian 2005 for Pakistan), easier access to government contracts (Agrawal and Knoeber 2001), favorable IPO conditions (Francis et al. 2009), relaxed regulatory oversight (Stigler 1971; De Soto 1990) and bailout options (Faccio et al. 2006). In addition, Faccio (2006) finds a greater prevalence of favorable

⁴ Other papers that found a positive relationship between political connectedness and firm valuation include inter alia: Ferguson and Voth (2009) for Nazi Germany and Johnson and Mitton (2003) for Malaysia.

treatment in association with political connections in countries with weak property rights regimes.⁵

Although, on balance, the literature favors the view that close ties with the government help in finding a helping hand, there are some studies that come to the opposite conclusion. In a cross-country setting, Boubakri et al. (2008) observe a negative relationship between political connectedness and accounting performance. Fan et al. (2007) find that newly privatized Chinese firms with politically connected CEOs are associated with poor post-IPO performance. Qian et al. (2011) find that minority shareholders are expropriated by controlling owners through their political connections. Bertrand et al. (2007) show that connected French firms pursue political goals by creating jobs at the expense of profitability. These results can be explained by the grabbing hand view (Shleifer and Vishny 1998), i.e., former politicians are more inclined to divert resources for political and personal objectives than to pursue maximum value of the firm. This paper differs from the above studies by examining the economic effect of a bank's rather than a firm's political connections. We focus on the mechanism of moral hazard. Depositors of politically connected banks may exert less discipline on their banks, which helps the connected bank to expropriate rents in the form of an expanding deposit base and lower funding costs, as compared to its peers.

We employ a unique dataset of 79 Turkish banks for the period 1980 to 2008 that comprises data on balance sheets, income and expense statements, ownership and political connections. Political connections for firms in most of the developing countries like Turkey are mainly established by putting politicians on their payroll. This gives us a direct measure of the political connectedness of the board of directors and is readily observable to depositors, so that it can affect market discipline. More indirect ways of exerting political power, like electoral campaign contributions, are not likely to be observable by depositors in most countries and so cannot be expected to impact depositor discipline.

We find that Turkish depositors discipline their banks through the capital ratio. Banks with lower capital exhibit slower deposit growth and pay their depositors higher deposit rates. The introduction of full-blanket deposit insurance fails to reduce depositor discipline significantly, suggesting that depositors had less than complete trust in the government's pledge to guarantee their deposits. Political connections affect market discipline. Specifically, depositors exert less discipline on their banks when banks' top executives

⁵ The evidence provided by Roberts (1990), Goldman et al. (2009) and Cooper et al. (2010) suggests that the value of political connections can also be important for industrialized countries like the US, where markets are well developed and shareholders enjoy a higher level of legal protection.

were formerly elected to parliament, unless these served as a cabinet minister. These effects are stronger if the former politician's party is currently in power, lending support to the thesis that the impact is really driven by political connections to a ruling party. Hiring a former cabinet member is less effective in reducing market discipline because depositors may perceive it as a signal of implicit structural problems that the bank can only solve with the aid of a former-minister's political clout. In addition, the new government deposits brought by the minister are also fickle and tend to leave the bank with the minister.

This article is organized as follows. The next section describes the sample of banks, discusses the methodology of the depositor discipline model, and presents the baseline results. In Section 3, we test whether the blanket guarantee scheme affected depositor discipline. In Section 4, we allow for interaction between bank fundamentals and political connection. Section 5 presents robustness checks and offers some explanations for the results. In Section 6, we examine whether there is a disparity in depositor discipline as between different types of agents. The last section contains concluding remarks.

2 Data and baseline model of depositor discipline

We use an unbalanced panel of 79 Turkish banks from various issues of *Banks in Turkey*, published by the Banks Association of Turkey. This publication includes balance sheets and income statements for these banks for 1980–2008. We chose the year 1980 as a starting point because in July of that year the government embarked on a program of financial liberalization and removed deposit rate ceilings on loans and deposits in order to increase competition in the banking sector. In Appendix 1, we present an overview and short history of the Turkish banking industry. We use only public information that is available to depositors.⁶ Of the 79 banks, 33 banks were classified as foreign banks, 50 banks were domestically owned commercial banks and 13 were classified as state-owned deposit taking banks.⁷ This study concentrates on commercial banks, as they function as universal banks (offering a broad range of products and services such as deposit-taking, commercial lending, trading financial instruments, insurance, leasing and investment banking), and hence operate relatively homogeneously. We exclude investment banks and State Deposit Insurance Fund banks (SDIF banks) from the sample. Our methodological approach is (i) to in-

⁶ Our data structure is adjusted for mergers & acquisitions by generating a new bank after tracing such events via The Banks Association of Turkey, which offers main historical events during the lifetime of operating and closed banks.

⁷ The sum exceeds 79 because we account for changes in ownership type over the sample period.

fer whether market discipline is present using evidence from both deposit rate and deposit growth regressions, (ii) to address the question whether a full blanket guarantee affects market discipline, and (iii) to assess whether political connectedness hampers depositors' incentives to monitor and discipline their banks. Methodological details are provided in the concerned sections.

2.1 A baseline model of depositor discipline

We first examine all the bank fundamentals, in order to discover which variables depositors focus on when disciplining their banks. The most convincing evidence of depositor discipline would emerge if depositors withdraw their funds whenever the asset quality of their bank is no longer satisfactory. Consequently, because of this upward shift of the deposit supply curve, the bank will face deposit outflows and climbing deposit rates. This is why analyzing both the reactions of deposit prices and quantities is important, as only such combined information will enable us to disentangle depositor discipline from demand shifts and regulatory shocks (Park 1995, Martinez Peria and Schmukler 2001, Ioannidou and de Dreu 2006, Karas et al. 2010). A positive relation between bank risk and deposit rates could for example also reflect a demand effect rather than discipline, with risky banks pursuing a more aggressive expansion strategy to meet new loan demand. But this would be revealed by looking at the quantity regression, where the relation between bank risk and deposit quantity would also be positive for a demand effect but negative for true depositor discipline.

Using reduced form equations, the following baseline models are estimated, in which we measure the reaction of deposits (Eq. 1) and deposit rates (Eq. 2) to bank risk taking, respectively:

$$DEPG_{i,t} = \alpha_i + \alpha_1 \mathbf{Risk}_{i,t-1} + \alpha_2 \mathbf{Controls}_{(i),t} + \varepsilon_{i,t} \quad (1)$$

$$IDEP_{i,t} = \beta_i + \beta_1 \mathbf{Risk}_{i,t-1} + \beta_2 \mathbf{Controls}_{(i),t} + \mu_{i,t} \quad (2)$$

The dependent variables are the traditional measures of market discipline. $DEPG_{i,t}$ is the first difference of the log of deposits for bank i in period t and $IDEP_{i,t}$ is the implicit interest rate on deposits of bank i at time t . To avoid non-stationarity, we use the growth rate (rather than level) of total deposits. Table 1 provides summary statistics of the numerical measures of the dependent variables, bank fundamentals and bank controls for the

sample period 1980–2008. We notice that the average yearly percentage change in deposits has been positive across banks and over time (16.20%), but with a high degree of dispersion (58.48%) and a substantial difference between minimum and maximum values. On the other hand, the implicit interest rate reveals that the banking sector has historically paid high deposit rates.

In line with the literature, **Risk** represents a vector of accounting measures of bank-specific risk characteristics (e.g., Park and Peristiani 1998, Martinez Peria and Schmukler 2001).⁸ This vector comprises one-year lags because of the delay in publication of balance sheet and income statement information. Furthermore, this lag structure helps to mollify our concerns about endogeneity. The capital ratio (*Equity*) is the ratio of book value of equity to total assets. This ratio tells us how secure is the cushion against declining bank asset values, and informs outsiders of the solvency of the bank. We expect that this variable will be positively related to deposits and negatively related to deposit rates, ceteris paribus. The summary statistics in Table 1 reveal that the average capital ratio in our sample is 12%. The *Liquidity* variable is the ratio of liquid assets (such as cash, central bank debt and short-term government securities) to total deposits. As this ratio measures the bank's ability to cover deposit withdrawals, we expect to see a positive relationship with deposits and a negative one with deposit rates. The *Bad loans* variable, which proxies for a riskier asset management strategy, is the ratio of loans under follow-up to gross loans. Because a high non-performing loans ratio is associated with higher credit risk, all else equal, we expect this ratio will have a negative impact on deposit growth and positive impact on the interest rate. *ROA*, profit after taxes divided by total assets, proxies for management's ability to generate profits from the bank's assets. We expect, ceteris paribus, this ratio will have a positive impact on deposit growth and a negative impact on the deposit rate. To moderate the inordinate influence of extreme values, we winsorize the dependent and bank risk variables at the 2% level in both tails.

⁸ Relying on market information instead of accounting data would severely restrict our dataset, since most banks in our sample are not listed.

Table 1 Summary statistics

	Description	Mean	Std. Dev.
Dependent variables			
DEPG	The first difference of the log of real (expressed in 1987 prices) deposits	0.1620	0.5848
IDEP	Annual interest expenses divided by total deposits	0.2860	0.3177
Bank risk variables			
Equity	Ratio of book value of equity to total assets	0.1198	0.1267
Liquidity	Ratio of liquid assets (cash, central bank debt, and short-term securities) to total deposits	0.7018	1.0631
Bad Loans	Ratio of loans under follow-up to gross loans	0.1128	0.3205
ROA	Ratio of profit after taxes to total assets	0.0267	0.0510
Political variables			
PCON	Dummy variable which takes the value of 1 when bank's top executive was previously a member of Turkish parliament and/or served as a cabinet member or prime minister, and otherwise 0	0.0857	0.2713
MIN	Dummy variable which takes the value of 1 when a bank's top executive was formerly a cabinet or prime minister, and otherwise 0	0.0631	0.2353
GOV	Dummy variable which takes the value of 1 when the (last) party of the former politician is currently in the government, and otherwise 0	0.0452	0.2011
POLBANK	Dummy variable that equals to 1 for banks that ever hired a former politician in the sample period, and otherwise 0	0.3243	0.4682
Control variables			
Size	Natural logarithm of the book value of total assets (expressed in 1987 prices)	12.2648	2.0765
Age	The number of years the bank exists	37.4472	32.3565
Emplbr	Ratio of total number of employees to total number of branches	36.6424	141.0743
Fragment	Monthly weighted number of parties in the government in one specific year	1.8635	1.1167
Xordin	Dummy variable equals to 1 during the extraordinary military government period (1981-1983), and otherwise 0	0.0920	0.2891
Bcycle	Growth rate of real gross domestic product	0.0426	0.0425
Crisis	Banking crisis dummy variable, which takes the value of 1 in 1982, 1991, 1994, and 2000, and otherwise 0	0.1508	0.3580
Inflation	Annual change in the consumer price index	0.5657	0.2707
Exchange rate change	Annual change in the Turkish Lira/US Dollar parity	0.5425	0.4157
State-banks	Banks that are predominantly owned (> 50% of shares) by the government	0.1357	0.3426
Foreign-banks	Either branches of international operating banks, or banks predominantly owned by non-residents.	0.3386	0.4734

Strong evidence of market discipline emerges when the signs of the estimated coefficients of bank fundamentals differ in the two equations, for example for capitalization $\alpha_1 > 0$ and $\beta_1 < 0$. The disturbance terms $\varepsilon_{i,t}$ and $\mu_{i,t}$ are independently distributed with mean zero and variance $\sigma_{i,t}^2$. Following most prior research, we estimate a model using bank fixed effects, α_i for the deposit reaction and β_i for deposit rate reaction, to control for the unobserved heterogeneity of banks.

