Sleeping with the Enemy:

Political Connections and Firm Risk*

Martín A. Rossi
Universidad de San Andrés

and

Christian A. Ruzzier
Universidad de San Andrés

Abstract: We examine the effect of political connections on market perceptions of firm risk, as measured by a firm's (equity) beta, and provide causal evidence of an increase in risk when the government appoints directors to a firm's board. To address endogeneity concerns we exploit a natural experiment in Argentina, where the nationalization of the country's pension system gave the government the right to appoint directors to some firms' boards. Our results are not driven by increases in financial leverage or changes in financial performance. We find evidence of a higher payout ratio in politically connected firms, which we suggest could result in increased risk of interference (or expropriation) in politically connected firms.

Keywords: Political connections, corporate governance, boards, beta, nationalization, firm performance.
JEL Code: G32, G34, H13.

February 2018

* Martín A. Rossi: mrossi@udesa.edu.ar; Christian A. Ruzzier: cruzzier@udesa.edu.ar. We are grateful to Luis Blaquier, former President of the *Fondo de Garantía de Sustentabilidad* (FGS) of Argentina, for helping us with the data on government-appointed directors in each firm. We thank Gabriela Értola Navajas and Paula A. López for excellent research assistance, and Santiago Barraza, Hugo Collacciani, Marcelo Fernandes, Gustavo Genoni, Maxim Mironov, Jorge Ponce, and seminar participants at Universidad de la República (Uruguay), Universidad Nacional de La Plata, Universidad de San Andrés, LACEA-LAMES 2017, AAEP 2017, and Academia Nacional de Ciencias Económicas (Argentina) for helpful comments. The usual disclaimer applies.

1. Introduction

A growing literature is documenting the benefits to firms of having political connections. Politically-connected firms enjoy easier access to credit (Claessens, Feijen, and Laeven, 2008; Dinç, 2005; Johnson and Mitton, 2003; Khwaja and Mian, 2005), lighter regulation (Agrawal and Knoeber, 2001; Kroszner and Stratmann, 1998), favorable access to government contracts (Goldman, Rocholl, and So, 2010), lower taxation (Faccio, 2010), and government aid in case of financial trouble (Faccio, Masulis, and McConnell, 2006) – to name a few benefits. Part of this literature focuses on market assessments of these connections, using stock market data to gauge their impact on firm value and firm performance (Bertrand, Kramarz, Schoar, and Thesmar, 2007; Cooper, Gulen, and Ovtchinnikov, 2010; Faccio, 2006; Fisman, 2001; Goldman, Rocholl, and So, 2009; and Jayachandran, 2006). Political connections are typically found there to add value to firms (Bertrand, Kramarz, Schoar, and Thesmar, 2007, being the exception).

However, not only expected returns are central to investors – risk is also a primary concern. Risk (and a decision maker's attitude towards risk) affects investors' portfolio design, as well as major corporate financial decisions such as investment, financing, and dividend decisions. In this paper, we examine the effect of political connections on market perceptions of firm risk, as measured by a firm's (equity) beta, and provide causal evidence of an increase in risk when the government appoints directors to a firm's board.

Since firm performance is affected by a firm's political connections, firms are likely to seek (or avoid) such connections: political connections are presumably endogenous. To address endogeneity concerns we exploit a natural experiment in Argentina concerning the nationalization of the country's pension system in 2008. A law passed towards the end of 1993 in Argentina had established a mixed pension system in which workers' contributions accumulated in individual

capitalization accounts, managed by private fund managers, called *Administradoras de Fondos de Jubilaciones y Pensiones* (AFJPs). The law allowed the AFJPs to invest their funds in, among other securities, shares in domestic firms. In October 2008, an unexpected announcement by President Cristina Fernández de Kirchner started the rapid legislative process that would lead to the nationalization of Argentina's private pension funds only a month later. The new law transferred all of the AFJPs' assets – including shares in domestic firms – to a fund run by the government. What were small ownership stakes when dispersed among several AFJPs became significant shareholdings when concentrated in the hands of a single owner, the Argentine government. In some cases, the shareholding was large enough to grant the government the right to appoint one or more directors to the boards of those firms – giving us a plausible source of exogenous variation in board composition across different firms. Consistent with prior literature (e.g., Faccio, 2006), we interpret the number of government-appointed directors (GADs) as a measure of a firm's political connections, and use the nationalization of the pension system as a source of exogenous variation in political connections.