The **Controls** vector contains other bank-specific control variables and macro-political variables potentially affecting the reaction variables. The variable *Size* is the natural logarithm of the book value of total assets expressed in terms of 1987 prices. The variable *Age*, used to measure institutional maturity, is the number of years of the bank's existence. The variable *Emplbr* is the average number of employees per branch and is used as a metric of bank service quality. Several macro-political variables are included in the model: a government fragmentation variable (*Fragment*), a variable that captures extraordinary military backed governments (*Xordin*), the growth rate of real gross national product (*Bcycle*), to control for business cycle effects, and a banking crisis dummy variable (*Crisis*), the annual change in the consumer price index (*Inflation*), and the vulnerability of the banking sector to capital-outflows triggered by foreign exchange risk (*Exchange rate change*). *Fragment* measures the number of government-parties and is equal to the monthly weighted number of parties in the government in a particular year. In our sample there was one episode of military backed governments: the period 1981–1983, due to a military coup. In line with Demirgüç-Kunt and Detragiache (2002), the banking crisis dummy variable (*Crisis*) takes the value of 1 in 1982, 1991, 1994 and 2000 and 0 in the other years. During the sample period, the inflation rate and the exchange rate were volatile, although recently the government has succeeded in reducing inflation to single digit numbers and stabilizing the currency. The *Exchange rate change* is the annual change in the Turkish Lira/US Dollar parity. As in Barajas and Steiner (2000) and Mondschean and Opiela (1999), we address the issue of bank ownership in market discipline. We differentiate between public, private and foreign banks: public banks (*State-banks*) are predominantly owned by the government, private banks are domestically owned commercial banks with more than 50% of shares owned by Turkish residents, and foreign banks (*Foreign-banks*) are either branches of foreign banks or Turkish banks with at least 50% of their shares owned by non-residents. Private domestic banks serve as the reference group.

2.2 Estimation results

Estimation results of Eq. 1 and Eq. 2 are summarized in Table 2. Panel A and Panel B show the results for the quantity and price equations, respectively. In the first four columns of each panel, the four sets of bank risk variables are estimated separately; while the last column of each panel presents their joint estimations. If we assume a positively sloped deposit supply curve and a negatively sloped deposit demand curve, based on the effects of bank fundamentals on deposit growth and deposit rate, we can infer whether there is a strong presence of market discipline (Park 1995). In particular, we are interested in the identification of variables that cause deposit supply shifts. An increase in the capital ratio (*Equity*) leads to an increase in deposit growth and a decrease in deposit rates, i.e., the major effect is a rightward shift of the deposit supply curve ($\alpha_1 > 0$ and $\beta_1 < 0$). In contrast, a higher liquidity position of the bank (*Liquidity*) results in a higher deposit growth, but also in a higher deposit rate, suggesting that liquidity is predominantly a demand shifter, rather than a supply shifter. Note that the two remaining risk variables (*Bad loans* and *ROA*) also fail to produce net shifts of the deposit supply curve.

It turns out that only the capital ratio gives convincing evidence of the presence of depositor discipline, since it conclusively leads to a shift of the deposit supply curve (i.e., statistically significant with the expected and opposite signs in the two equations). Specifically, depositors are willing to supply more funds at lower deposit rates to better-capitalized banks. This suggests that depositors put most weight on the capital ratio in evaluating banks' riskiness. This is not surprising since the capital ratio is a simple but a very powerful indicator of bank risk: a high capital ratio serves as a secure cushion against declining bank asset values. It is also a signal to outsiders about the solvency position of the bank as it faces credit, liquidity, operational, off balance sheet, legal and macroeconomic risks. Consequently, more than any other measure, the capital ratio is extensively used as a proxy for bank risk taking in market discipline studies, in both developed and emerging market economies (e.g., Cook and Spellman 1994, Hannan and Hanweck 1988, Park and Peristiani 1998, Martinez Peria and Schmukler 2001, Karas et al. 2010).

Most bank-specific control variables enter both the deposit growth equation and the deposit rate equation significantly. The *Size* variable shows us that the larger banks have a competitive advantage, as they attract on average more deposits while not having to pay higher deposit rates. This probably means that depositors perceive larger banks as "too big to fail", as they perform a key role in the functioning of financial markets and the pay-

Table 2 Testing for the presence of depositor discipline

	Panel A					Panel B					
	(1)	(2)	GDEPR		(5)	(1)	(2)	IDEP		(5)	
			(3)	(4)				(3)	(4)		
Equity	1.9763*** (0.284)				1.8885*** (0.375)	Equity	-0.2334** (0.108)			-0.3433*** (0.125)	
Liquidity		0.1633*** (0.031)			0.1329*** (0.036)	Liquidity		0.0651*** (0.020)		0.0745*** (0.020)	
Bad loans			0.1569*** (0.053)		0.0657 (0.059)	Bad loans		-0.0287 (0.027)		-0.0127 (0.020)	
ROA				0.7661 (0.581)	-0.1669 (0.635)	ROA			0.1893 (0.206)	0.1989 (0.179)	
Size	0.1738*** (0.030)	0.1175*** (0.026)	0.1202*** (0.026)	0.0998*** (0.026)	0.1670*** (0.029)	Size	0.0129 (0.017)	0.0236 (0.015)	0.0151 (0.019)	0.0178 (0.017)	0.0078 (0.016)
Age	-0.0182*** (0.005)	-0.0180*** (0.004)	-0.0153*** (0.004)	-0.0145*** (0.004)	-0.0162*** (0.004)	Age	-0.0078*** (0.002)	-0.0086*** (0.002)	-0.0072** (0.003)	-0.0074*** (0.003)	-0.0072*** (0.002)
Emplbr	0.0002*** (0.000)	0.0002*** (0.000)	0.0003*** (0.000)	0.0002*** (0.000)	0.0002*** (0.000)	Emplbr	-0.0000 (0.000)	-0.0001** (0.000)	-0.0000** (0.000)	-0.0000* (0.000)	-0.0001* (0.000)
Fragment	0.0203 (0.022)	0.0463** (0.021)	0.0228 (0.022)	0.0286 (0.023)	0.0258 (0.021)	Fragment	0.0371** (0.015)	0.0435*** (0.013)	0.0348** (0.014)	0.0360** (0.015)	0.0436*** (0.013)
Xordin	0.2308*** (0.067)	0.1184* (0.070)	0.1343** (0.067)	0.1238* (0.069)	0.2420*** (0.068)	Xordin	-0.0705*** (0.025)	-0.0531** (0.023)	-0.0553** (0.024)	-0.0527** (0.025)	-0.0677*** (0.024)
Bcycle	0.1332 (0.494)	-0.1355 (0.508)	0.0715 (0.516)	0.0068 (0.510)	0.0589 (0.490)	Bcycle	-0.7922*** (0.236)	-0.8806*** (0.208)	-0.7626*** (0.231)	-0.7797*** (0.234)	-0.8890*** (0.205)
Crisis	0.0485 (0.054)	0.0091 (0.056)	0.0450 (0.059)	0.0405 (0.058)	0.0185 (0.055)	Crisis	0.0355* (0.019)	0.0203 (0.021)	0.0327 (0.020)	0.0354* (0.019)	0.0173 (0.022)
Inflation	0.0227 (0.120)	-0.2813** (0.127)	-0.1939 (0.131)	-0.2584* (0.130)	-0.0224 (0.115)	Inflation	0.0473 (0.080)	0.0608 (0.074)	0.0625 (0.078)	0.0752 (0.079)	0.0062 (0.071)
Exchange rate change	0.0577 (0.069)	0.0528 (0.068)	0.0726 (0.077)	0.0752 (0.077)	0.0549 (0.063)	Exchange rate change	-0.1043** (0.042)	-0.1146*** (0.040)	-0.0996** (0.040)	-0.1052** (0.041)	-0.1083*** (0.041)
State-banks	-0.5779*** (0.210)	-0.5033** (0.196)	-0.5570*** (0.205)	-0.5181*** (0.194)	-0.5763*** (0.209)	State-banks	0.1711** (0.080)	0.1687** (0.078)	0.1738** (0.078)	0.1632* (0.083)	0.1847** (0.088)
Foreign-banks	-0.0569 (0.086)	-0.1234 (0.106)	-0.0730 (0.097)	-0.0829 (0.094)	-0.0972 (0.101)	Foreign-banks	0.1326* (0.078)	0.1169* (0.064)	0.1337* (0.077)	0.1338* (0.077)	0.1083* (0.062)
Bank-fixed effects	Yes	Yes	Yes	Yes	Yes	Bank-fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1,252	1,252	1,237	1,252	1,237	No. of observations	1,256	1,252	1,239	1,256	1,237
R ²	0.144	0.108	0.048	0.046	0.184	R ²	0.054	0.100	0.042	0.048	0.113

Standard errors (in parentheses) are corrected for clustering at bank level. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively

ment system. Furthermore, as evidenced by De Jonghe et al. (2012), the larger Turkish banks manage their portfolio risk more efficiently and achieve a more optimal risk/return profile. We notice that Turkish depositors are eager to deposit their funds and accept lower deposit rates in exchange for a better quality of client oriented bank service (*Emplbr*). In order to gain market share in the deposit market, newer banks offer higher deposit rates than older banks (*Age*) in order to attract more deposits. Political fragmentation (*Fragment*) is related to higher deposit growth and higher deposit rates, suggesting that depositors are willing to save more in times of political uncertainty, but not without requiring a risk premium to compensate for the higher general uncertainty. All else equal, crisis years do not significantly impact the deposit or price equation. We observe that deposits increase during the military intervention period (*Xordin*), probably because depositors consider deposit accounts a safe haven in troubled times. In good economic times (*Bcycle*), banks pay lower rates on deposits, but do not experience higher deposit growth. Neither the growth in deposits nor the pricing of deposits seem to be much affected by *inflation*, and depositors are not compensated for currency depreciation by higher deposit rates. State-owned banks pay higher deposit rates, but have still seen their share in the deposit market reduced. Although foreign-owned banks also pay higher rates on deposits, this does not significantly boost their deposit growth.

3 Depositor discipline and blanket deposit insurance

In the following two specifications, bank fundamentals interact with a full deposit insurance dummy variable, which enables us to examine the impact of a full blanket guarantee on depositor discipline:

$$DEPG_{i,t} = \alpha_i + \alpha_1 \mathbf{Risk}_{i,t-1} + \alpha_2 \mathbf{Risk}_{i,t-1} * DI_t + \alpha_3 DI_t + \alpha_4 \mathbf{Controls}_{(i),t} + \varepsilon_{i,t} \quad (3)$$

$$IDEP_{i,t} = \beta_i + \beta_1 \mathbf{Risk}_{i,t-1} + \beta_2 \mathbf{Risk}_{i,t-1} * DI_t + \beta_3 DI_t + \beta_4 \mathbf{Controls}_{(i),t} + \mu_{i,t} \quad (4)$$

where *DI* is a dummy variable that takes the value one for the full blanket guarantee period (1994–2003) and zero otherwise. The Turkish government instituted full deposit coverage in response to the collapse of three small banks on May 5, 1994, to restore confidence in the banking system. This blanket guarantee was in place for a long period and was actually reinforced during the second major banking crisis in 2000. With the stabilization of the

banking sector in the aftermath of the 2000 crisis, the insurance coverage was eventually limited to 50 thousand TL on July 5, 2004, a limit that currently remains in place (see, e.g., Tanyeri 2010 and Laeven and Valencia 2012 for a detailed discussion).

The coefficients α_2 and β_2 identify the change in depositor discipline induced by the deposit insurance. In line with theory and previous empirical findings, if the blanket guarantee indeed reduced depositor sensitivity to bank capitalization, we expect that $\alpha_2 < 0$ and $\beta_2 > 0$. So far, we have reached the conclusion that market discipline takes place through the capital ratio, as higher levels of capital buffers lead to *both* faster deposit growth and lower deposit rates. Given the continuous importance of the capital ratio as the only clear driver of depositor discipline, we focus our attention in the remainder of this paper on the capital ratio. Table 3 presents the results of the impact of an explicit full blanket guarantee on depositor discipline via the deposits equation and price equation (respectively, column 1 and 2 of Table 3). Recall that the coefficient of interaction terms *Equity * DI* in equations (3) and (4) measures the changes in intensity of market discipline during the full blanket period.⁹ The results tell us that the introduction of a full blanket guarantee did not have much of an impact on the intensity of depositor discipline. This finding indicates that the adoption of such a scheme was not credible, or that depositors still feared costs related to the recovery of deposits in case of failure (i.e., costs due to late payments and the foregone interest earnings).¹⁰

⁹ Although we estimate the most flexible specification with Equity, Liquidity, Bad loans, ROA, and a full set of interactions, in order to facilitate the interpretation of the results, we report only Equity and its interaction with DI in the discussion of results as only Equity proved to unambiguously lead to depositor discipline. Full results are available upon request.

¹⁰ In developing countries, it is frequently observed that deposit insurance schemes are not fully credible. Besides the work of Martinez Peria and Schmukler (2001) referred to in the introduction of this article, Prean and Stix (2011) show that Croatian depositors perceive the safety of their deposits to be relatively low during turbulent times. More importantly, the finding that a generous deposit insurance scheme is not an effective tool for improving market confidence is also confirmed for Turkey (Önder and Özyildirim 2008).

Table 3 Impact of blanket deposit guarantee and political connections on depositor discipline

	DEPG (1)	IDEP (2)	DEPG (3)	IDEP (4)	DEPG (5)	IDEP (6)	DEPG (7)	IDEP (8)
Equity	1.8500*** (0.431)	-0.4441*** (0.126)	1.8870*** (0.441)	-0.4520*** (0.128)	1.8837*** (0.441)	-0.4513*** (0.128)	1.8828*** (0.438)	-0.4406*** (0.127)
Equity x DI	0.3963 (0.577)	0.1478 (0.263)	0.3565 (0.584)	0.1549 (0.265)	0.3576 (0.584)	0.1543 (0.265)	0.3711 (0.582)	0.1441 (0.265)
Equity x PCON			-2.6664*** (0.767)	0.5465** (0.264)	-4.4556*** (0.692)	0.9864*** (0.206)		
Equity x PCON x MIN					2.8487** (1.150)	-0.6553* (0.380)		
Equity x PCON x GOV							-7.9316*** (0.842)	2.7021*** (0.382)
Equity x PCON x MIN x GOV							6.6890*** (0.868)	-2.1223*** (0.524)
Size	0.1808*** (0.029)	0.0034 (0.015)	0.1787*** (0.029)	0.0036 (0.015)	0.1832*** (0.029)	0.0032 (0.015)	0.1817*** (0.029)	0.0042 (0.015)
Age	-0.0234*** (0.004)	-0.0055** (0.002)	-0.0223*** (0.004)	-0.0053** (0.002)	-0.0230*** (0.004)	-0.0052** (0.002)	-0.0225*** (0.004)	-0.0052** (0.002)
Emplbr	0.0002*** (0.000)	-0.0000 (0.000)	0.0002*** (0.000)	-0.0000 (0.000)	0.0002*** (0.000)	-0.0000 (0.000)	0.0002*** (0.000)	-0.0000 (0.000)
Fragment	-0.0022 (0.024)	0.0505*** (0.013)	-0.0046 (0.024)	0.0502*** (0.014)	-0.0065 (0.025)	0.0504*** (0.014)	-0.0045 (0.024)	0.0504*** (0.014)
Xordin	0.1531** (0.069)	-0.0490** (0.024)	0.1620** (0.069)	-0.0493** (0.024)	0.1651** (0.070)	-0.0508** (0.024)	0.1781** (0.071)	-0.0483* (0.025)
Bcycle	0.4430 (0.493)	-0.9960*** (0.207)	0.4580 (0.494)	-1.0099*** (0.207)	0.4418 (0.495)	-1.0098*** (0.208)	0.4578 (0.493)	-1.0008*** (0.208)
Crisis	-0.0065 (0.051)	0.0287 (0.020)	-0.0101 (0.051)	0.0286 (0.020)	-0.0085 (0.051)	0.0291 (0.020)	-0.0137 (0.051)	0.0298 (0.020)
Inflation	-0.1977 (0.139)	0.0350 (0.087)	-0.2027 (0.140)	0.0401 (0.087)	-0.1995 (0.141)	0.0397 (0.088)	-0.1829 (0.141)	0.0407 (0.087)
Exchange rate change	0.1021 (0.072)	-0.1148** (0.046)	0.1098 (0.072)	-0.1170** (0.047)	0.1073 (0.072)	-0.1170** (0.047)	0.1077 (0.072)	-0.1159** (0.047)
State-banks	-0.5784*** (0.212)	0.1961** (0.092)	-0.5629*** (0.206)	0.2053** (0.093)	-0.5492*** (0.197)	0.2043** (0.094)	-0.5570*** (0.200)	0.2054** (0.093)
Foreign-banks	-0.0286 (0.106)	0.0923 (0.062)	-0.0272 (0.106)	0.0939 (0.062)	-0.0264 (0.107)	0.0939 (0.062)	-0.0244 (0.107)	0.0941 (0.062)
Bank-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	1,237	1,237	1,237	1,237	1,237	1,237	1,237	1,237
R ²	0.218	0.148	0.223	0.149	0.226	0.149	0.224	0.149

Standard errors (in parentheses) are corrected for clustering at bank level. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

4 Political connections and depositor discipline

Since the major goal of this paper is to estimate changes in intensity of market discipline after a former politician takes the helm of the bank, we estimate the following reduced form quantity and price equations:

$$\begin{aligned} \text{DEPG}_{i,t} = & \alpha_i + \alpha_1 \mathbf{Risk}_{i,t-1} + \alpha_2 \mathbf{Risk}_{i,t-1} * \text{DI}_t + \alpha_3 \mathbf{Risk}_{i,t-1} * \mathbf{POL}_{i,t-1} + \\ & \alpha_4 \text{DI}_t + \alpha_5 \mathbf{POL}_{i,t-1} + \alpha_6 \mathbf{Controls}_{(i),t} + \varepsilon_{i,t} \end{aligned} \quad (5)$$

$$\begin{aligned} \text{IDEP}_{i,t} = & \beta_i + \beta_1 \mathbf{Risk}_{i,t-1} + \beta_2 \mathbf{Risk}_{i,t-1} * \text{DI}_t + \beta_3 \mathbf{Risk}_{i,t-1} * \mathbf{POL}_{i,t-1} + \\ & \beta_4 \text{DI}_t + \beta_5 \mathbf{POL}_{i,t-1} + \beta_6 \mathbf{Controls}_{(i),t} + \mu_{i,t} \end{aligned} \quad (6)$$

where **POL** is a vector of two sets of bank-specific political connections, i.e., *PCON* and *MIN*.

Regression estimations of equations (5) and (6), are reported in Table 3, columns 3 and 4, respectively. Given these estimations, we first determine whether depositors perceive a top bank executive with past political experience as an implicit government guarantee. The coefficients of α_3 and β_3 measure the change in intensity of depositor discipline for the period that the politically connected person is at the head of the bank (*PCON*). In particular, if there is a reduction in depositor sensitivity to bank capitalization, we would find that $\alpha_3 < 0$ and $\beta_3 > 0$. We proceed, in columns 5 and 6, to determine whether depositors react differently to appointments of former prime ministers or cabinet members (*MIN*) versus ordinary parliamentarians.