We find that an extra GAD (or a one-standard-deviation increase in their proportion in the board) causes an increase of 0.08 points in beta – a more than 10% increase with respect to the sample mean. Political connections thus seem to make a firm more risky (as perceived by the market). This result is not driven by increases in financial leverage or changes in financial performance.

We find some evidence of a higher payout ratio in politically connected firms, an alteration of a major corporate decision that could entail some costs to firms if they are made to favor the politicians they are connected with, and which could explain our main result if a higher beta is reflecting an increased risk of interference (or expropriation) in politically connected firms.

Our paper contributes to the growing economic literature on politicians and firms (Agrawal and Knoeber, 2001; Bertrand, Kramarz, Schoar, and Thesmar, 2007; Faccio, 2006; Fan, Wong, and Zhang, 2007; Fisman, 2001; Goldman, Rocholl, and So, 2009; Shleifer and Vishny, 1994) by showing that political connections may affect not only a firm's return, but also its risk.

We also add to the literature on boards of directors and firm value (see the surveys by Adams, Hermalin, and Weisbach, 2010; Hermalin and Weisbach, 2003; and Johnson, Daily, and Ellstrand, 1996) – and especially the part of that literature focusing on directors' characteristics[1] – by considering directors with the distinguishing characteristic of being appointed by the government, and also by proposing a plausible identification strategy to deal with the endogeneity concerns that plague this literature (as pointed out, e.g., by Hermalin and Weisbach, 2003).

Finally, we contribute to the study of the determinants of systematic risk (Gahlon and Gentry, 1982; Griffin and Dugan, 2003; Hamada, 1972; Hill and Stone, 1980; Hong and Sarkar, 2007; Mandelker and Rhee, 1984) by showing how market equity betas are affected by the political connections of the firm.

The remainder of the paper is organized as follows. Section 2 describes the natural experiment and data. Section 3 presents the empirical strategy and reports the results. Section 4 contains further discussion about the reported results, and section 5 concludes.

2. Natural experiment and data

We propose an explanation for the evolution of a firm's equity beta that emphasizes the change in firm risk associated to the presence of government representatives in the board of directors. To test our prediction, we exploit a source of exogenous variation in the composition of

[1] See, e.g., Adams and Ferreira (2009) for the case of female directors; Goldman, Rocholl, and So (2009) for directors with political backgrounds; Güner, Malmendier, and Tate (2008) for directors with banking experience; and Masulis, Ruzzier, Xiao, and Zhao (2012) for directors with previous industry experience.

boards. Accordingly, in this section we describe the setup and data for our empirical exercise and discuss how we can exploit changes in Argentina's pension system as a source of exogenous variation in the composition of a firm's board.

According to the results in Faccio (2006: 369), "connections are [more] common in the [absence] of more stringent regulation of political conflicts of interest, and connections are particularly common in countries that are perceived as being highly corrupt." In Transparency International's frequently cited Corruption Perceptions Ranking, Argentina ranked 95th out of the 176 countries surveyed in 2016 (109/180 in 2008).[2] Argentina thus seems to be a good lab in which to examine the question of firms' political connections.

2.1. A brief history of Argentina's pension system up to 2008

With the first pension schemes created early in the 20th century, Argentina was one of the first countries in the world to establish a social security system (Cohan, Díaz-Frers, and Levy-Yeyati, 2010). At first, coverage was limited to workers of some industries and most funds were organized under an individual capitalization scheme. By the 1950s, however, social security was made universal and most of the previously existing funds were consolidated at the national level under a pay-as-you-go system – that is, an unfunded system in which current contributors pay the expenses for current recipients. For more than 30 years the system was based on intergenerational solidarity, but its increasing deficits made it undergo many changes in its design and regulation.[3]

In the 1980s the financial unsustainability of Argentina's pay-as-you-go pension system became evident. Tax evasion, population aging, and rising unemployment and informality in labor markets, together with other economic problems faced by the country, eroded the public support of the scheme and laid the foundations for a deep reform that took place in 1993.