We use data from a variety of sources published by The Grand National Assembly Turkey, i.e., the parliament of the Republic of Turkey, to identify political connections. Politically connected bank CEOs or Chairmen are divided into two subgroups. We define political connections (*PCON*) to equal one if the bank's head was previously a member of Turkish parliament and/or served as a cabinet member or prime minister. The variable *MIN* is set to one if the bank's head served as a cabinet member (i.e., prime minister or any other cabinet member). We use a more narrow definition of political connectedness than Faccio (2006), as we concentrate on bank executives that are most visible to the public,

namely the CEO and Chairman of the board¹¹. Members of the Turkish parliament are retrieved from a three-volume scrapbook, published on the website of The Grand National Assembly of Turkey (www.tbmm.gov.tr). The album covers in a structured way the name, a short biographic note (date of birth, education level, professional experience), and a picture of all the elected parliamentarians in each legislature over the period 1920–2010. Cabinet members are retrieved from the historical archives of the Turkish parliament, which provide information about ministerial composition of past governments. The names of banks' CEOs and Chairmen are gathered from various issues of *Banks in Turkey* published by the Banks Association of Turkey. We crosscheck the names of a bank's CEO and Chairman with the names of cabinet ministers and the names covered in the scrapbook. Names that match are verified with biographies available on the Internet and online archives of various newspapers. Whenever we cannot find any information about banking experience of formerly elected parliamentarians, we do not consider those names as politically connected, in order to avoid overstatements of political connections. We focus on the most objective and direct form of political connections, although there are other indirect, more opaque forms, of political connections (ranging from politicians' relatives on the board to less subtle forms such as bribery or corruption).

To summarize the above description: *PCON* is a dummy variable which takes the value one when a bank CEO or Chairman was previously a member of the Turkish Parliament and/or served as a cabinet member or prime minister, and zero otherwise; *MIN* is a dummy variable which takes the value one when a bank's CEO or Chairman was formerly a cabinet member or prime minister, and zero otherwise. According to the definitions above, we identify 27 politically connected directors among 21 banks (20 private commercial banks and 1 state bank). The number of bank-year observations for former parliament members is 106, and for former cabinet members 78. The average number of years that a former politician heads a bank is four.

Table 3, Column 3, shows that the interaction term *Equity * PCON* appears in the deposit growth equation with a statistically significant negative sign, i.e., causing an enormous reduction in the *Equity* coefficient.¹² Summing the coefficients ($1.9772 - 2.6785 < 0$) yields a non-positive number and reveals that depositors do not at all impose discipline on

¹¹ It is reasonable to hypothesize that political connections of other board members will not have any effect on market discipline, as these individuals are much less known to depositors.

¹² Although we estimate the most flexible specification with *Equity*, *Liquidity*, *Bad loans*, *ROA*, and a full set of interactions, in order to facilitate the interpretation of the results, we report only *Equity* and its interactions with **POL** in the discussion of our results, as only *Equity* proved to unambiguously lead to depositor discipline.

a bank while a former politician is at the helm. Column 4 indicates that the interaction term $Equity * PCON$ enters the deposit rate equation with a significant positive relationship, causing the $Equity$ coefficient to become approximately zero (summing coefficients: $-0.4204+0.4401$). These results indicate that risky, less capitalized banks attract more deposits and pay lower interest when they appoint a former politician as a Chairman or CEO. We interpret these findings as rightward shifts in the supply of deposits to risky but politically connected banks. These findings suggest that depositors believe that politically connected banks are safer, irrespective of bank fundamentals.

Compared to a full-blanket deposit insurance scheme, one may wonder why depositors have more trust in political connected banks than generally in insured banks. The main problem with deposit insurance schemes is that they may be less than fully credible. While the initiation of a blanket guarantee may succeed in restoring some basic confidence when a country is on the verge of financial collapse, it still may not fully undo depositors' fear of a systemic meltdown. Especially when the coverage is unlimited, as it was in Turkey, the capacity of governments to make good on their promised guarantees may be rightly questioned by depositors. Indeed, in this case the contingent liabilities of deposit insurance are massive, and depositors may thus have good reasons to suspect that there will be considerable costs associated with the recovery of the deposits if a systemic meltdown does occur (for instance in the form of late payments, foregone interest earnings and/or less than full redemption of deposits). Schich (2008) provides an excellent discussion of the possible problems associated with extended deposit insurance schemes. In addition, deposit insurance is provided to all banks, whereas political connections clearly are not. Depositors may therefore anticipate that banks appoint former politicians to gain access to political resources and the associated competitive advantages (as discussed in the introduction, e.g., implicit government guarantees, access to government deposits as complementary funding, regulatory forbearance, and bailouts). Since political connections, in contrast to deposit insurance, are available only to certain banks, the benefits of these connections may be more affordable to the government and hence more credible to depositors, than deposit insurance.

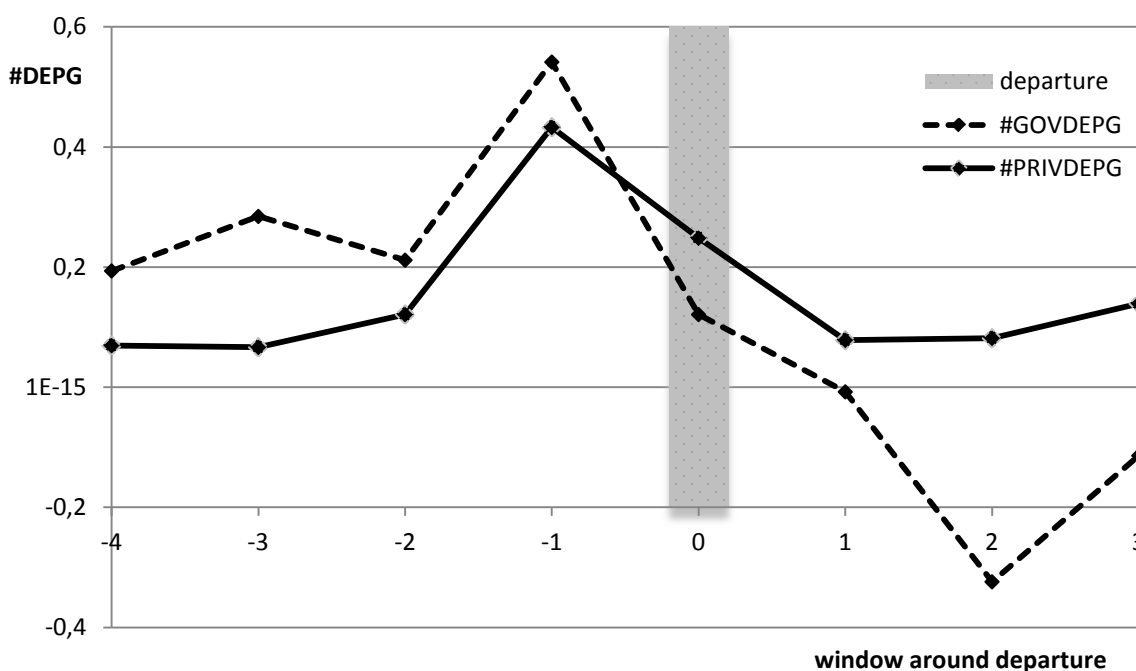
In order to examine possible differential effects between former cabinet members and ordinary parliament members, we include triple interaction terms. This strategy enables us to identify the separate impact of former cabinet members on depositor discipline. Intriguingly, Column 5 shows that the triple interaction term $Equity * PCON * MIN$ enters the deposit equation with a statistically and economically significant positive coeffi-

cient. Relative to the presence of ordinary parliamentarians, the presence of a former minister increases the sensitivity of deposit growth to bank capital ($1.8837 - 4.4556 < 1.8837 - 4.4556 + 2.8487$). Column 6 shows that this triple interaction term also enters the deposit rate equation, now with a statistically significant negative impact. Relative to the presence of ordinary parliamentarians, the presence of a former minister increases the sensitivity of deposit rates to bank capital ($-0.4513 + 0.9864 > -0.4513 + 0.9864 - 0.6553$). These results suggest that political connections induce a far greater reduction in market discipline if the political connection is through a former member of parliament rather than through a former minister. Depositors seem to reduce their discipline more if the politically connected person did not serve as a minister. We see two possible explanations for this unexpected finding with respect to former ministers. First, depositors may fear that in banks with former ministers at the helm, using the terminology of Shleifer and Vishny (1998), the grabbing hand will impair the helping hand. More specifically, depositors may believe that former ministers will extract political benefits at the expense of other bank stakeholders.¹³ This phenomenon may also be intensified by the instability of the governments in which these people have served.¹⁴ In Appendix 2, we briefly review the historical developments in the Turkish political landscape. An alternative interpretation is that the appointment of a former cabinet member may convey a negative message concerning the bank's financial health. Hiring a former cabinet member may be perceived as a signal of otherwise unobserved structural problems the bank can only solve with the help of a politically well-connected former minister. In Section 5 we provide evidence that unhealthy banks are indeed more likely to hire former ministers, which is in line with this argument. Later in this section we also show how the additional government deposits brought to the bank by the former minister tend to leave the bank upon his/her departure (see Figure 1).

¹³ The importance of bureaucratic background seems to be a structural characteristic of the ministerial elite: the occupational histories of 80% of the minister-year observations appear to include some public employment prior to entering politics, whereas the comparable figure is below 10% for normal deputies. Moreover, when banks do appoint former ministers they appear to be highly experienced, with long years of service compared to normal deputies. Hence, former ministers have stronger personal networks and knowledge of administrative procedures to effectively use their clout in government apparatus. This intuition is also in line with Kalaycioglu (1995) who argues that in Turkey newcomer MPs have difficulties in establishing relationships with the public bureaucracy.

¹⁴ A majority of the ex-ministers served in the seventies, a decade of political turbulence and short-lived governments with frequent military intervention in politics. Turkey witnessed during that decade many coalition governments leading to a seriously undermined public confidence in the central authority. The public may hold cabinet members responsible for cabinet instability, so that their presence may not be a good signal to depositors. Depositors may have loathed banks that took these former politicians on board so that the ensuing increased depositor discipline could be seen in part as a way of settling the score for the previous curtailment of democratic rights.

Figure 1 Average growth rate of the number of government and private deposit accounts around periods in which a former cabinet member leaves office.



The graph of the average growth rate of the number of deposit accounts (#DEPG) around the period in which a former cabinet members leaves office, over a seven-year window [-4, 0, +3]. We distinguish between growth rates of government deposit accounts (#GOVDEPG, dashed line) and other (private) deposit accounts (#PRIVDEPG, solid line). The years [-4, -1] represent the last three years in which the former cabinet member is at the top of the bank; the year 0 is the event-year in which the former cabinet member leaves the bank; and the years [+1, +3] represent the three years after departure.

Via Eq. 7 and Eq. 8 we examine whether our findings are stronger if the party of affiliation of the former politician is part of the ruling majority during his/her time as head of the bank. The variable *GOV* is set to one when the party of the politician heading the bank is currently in the (coalition) government, and zero otherwise.¹⁵ The introduction of the triple interaction term *Risk * PCON * GOV* enables us to examine whether the sensitivity of depositor discipline intensifies when the (last) party of the former politician is currently in power (i.e., *GOV*). The introduction of the quadruple interaction terms *Risk * PCON * MIN * GOV* again allows us to differentiate between former cabinet members and parliamentarians.¹⁶ On the one hand, we observe that depositor discipline is completely wiped out for risky, less capitalized banks in periods when the (last) party of

¹⁵ When the affiliated party ceased to exist, we checked whether its successor is in the coalition government during the period that the former politician is at the top of the bank.

¹⁶ We estimate the following reduced form equations: $Y_{i,t} = \alpha_i + \alpha_1 Risk_{i,t-1} + \alpha_2 Risk_{i,t-1} * DI_t + \alpha_3 Risk_{i,t-1} * PCON_{i,t-1} * GOV_{i,t} + \alpha_4 5tVNON$ specifically, we estimate the following equations: ormer politician is at the top of the bank. $Risk_{i,t-1} * MIN_{i,t-1} * GOV_{i,t} + \alpha_5 TNN5tVNON$ specifically, we estimate the following equations: ormer politician is at the top of the bank. $POL_{i,t-1} + \alpha_6 GOV_{i,t} + \delta_{i,t}$, with *Y* the reaction variables DEPG and IDEP.

the politically connected CEO of chairman is currently in power. This reinforces the identification of our mechanism of political connections: it is the access to current political power that annihilates or even reverses depositor sensitivity to bank capital. This is in line with theories of political rent seeking by banks. On the other hand, this effect is again substantially smaller, though not absent, for former cabinet members.¹⁷

The previous results raise the question of why banks even consider taking these former cabinet members on board in the first place. To understand the exact effect of the presence of a former cabinet member at the bank, we start by analyzing the evolution of the number of deposit accounts of politically connected banks. In Figure 1 we present the average growth rates of the number of deposit accounts of banks led by former cabinet members, over the eight-year window $[-4, 0, +3]$ surrounding his leave. Since the average tenure is four years, this gives a good picture of deposit flows during and after their term. The years $[-4, -1]$ represent the last four years that the former cabinet member is at the top of the bank; the year 0 is the event-year in which the former cabinet member leaves the bank; and the years $[+1, +3]$ represent the three years after this person leaves the bank. We distinguish between the growth of the number of government deposit accounts and of other (i.e., private) deposit accounts. The reason why banks may believe it is useful to have political connections with former cabinet members, lies in the dashed line that represents the average growth of the number of government accounts in Figure 1. As long as the former politician is still at the helm of the bank, the number of government deposit accounts shows robust growth rates. Apparently former minister use their political clout to bring in deposits from a variety of government organizations. However, this positive effect is annihilated once the former minister leaves and the bank loses its political connection, as the number of government deposit accounts drops sharply in this event. Compared to the number of government deposit accounts, the number of non-government deposit accounts (solid line in Figure 1) exhibits lower growth rates before the departure of the former minister but not for the period after departure.

¹⁷ Non-significant regression parameters indicated again that the interaction variable $CAP \times DI$ did not affect deposit growth or rates. Therefore, to prevent overspecification, the variables DI and $Risk \times DI$ are not included in the following models.

5 Robustness

In Eq. 5 and Eq. 6 the political connection dummy variables are lagged by one period and hence are predetermined in explaining deposit growth and deposit rates, respectively. Furthermore, bank-specific effects control for unobserved bank heterogeneity. But there could still be unobserved time-varying bank-specific variables that affect both deposit growth and deposit rates and the bank's propensity to appoint former politicians. This is in line with the argument of Demsetz and Lehn (1985), who claim that corporate governance measures can influence performance and vice versa. If there is a selection problem, standard linear regression may produce biased estimates for the effects of political connections on deposit growth and deposit rates. Like Campa and Kedia (2002) and Villalonga and Amit (2006), we employ the Heckman (1979) two-stage treatment procedure to address this potential selection bias. Specifically, we employ a two-step random effects parametric approach as discussed by Vella and Verbeek (1999), which is an extension of Heckman's two step procedure to a panel data context. In the first stage, we estimate a random effects probit model in which the dummy variable for political connections is regressed against the same controls as in the previous analyses as well as against three additional variables that distinguish between banks that hire former politicians and those that do not (i.e., conditioning variables).¹⁸ We estimate two probit models for being politically connected (**POL**): one examines the determinants of appointing a former politician (**PCON**) and the other the determinants of appointing a politician who served as a cabinet member (**MIN**). The explanatory variables in both of these selection equations are all lagged by one year, and the identifying variables are $\ln(\#govdep + \theta)$, z-score, and a measure of liquidity. The $\ln(\#govdep + \theta)$ is the natural logarithm of the total number of government deposit accounts ($\#govdep$). We add θ , which is equal to one, because the existence of banks without government deposit accounts would otherwise eliminate observations. The z-score is a measure of bank stability $z = \frac{\text{Mean}(EQ/TA+ROA)}{\text{St.Dev.}(ROA)}$, i.e., the average capitalization $\left(EQ/TA = \frac{\text{Equity}}{\text{Total Assets}} \right)$ and return on assets (**ROA**) during the four preceding years over the 4-year standard deviation of the return on assets.¹⁹ Banks with lower z-scores are considered to be more risky, i.e., have a shorter distance to default. The liquidity measure, $Liquid/TA$, is the ratio of liquid assets to total assets.

¹⁸ The fixed effects probit model suffers from an incidental parameter problem, which would yield inconsistent estimates.

¹⁹ To avoid losing observations over the sample period 1980-2008, our z-scores run from 1977 onwards.

The z-score is a condensed measure of bank stability. It is unobservable to depositors because they have neither access to the information needed for its calculation nor the sophistication to do so or to interpret the results. But banks are aware of their potential instability and may anticipate health problems by seeking protection and forbearance through political connections. We therefore expect this z-score to be unrelated to the bank's deposit growth and deposit rate, but related to political connections. The presence of government deposits by itself, is not related to deposit growth or deposit rates, since the size of government in the economy is relatively stable over long time periods (and hence banks with more government deposit accounts cannot expect their deposit level to grow faster) and the rates on government deposits and other deposits of the same size are comparable. Banks without access to government deposit accounts can however aim at improving their access to government deposit accounts and their market share of these accounts, by relying on new political connections. Therefore, banks with a low number of government deposit accounts may want to obtain political connections. Liquidity, finally, is clearly related to the desirability of political connections. Illiquid banks may rely on political connections to either improve their liquidity or to induce the regulator overlook their lack of liquidity. Banks with higher liquidity also have higher deposit growth rates and higher deposit rates (see Table 2), which implies that liquidity is a demand and not a supply shifter. So, although liquidity is related to deposit rates and deposit growth separately, it is not related to the market discipline we are after in this paper. Therefore, the presence of these three variables in the selection equation is appropriate.

The results of the first stage are presented in Table 4, Panel A. Employing the broader definition of political connections (PCON), we find that banks with unfavorable liquidity positions are more likely to appoint leaders with political connections. Applying the more narrow definition of political connections, we find that banks may appoint former cabinet members (MIN) in the hope that their increased political clout will remedy some of their profound structural problems. In particular, we find that banks with a low number of government deposit accounts (see previous section), a lower distance to default, and a less favorable liquidity position are more inclined to hire former ministers, possibly in an attempt to obtain relief from some of these problems.

Table 4 Testing for depositor discipline via Heckman two-stage treatment effects

Panel A: 1st Step of Heckman 2-Step Treatment Model				
	PCON, t		MIN, t	
	Coef.	St. Err.	Coef.	St. Err.
ln(#govdep+1), t - 1	-0.1043	(0.073)	-0.1912*	(0.108)
z-score, t - 1	-0.0074	(0.005)	-0.0107*	(0.006)
Liquid/TA, t - 1	-2.2555***	(0.776)	-2.0733**	(1.003)
Size, t - 1	-0.0784	(0.125)	0.2799	(0.183)
Age, t - 1	0.0109	(0.010)	-0.0052	(0.013)
Emplbr, t - 1	-0.0123	(0.010)	-0.0658***	(0.020)
Fragment, t - 1	-0.5177***	(0.129)	-0.7659***	(0.194)
Xordin, t - 1	0.9407***	(0.343)	0.9819**	(0.455)
Bcycle, t - 1	2.7046	(3.479)	4.5838	(4.756)
Crisis, t - 1	-0.2719	(0.300)	-0.1572	(0.396)
Inflation, t - 1	1.1741	(0.838)	0.2567	(1.147)
Exchange rate change, t - 1	0.3437	(0.513)	1.0399	(0.680)
Random-effects	Yes		Yes	
R ²	0.220		0.313	
Panel B: 2nd Step of Heckman 2-Step Treatment model				
	DEPG		IDEP	
	(1)	(2)	(3)	(4)
Equity	0.9689*** (0.345)	0.9801*** (0.348)	-0.2320** (0.118)	-0.2319** (0.117)
Equity x PCON	-3.8106*** (0.690)		0.4561** (0.192)	
Equity x PCON x MIN	4.3972*** (1.272)		-0.4015 (0.471)	
Equity x PCON x GOV		-7.3089*** (0.807)		1.4050*** (0.358)
Equity x PCON x MIN x GOV		8.0539*** (1.043)		-1.1481* (0.646)
Size	0.1362*** (0.023)	0.1389*** (0.023)	-0.0596*** (0.009)	-0.0596*** (0.009)
Age	-0.0059*** (0.001)	-0.0061*** (0.001)	0.0022*** (0.001)	0.0022*** (0.001)
Emplbr	-0.0079** (0.003)	-0.0083*** (0.003)	0.0065*** (0.001)	0.0065*** (0.001)
Fragment	0.0103 (0.023)	0.0110 (0.023)	0.0346*** (0.011)	0.0349*** (0.011)
Xordin	0.1531*** (0.056)	0.1642*** (0.056)	0.0641*** (0.025)	0.0672*** (0.025)
Bcycle	0.7276 (0.459)	0.7621* (0.456)	-0.8927*** (0.231)	-0.8861*** (0.231)
Crisis	0.0251 (0.047)	0.0234 (0.047)	-0.0088 (0.014)	-0.0087 (0.014)
Inflation	-0.3182** (0.125)	-0.3326*** (0.124)	0.2951*** (0.069)	0.2933*** (0.069)
Exchange rate change	0.2260*** (0.086)	0.2374*** (0.085)	-0.1781*** (0.046)	-0.1760*** (0.046)
State-banks	-0.2127*** (0.063)	-0.2179*** (0.063)	0.1570*** (0.050)	0.1566*** (0.050)
Foreign-banks	-0.0757* (0.043)	-0.0787* (0.044)	0.0663* (0.036)	0.0664* (0.036)
λ_{PCON}	-0.3441*** (0.064)	-0.3535*** (0.062)	0.2155*** (0.026)	0.2157*** (0.026)
λ_{MIN}	0.2078*** (0.066)	0.2172*** (0.063)	-0.1419*** (0.021)	-0.1421*** (0.022)
Random-effects	Yes	Yes	Yes	Yes
Observations	1,198	1,198	1,198	1,198
R ²	0.332	0.333	0.363	0.363

Standard errors (in parentheses) are corrected for clustering at bank level. *** indicates significance at the 1% level, ** at the 5% level, and * at the 10% level.

The fitted values from the first-stage probit are then employed to generate the correction parameter for self-selection (inverse of Mill's ratio). In the second stage analysis, we include the inverse of Mill's ratios. As depositors react differently to the appointment of cabinet members as compared to ordinary parliamentarians, we differentiate between these choices, and include the inverse of Mill's ratio for being politically connected (λ_{PCON}) and the inverse of Mill's ratio for selecting only past cabinet members (λ_{MIN}). The results of the second stage regression are presented in Table 4, Panel B. Our earlier findings are robust. We find again evidence that there is a reduction in depositor discipline for politically connected banks, and that this reduction is mitigated if former cabinet members are appointed. We notice that quantity disciplining and price disciplining are reduced with the appointment of former politicians, and that this reduction in market discipline is mitigated with the appointment of former cabinet member through the quantity equation (Column 1). From the deposit rate equation, we observe that market discipline is reduced with the appointment of former politicians (Column 3 and 4), and that this reduction is annihilated with the appointment of a former minister but only if the affiliated party of the former minister is in power (Column 4).^{20,21}

The bank-specific effects in Eq.5 and Eq.6 control for time invariant differences between politically connected banks and unconnected banks. The main variable of interest in both of these equations is

Risk * POL, which allows the vector **Risk** to have a different slope for a period in which a former politician is at the helm of the bank. However, since bank-specific effects cannot capture differences in slope between politically connected and unconnected banks, the concern is that the coefficient estimate for the interaction term (**Risk * POL**) actually captures the differences between banks that never have a political connection and banks

²⁰ Some papers (e.g., Karas et al. 2010, Demirgüç-Kunt and Huizinga 2004) argue that in emerging economies depositor discipline is displayed more through the quantity equation than the price equation, as these markets fail to price risk properly because of lack of transparency and asymmetric information.

²¹ The two-step random-effects estimator assumes that the error terms measuring bank specific random effects in both equations are not correlated. As both errors mirror bank's non-observable heterogeneity, this assumption may be violated. To test the robustness of our findings, we also use Woolridge's (1995) consistent estimator model for panel data. In the first stage, instead of a random effects probit, we estimate a pooled probit model (with standard errors corrected for clustering at bank level) to study the determinants of **POL**. These results are very similar to those in Table 4, Panel A (number of government deposit accounts and z-score becomes even more important in the appointment of cabinet members). In the second stage, instead of a random effects model, we estimate a pooled OLS model (with standard errors corrected for clustering at bank level). For the quantity equation, this approach yields similar conclusions as in Table 4, Panel B concerning the sensitivity of market discipline with respect to political connections. For the interest equation, the interactions of Equity with political variables (PCON and MIN) preserve the same signs, but they lose some significance. The replication of Column 4 with pooled OLS indicates that the coefficient of Equity x PCON x GOV is significantly positive, while the coefficient of Equity x MIN x GOV is negative but not significant. The findings of this exercise are available on request.

that do. To overcome this concern, as an additional robustness check, the **Risk** vector included in the previous regressions is allowed to have a different slope for politically connected banks (*POLBANK*).²² The *POLBANK* variable is equal to one for all 21 banks that ever hired a former politician in the sample period, and zero otherwise.²³ To be more precise, we estimate the following reduced form models:

$$\text{DEPG}_{i,t} = \alpha_i + \alpha_1 \mathbf{Risk}_{i,t-1} + \alpha_2 \mathbf{Risk}_{i,t-1} * \text{POLBANK}_i + \quad (7)$$

$$\alpha_3 \mathbf{Risk}_{i,t-1} * \text{POL}_{i,t-1} + \alpha_4 \text{POL}_{i,t-1} + \alpha_5 \mathbf{Controls}_{(i),t} + \varepsilon_{i,t}$$

$$\text{IDEP}_{i,t} = \beta_1 + \beta_1 \mathbf{Risk}_{i,t-1} + \beta_2 \mathbf{Risk}_{i,t-1} * \text{POLBANK}_i + \quad (8)$$

$$\beta_3 \mathbf{Risk}_{i,t-1} * \text{POL}_{i,t-1} + \beta_4 \text{POL}_{i,t-1} + \beta_5 \mathbf{Controls}_{(i),t} + \mu_{i,t}$$

Regression estimations of equations (7) and (8), are reported in Table 5. The coefficients α_2 and β_2 capture the possible difference in slope for banks that have at some time appointed a former politician (*POLBANK*). The coefficients of α_3 and β_3 measure the change in intensity of depositor discipline for the period in which the politically connected director is at the top of the bank (*PCON*). In particular, if there is a reduction in depositor sensitivity to bank capitalization after the appointment of a former politician, we would find that $\alpha_3 < 0$ and $\beta_3 > 0$. Secondly, in columns 5 and 6, we again show whether the appointment of former prime ministers or cabinet members (*MIN*) is perceived differently. We confirm our earlier finding that depositor discipline is reduced for politically connected banks, but that this reduction is less dramatic for the appointment of former cabinet members.

²² Dinç (2005) uses a similar approach as a robustness check in his empirical analysis of government bank lending in election years.

²³ Compared to banks that never hired a former politician as a chief-executive in the sample period (*POLBANK* = 0), we observe that banks that did hire a former politician (*POLBANK* = 1) are on average older (50.33 years) and greater in size (natural logarithm of total assets in 1987 prices = 13.27), but employ less personnel per branch (24.30).

Table 5 Different slopes for politically connected banks

	DEPG (1)	IDEP (2)	DEPG (3)	IDEP (4)	DEPG (5)	IDEP (6)
Equity	1.8512*** (0.398)	-0.3475** (0.132)	1.8565*** (0.399)	-0.3480** (0.133)	1.8560*** (0.400)	-0.3475** (0.133)
Equity x POLBANK	0.8729 (0.624)	0.1990 (0.191)	0.7919 (0.612)	0.2106 (0.192)	0.6205 (0.625)	0.1997 (0.191)
Equity x PCON	-3.1996*** (0.781)	0.2620 (0.239)	-4.7801*** (0.564)	0.7714*** (0.187)		
Equity x PCON x MIN			2.7678*** (0.840)	-0.7610* (0.385)		
Equity x PCON x GOV					-7.7020*** (0.927)	1.7983*** (0.387)
Equity x PCON x MIN x GOV					6.7676*** (0.840)	-1.6173*** (0.496)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Bank-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	1,237	1,237	1,237	1,237	1,237	1,237
R ²	0.191	0.116	0.193	0.116	0.191	0.116

Standard errors (in parentheses) are corrected for clustering at bank level. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

6 Depositor discipline and the number of deposit accounts

While our preference for the quantity equation is the first difference of the log of real value of deposits, this was only possible for total deposit liabilities. However, since Turkish data distinguish between deposit categories only by the number of accounts, and not by volumes, we reproduce our results for the quantity equation with the growth of the number of diverse deposit accounts. For the entire sample period, we can distinguish between the following numbers of deposit accounts: firm deposits, savings deposits, and interbank deposits. These categories enable us to see whether there is a disparity in depositor discipline between different types of agents, and how each one reacts to the appointment of a former politician at the head of the bank. Therefore, we estimate the following reduced form equation:

$$\#DEPG_{i,t} = \alpha_i + \alpha_1 Risk_{i,t-1} + \alpha_2 Risk_{i,t-1} * POL_{i,t-1} + \alpha_3 POL_{i,t-1} + \alpha_4 Controls_{(i),t} + \varepsilon_{i,t} \quad (9)$$

where $\#DEPG$ is a vector capturing the growth in the number of deposit accounts of different agents. We consider the following four sets of variables: $\#SAVDEPG$ is the growth in the number of savings deposits; $\#FIRMDEPG$ is the growth in the number of firm deposits; $\#BANKDEPG$ is the growth in the number of bank deposits; and $\#PRIVDEPG$ is the

number of private deposits (with private deposits equal to the sum of savings deposits, firm deposits and bank deposits). The results are reported in Table 6. We find some interesting differences in the disciplining behavior between agents. The findings in column 1 indicate that private depositors discipline banks in terms of their capitalization, and that the disciplining sensitivity diminishes with the appointment of a former politician, unless he was a former cabinet member. These results are in accordance with the hypothesis that appointing a former cabinet member may signal a structural problem (smaller distance to default) that is otherwise unobservable to unsophisticated depositors (see findings in section 5). We see a similar reaction by the holders of savings deposit accounts and from firms. Interbank creditors do not attach additional value to the appointment of former politicians, possibly because they are better informed about the underlying bank fundamentals.

Table 6 Testing for the impact of political connections on depositor discipline for different agents

	# PRIVDEPG (1)	# SAVDEPG (2)	# FIRMDEPG (3)	# BANKDEPG (4)
Equity	1.2458*** (0.206)	1.1311*** (0.283)	1.1530*** (0.243)	1.2533*** (0.436)
Equity x PCON	-3.9210** (1.623)	-5.2326* (2.642)	-3.8806*** (1.091)	-1.8185 (3.111)
Equity x PCON x MIN	5.3144*** (1.866)	7.0259** (2.816)	4.7955** (1.867)	0.7922 (3.462)
Control variables	Yes	Yes	Yes	Yes
Bank-fixed effects	Yes	Yes	Yes	Yes
No. of observations	1,231	1,157	1,222	1,138
R ²	0.116	0.078	0.071	0.030

Standard errors (in parentheses) are corrected for clustering at the bank level. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

7 Conclusions

Rather than evaluating the impact of political connections through wealth effects, we attempt to extend our knowledge of the impact of political connections on depositor loyalty by employing a depositor discipline framework. This approach allows us to verify how the average depositor reacts once the bank appoints a former politician. A strong political relationship can be considered an important intangible asset for banks in several ways. We test whether politically connected banks are less subject to market discipline by depositors.

We find that appointments of former politicians markedly affect depositor disci-

pline. Specifically, depositors discipline their banks less when banks' top executives were formerly elected to parliament. This is especially the case when the former politician's party is currently in power, providing further evidence that our results indeed identify a political channel. However, this reduction in depositor discipline is partially or fully nullified if the concerned politician also served as a cabinet minister. This could be due to the fact that many of these former ministers were part of controversial governments, which elicited negative reactions by depositors. But we also provide evidence that banks are more likely to appoint former ministers if they are less liquid and closer to default, suggesting that appointing a minister may also send a bad signal of otherwise unobserved bank health to depositors. In addition, the additional government deposits that former ministers attract during their term at the bank tend to leave the bank upon their departure. All of our results with respect to the effect of political connections on depositor discipline are robust to controlling for possible selection effects.

References

- Acemoglu, D., Johnson, S., 2005. Unbundling institutions. *Journal of Political Economy*, 113: 949–995.
- Agrawal, A., Knoeber, C.R., 2001. Do some outsider directors play a political role? *Journal of Law and Economics*, 44: 179–199.
- Barajas, A., Steiner, R., 2000. Depositor behavior and market discipline in Colombia. IMF Working Paper 00/214.
- BAT, 2009. 50th Anniversary of The Banks Association of Turkey And Banking System “1958–2007”, Publication No: 62.
- Bertrand, M., Kramaraz, F., Schoar, A., Thesmar, D., 2006. Politicians, firms and the political business cycle: evidence from France. Unpublished working paper. University of Chicago.
- Boubakri, N., Cosset, J.-C., Saffar, W., 2008. Political connections of newly privatized firms. *Journal of Corporate Finance* 14, 654–673.
- Calomiris, C. W., Powell, A., 2001. Can emerging market bank regulators establish credible discipline? The case of Argentina, 1992–1999. In F. S. Mishkin (Ed.), *Prudential supervision: What works and what doesn't*. Chicago, IL: University of Chicago Press.
- Campa, J.M., Kedia, S., 2002. Explaining the diversification discount. *Journal of Finance*, 57:1731–1762.
- Claessens, S., Feijen, E., Laeven, L., 2008. Political connections and preferential access to finance: the role of campaign contributions, *Journal of Financial Economics*, 88: 554–580.
- Cook, D.O., Spellman, L.J., 1994. Firm and guarantor risk, risk contagion and the interfirm spread among insured deposits. *Journal of Financial and Quantitative Analysis*, 21: 265–282.
- Cooper, M.J., Gulen, H., Ovtchinnikov, A.V., 2010. Corporate political contributions and stock returns. *Journal of Finance*, 65, 687–724.
- De Jonghe, O., Disli, M., Schoors, K., 2012. Corporate governance, opaque bank activities and risk/return efficiency: Pre- and post-crisis evidence from Turkey. *Journal of Financial Services Research*, 41: 51–80.
- Demirgüç-Kunt, A., Detragiache, E., 2002. Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation. *Journal of Monetary Economics*, 49: 1373–1406.
- Demirgüç-Kunt, A., Huizinga, H., 2004. Market discipline and deposit insurance. *Journal of Monetary Economics*, 51: 375–399.
- Demirgüç-Kunt, A., Kane, E., Laeven, L., 2008. Determinants of deposit-insurance adoption and design. *Journal of Financial Intermediation*, 17:407–438.
- Demsetz, H., Lehn, K., 1985. The structure of corporate ownership: causes and consequences. *Journal of Political Economy* 93, 1155–1177.
- De Soto, H., 1990. *The other path: The invisible revolution in the Third World*. Harper and Row Publishers, New York.

- Dinc, S., 2005. Politicians and banks: political influences on government-owned banks in emerging countries. *Journal of Financial Economics* 77, 453–479.
- Esfahani, H.S., 1996. Institutional structure, government policy & economic performance in Turkey. University of Illinois, Department of Economics, Working paper: 9620.
- Evanoff, D. D., Wall, L. D., 2001. Sub-debt yield spreads as bank risk measures. *Journal of Financial Services Research*, 20: 121–45
- Faccio, M., 2006. Politically connected firms. *American Economic Review*, 96: 369–386.
- Faccio, M., Masulis, R.W., McConnell, J.J., Offenberg, M.S., 2006. Political connections and corporate bailouts. *Journal of Finance*, 61: 2597–2635.
- Fan, J.P.H., Wong, T.J., Zhang, T., 2007. Politically-connected CEOs, corporate governance and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics* 84, 330–357.
- Ferguson, T., Voth, H.J., 2008. Betting on Hitler: the value of political connections in Nazi Germany. *Quarterly Journal of Economics* 123, 131–137.
- Fisman, R., 2001. Estimating the value of political connections. *American Economic Review*, 91: 1095–1102.
- Flannery, M., 1998. Using market information in prudential bank supervision: A review of the US empirical evidence. *Journal of Money, Credit and Banking*, 30: 273–305.
- Flannery, M., Sorescu, S., 1996. Evidence of market discipline in subordinated debenture yields: 1983–1991. *Journal of Finance*, 51:1347–1377.
- Francis, B., Hasan, I., Sun, X., 2009. Political connections and the process of going public: evidence from China. *Journal of International Money and Finance* 28, 696–719.
- Goldberg, L.G., Hudgins, S.C., 2002. Depositor discipline and changing strategies for regulating thrift institutions. *Journal of Financial Economics*, 63: 263–274.
- Goldman, E., Rocholl, J., So, J., 2009, Do politically connected boards affect firm value? *Review of Financial Studies* 22, 2331–60.
- Hannan, T., Hanweck, G., 1988. Bank Insolvency Risk and the Market for Large Certificate of Deposit. *Journal of Money Credit and Banking*, 20: 203–211.
- Heckman, J.J., 1979. Sample selection bias as a specification error. *Econometrica* 47, 153–161.
- Hellman, J.S., Jones, G., Kaufmann, D., 2003. Seize the State, Seize the Day: State Capture and Influence in Transition Economies. *Journal of Comparative Economics*, 31: 751–773.
- Ioannidou V.P., de Dreu, J., 2006. The Impact of Explicit Deposit Insurance on Market Discipline. Tilburg University Centre discussion paper no. 2006–05.
- Johnson, S., Mitton, T., 2003. Cronyism and capital controls: Evidence from Malaysia. *Journal of Financial Economics* , 67: 351–382.
- Kalaycioglu, E., 1995. The Turkish Grand National Assembly: A brief inquiry into the politics of representation in Turkey. In Balim et al. (eds.) *Turkey : The Political, Social and Economic Challenges in the 1990s*, Leiden, E.J. Brill.
- Karas, A., Pyle, W., Schoors, K., 2010. How do Russian depositors discipline their banks? Evidence of a backward bending deposit supply function. *Oxford Econ Papers*, 62:36–61.

- Karas, A., Pyle, W., Schoors, K., 2013. The Effect of Deposit Insurance on Market Discipline: Evidence from a Natural Experiment on Deposit Flows and Rates. *Journal of Money, Credit and Banking*, forthcoming.
- Khwaja, A.I., Mian, A., 2005. Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quarterly Journal of Economics* 120, 1371–1411.
- Laeven, L., 2004. The political economy of deposit insurance. *Journal of Financial Services Research*, 26:201–224.
- Laeven, L., Valencia, F., 2012. The use of blanket guarantees in banking crises. *Journal of International Money and Finance*, forthcoming.
- Maechler, A.M., McDill, K., 2006. Dynamic depositor discipline in US banks. *Journal of Banking and Finance*, 30: 1871–91.
- Martinez Peria, M.S., Schmukler, S.L., 2001. Do depositors punish banks for bad behavior? Market discipline, deposit insurance, and banking crises. *Journal of Finance*, 56:1029–1051.
- Masters, M., Keim, G., 1985. Determinants of PAC participation among large corporations. *Journal of Politics*, 47: 1158–1173.
- Mondschean, T.S., Opiela, T.P., 1999. Bank Time Deposit Rates and Market Discipline in Poland: The Impact of State Ownership and Deposit Insurance Reform. *Journal of Financial Services Research*, 15: 179–196.
- Nier, E., Baumann, U., 2006. Market discipline, disclosure and moral hazard in banking. *Journal of Financial Intermediation* 15, 332–361.
- North, D.C., 1981. *Structure and Change In Economic History*. New York: Norton.
- Olson, M., 2000. *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships*. New York: Basic Books
- Önder Z., Özyildirim S., 2008. Market Reaction to risky banks: Did generous deposit guarantee change it? *World Developments*, 36: 1415–1435.
- Park, S., 1995. Market discipline by depositors: evidence from reduced-form equations. *Quarterly Review of Economics and Finance*, 35: 497–514.
- Park, S., Peristiani, S., 1998. Market discipline by thrift depositors. *Journal of Money, Credit and Banking*, 30: 347–364.
- Prean N., Stix H., 2011. The effect of raising deposit insurance coverage in times of financial crisis – Evidence from Croatia microdata. *Economic Systems*, 35: 496–511
- Qian, M., Pan, H., Yeung, B., 2011. Expropriations of minority shareholders in politically connected firms. Unpublished working paper. The National University of Singapore.
- Roberts, B., 1990. A dead senator tells no lies: seniority and the distribution of federal benefits. *American Journal of Political Science*, 34: 31–58.
- Salamon, L., Seigfried, J., 1977. Economic power and political influence: The impact of industry structure on public policy. *American Political Science Review*, 71: 1026–1043.
- Schich, S., 2008. Financial crisis: deposit insurance and related financial safety net aspects. *Financial Market Trends*, OECD.
- Schuler, D., Rehbein, K., Cramer, R., 2002. Pursuing strategic advantage through

-
- litical means: A multivariate approach. *Academy of Management Journal*, 45: 659–672.
- Shleifer, A., Vishny, R.W., 1998. *The grabbing hand: government pathologies and their cures*. Harvard University Press, Cambridge, Massachusetts.
- Sironi, A., 2003. Testing for market discipline in the European banking industry: evidence from subordinated debt issues. *Journal of Money, Credit and Banking*, 35: 443–472
- Stigler, G., 1971. The Theory of Economic Regulation. *Bell Journal of Economics and Management Science*, 2: 3–21.
- Tachau, F, Heper, M., 1983. The state, politics and the military in Turkey. *Comparative Politics*, 16: 17–33.
- Tanyeri B., 2010. Financial transparency and sources of hidden capital in Turkish banks. *Journal of Financial Services Research*, 37:25–43
- Vella, F., Verbeek, M., 1999. Two-step estimation of panel data models with censored endogenous variables and selection bias. *Journal of Econometrics* 90, 239–264.
- Villalonga, B., Amit, R., 2006. How do family ownership, control, and management affect firm value? *Journal of Financial Economics*, 80:385–417.
- Woolridge, J.M., 1995. Selection corrections for panel data models under conditional mean independence assumptions. *Journal of Econometrics* 68, 115–132.

Appendix 1 Turkish banking system

Initiated in 1980, the financial liberalization reforms abandoned almost immediately interest rate ceilings, removed quantitative controls on lending, facilitated bank entry, and stimulated financial innovation. Since the banking reforms, Turkish banking system experienced a troublesome transformation from government domination to private competition and dealt with two minor (in 1982 and 1991) and two major banking crises (in 1994 and 2000). Turkish commercial banks operate as universal banks (offering a broad range of products and services such as deposit-taking, commercial lending, trading financial instruments, insurance, leasing and investment banking) that are largely homogeneous. Before liberalization, the banking sector was largely under state control and virtually no start-ups were allowed in this period. There were interest rate ceilings on deposits and loans and maximum limits on loan sizes in line with the import substitution strategy. In an environment of non-price competition, bank competition was focused largely on customer convenience, leading to a race to establish larger bank networks in order to take in more deposits. Table A1 shows that the average number of branches increased by almost 390 % and the average number of employees rose by more than 400% between 1963 and 1980. These rates of increase, however, decelerated after 1980. After the liberalization of the market, the number of banks operating in the Turkish banking sector increased significantly because the large demand of profitable public borrowing and the presence of a full blanket deposit guarantee attracted a considerable number of new entrants. The number of banks fell sharply from more than 50 to just 33 in the aftermath of the 2000/2001 financial crisis. This shakeout occurred through the liquidation of banks with a weak capital basis and through voluntarily mergers and acquisitions. Despite decreasing bank numbers, banking assets grew massively after the crisis from \$118 billion in 2002 to about \$ 460 billion in 2008. With regard to ownership, commercial banks can be classified as public, domestic or foreign banks. The Turkish banking landscape changed after the liberalization of the market because of mergers and acquisitions, new entries and privatizations. As of 2008, there were 33 deposit-taking banks, 3 of which were state-owned banks, 17 private domestic banks and 13 foreign banks. Although the share of public banks in total assets continues to decline gradually, its impact is still large compared to EU averages. The presence of foreign banks used to be limited because of the unstable environment and entry barriers. However, the sector has recently attracted the interest of foreign banks because of the strong growth potential and solid economic recovery. The Turkish banking system still of-

fers strong growth potential compared with EU countries. In the future, the environment of sustainable growth potential, relatively high margins, low inflation and declining intermediation costs are expected to support further growth in total assets, commercial loans and deposit volumes of the banking system, leading to a long overdue process of financial deepening.

Table A1 Overview of the Turkish banking system

	public share (%)	commercial share (%)	foreign share (%)	average number of branches	average number of employees	assets/GNP (%)
1963	64.4	28.9	4.3	35.8	668.8	16.1
1970	49.6	29.5	3.0	69.4	1434.1	18.3
1980	44.1	44.2	2.9	138.5	2914.2	31.4
1981	42.5	47.2	2.9	138.8	2812.5	37.2
1982	41.8	47.3	3.2	132.4	2737.4	41.7
1983	47.0	42.2	3.7	139.6	2965.7	45.2
1984	47.8	41.6	4.1	132.0	2865.0	45.3
1985	47.6	43.6	3.6	125.4	2764.0	43.9
1986	43.1	45.3	3.8	115.4	2606.8	49.4
1987	44.2	44.9	3.1	114.6	2660.6	55.1
1988	43.1	43.8	3.6	108.8	2521.0	52.9
1989	45.4	42.3	3.1	106.3	2468.8	47.3
1990	44.6	43.2	3.5	99.4	2334.7	42.9
1991	42.3	45.8	3.3	99.6	2352.3	46.6
1992	43.1	46.0	3.7	89.9	2127.9	50.2
1993	36.9	52.3	3.8	89.2	2056.9	52.5
1994	39.5	49.3	3.0	91.1	2075.3	52.0
1995	37.7	52.0	2.9	91.8	2129.3	52.2
1996	38.3	52.7	3.0	93.4	2147.1	59.8
1997	34.6	55.4	4.7	94.7	2150.9	65.9
1998	34.9	53.3	4.4	98.3	2219.9	68.8
1999	34.9	49.5	5.2	95.0	2148.0	92.1
2000	34.3	47.5	5.4	99.2	2157.0	82.9
2001	32.4	56.3	3.0	113.2	2254.0	94.3
2002	31.9	56.2	3.1	113.1	2282.8	77.3
2003	33.3	57.0	2.8	119.3	2465.0	70.0
2004	34.9	57.4	3.4	127.2	2649.2	71.4
2005	31.4	59.7	5.2	132.9	2814.0	81.6
2006	29.6	54.8	12.2	148.9	3111.8	84.2
2007	29.2	52.3	15.0	165.6	3446.4	86.5
2008	30.4	54.1	14.8	195.3	3813.3	87.1

Appendix 2 Turkish political environment

Political instability accompanied by increasing social disorder was the hallmark of the post-1960 military regime. The military coup in Turkey of 1960 was a [coup d'état](#) staged by some officers against the democratically elected government of the then Adnan Menderes-led [Democratic Party](#). The coup occurred primarily in response to the erosion of military and civil bureaucracy power in the Menderes era. The 1961 constitution was reoriented toward preservation of the status-quo and sought to impose significant institutional constraints (e.g., establishment of a second parliamentary chamber and a constitutional court with powers to invalidate government policy) on the government's discretion (Tachau and Heper 1983). These constraints produced huge rigidities for the system, and are believed to be partly responsible for the political instability, which governments seemed powerless to remedy (Esfahani 1996). The 1960 coup consolidated the military's hold on the country. In 1971, after the military ultimatum, and with the assistance of military forces a new coalition cabinet was formed following an increase in left- and right-wing violence.

From 1980 till 1983, the legislative process was again derailed by another coup d'état as a response to political fragmentation, radical left and right doctrines, uncompromising attitudes of political parties and unstable governments. The military junta returned power to civilians with the general elections held on November 6, 1983 and the Motherland Party, or ANAP, headed by Turgut Özal, won the elections with an absolute majority, defeating the parties favored by the military caretakers. During the Özal-era the country initiated a staged transformation towards an open economy and turned away from an inward-looking import substitution strategy. From the October 1991 general elections till October 2002 general elections, the various coalition governments, frequently with opposing ideologies, proved to be weak and divided. Turkey faced in the period two economic crises episodes. In the 1994 crisis, three banks were confiscated after the sharp devaluation of domestic currency due to the unsustainable domestic borrowing policy, high inflation and large current account and budget deficits. To avoid a systemic crisis a full blanket deposit guarantee was introduced to cover both Turkish Lira and foreign currency denominated deposits. This blanket guarantee was not lifted until 2001, after another and much deeper economic crisis in 2000.

The 2000/2001 crisis was a classic twin crisis, caused by growing macroeconomic imbalances. Ultimately, the government was forced to abandon the euro-dollar crawling

peg it had initiated primarily to tackle high inflation, and had to face the collapse of the banking system. In response, the government adopted a comprehensive reform program supported by the World Bank and IMF. An important part of this program was the establishment of the Banking Regulation and Supervision Agency (BRSA), which became more effective in the post-crisis period in terms of prudential supervision and regulation, having the appropriate enforcement power, credibility and autonomous structure in the post-crisis period. Private banks were forced to strengthen their equity capital, either independently or through mergers and acquisitions, and about 20 fragile banks that failed to comply were transferred to the State Deposit Insurance Fund. It is widely believed that the introduction of full insurance coverage on deposits fuelled an unhealthy competition between financial institutions at the expense of sound banking practices and was one of the main causes of the crisis in 2000/2001 (BAT, 2009). In November 2002 Turkish voters punished the governing parties for their economic mismanagement, and pinned their hopes on Erdogan, the leader of Justice and Development Party (AKP). Table A2 presents an overview of the parties in power after the 1960 coup d'état.

Table A2 Post 1960 elections and governments in Turkey

Date of the elections	Duration of the government	Parties in the government
15.10.1961	30.05.1960 - 28.10.1961	Military intervention
	20.11.1961 - 01.06.1962	CHP + AP
	25.06.1962 - 02.12.1963	CHP+YTP+CKMP+BG
	25.12.1963 - 13.02.1965	CHP+Independ.
10.10.1965	20.02.1965 - 22.10.1965	AP+CKMP+MP+YTP
	27.10.1965 - 27.10.1969	AP+CKMP+MP+YTP
12.10.1969	03.11.1969 - 14.02.1970	AP
	06.03.1970 - 12.03.1971	AP
	26.03.1971 - 03.12.1971	Extraordinary
	11.12.1971 - 17.04.1972	Extraordinary
14.10.1973	22.05.1972 - 10.04.1973	Extraordinary
	15.04.1973 - 16.12.1973	AP+CGP
	26.01.1974 - 16.09.1974	CHP+MSP
	16.11.1974 - 31.03.1975	Temporary (N)
05.06.1977	31.03.1975 - 21.06.1977	AP+MSP+MHP+CGP
	21.06.1977 - 03.07.1977	CHP(N)
	21.07.1977 - 31.12.1977	AP+MSP+MHP
	05.01.1978 - 17.10.1979	CHP+BG+CGP+DP
	12.11.1979 - 12.09.1980	AP(minority)
	22.09.1980 - 24.11.1983	Military intervention
06.11.1983	13.12.1983 - 21.12.1987	ANAP
29.11.1987	21.12.1987 - 09.11.1989	ANAP
	09.11.1989 - 23.06.1991	ANAP
	23.06.1991 - 20.11.1991	ANAP
	20.10.1991	21.11.1991 - 25.06.1993
25.06.1993 - 05.10.1995		DYP+SHP/CHP
05.10.1995 - 30.10.1995		DYP+SHP/CHP
24.12.1995		30.10.1995 - 06.03.1996
	06.03.1996 - 28.06.1996	ANAP+DYP
	28.06.1996 - 30.06.1997	RP+DYP
	30.06.1997 - 11.01.1999	DSP+ANAP+DTP
18.04.1999	11.01.1999 - 28.05.1999	DSP(Minority)
	28.05.1999 - 04.11.2002	DSP+MHP+ANAP
03.11.2002	18.11.2002 - 14.03.2003	AKP
	14.03.2003 - 29.08.2007	AKP
22.07.2007	29.08.2007 -	AKP

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