[2] https://www.transparency.org/news/feature/corruption_perceptions_index_2016.
[3] For a detailed account of the history of Argentina's social security system, see Cetrángolo and Grushka (2004) and Isuani (2008).

Trying to achieve long-term sustainability of the pension system, a law passed towards the end of 1993 (Law No. 24241) established a mixed system (the *Sistema Integrado de Jubilaciones y Pensiones* – SIJP) in which workers' contributions accumulated in individual capitalization accounts, and employers' contributions funded a universal pension that preserved the logic of the pay-as-you-go scheme (Cohan, Díaz-Frers, and Levy-Yeyati, 2010). The management of the individual capitalization scheme was delegated to private firms – the pension fund managers, called *Administradoras de Fondos de Jubilaciones y Pensiones* (AFJPs), which were entitled to remuneration by charging commissions to their beneficiaries. The law allowed the AFJPs to invest their funds in negotiable debt instruments, government-issued securities, fixed-term deposits, shares in mutual funds, mortgage bonds, and – most important for our purposes in this paper – shares in domestic firms.[4]

2.2. The 2008 nationalization of Argentina's pension system

The existence of the AFJPs came to an end in 2008.[5] In October 2008, an unexpected announcement by President Cristina Fernández de Kirchner started the rapid legislative process that would lead to the nationalization of Argentina's private pension funds: only 31 days passed between the announcement (October 21) and the passing (November 21) of the law (Law No. 26425).[6] The Congress undid the 1993 reform by unifying the two co-existing schemes into a single pay-as-you-go, government-run scheme – the newly created *Sistema Integrado Previsional Argentino* (SIPA) that replaced the SIJP.

The new law transferred all of the AFJPs' assets to a fund, the *Fondo de Garantía de Sustentabilidad* (FGS), run by the government through the national social security agency,

[4] The limits on the portfolio choices of the AFJPs were laid out in Articles 74° to 76º of Law No. 24241.
[5] There were 10 AFJPs at the time.
[6] *La Nación*, a leading Argentine newspaper, described it as a "process that would blush the fast track obtained by the government of George W. Bush from the American Parliament" (http://www.lanacion.com.ar/1072498-es-ley-la-estatizacion-de-las-jubilaciones).

Administración Nacional de la Seguridad Social (ANSES).[7] These funds totaled over 23 billion dollars.[8] The reform also implied that the government would receive the monthly flow of workers' contributions previously going to the AFJPs, which had added up to a grand total of 2.7 billion dollars in 2007, and were expected to grow over 50% in 2008.[9] While the government claimed the 2008 reform to be a "strategic decision" taken to preserve workers' savings in the midst of the global financial crisis,[10] political opponents saw it as an opportunity that would allow the government to gain access to new revenue sources to cover 2009 funding needs.[11]

Of the 23 billion dollars managed by the AFJPs, approximately 6% consisted of shares in 44 different firms at the time of nationalization.[12] Ownership in a given firm by any individual AFJP was typically very small. However, the nationalization of the pension system placed all the shares in the hands of a single owner: the Argentine government (through ANSES), which suddenly became a significant shareholder in some of those firms. The mean shareholding was 13.57%, but the government's ownership ranged from 0.01% (Alpargatas S.A.I.C.) to 26.96% (S.A. San Miguel).

Where the government's shareholding was large enough, the government acquired the right to appoint one or more directors to the boards of those firms (in particular, the government could potentially appoint directors in 26 of the 44 firms) – and this was unrelated to the reasons for the reform of the pension system. This gives us a plausible source of exogenous variation in board

[7] The fund had been created by Decree No. 897/07.
[8] According to OSS (2011), the funds managed by the AFJPs totaled 80,209,124,682 pesos as of December 9, 2008. We have converted this figure into US dollars using the prevailing exchange rate at the time (source: http://www.cotizacion-dolar.com.ar/cotizaciones_dolar_historico.php).
[9] Figures obtained from UADE (2008).
[10] See, e.g., http://www.laprensa.com.ar/NotePrint.aspx?Note=325886.
[11] See, e.g., http://www.ucrcapital.org.ar/views/1543/oposicion-en-argentina-se-movilizo-contra-reforma-en-fondos-jubilatorios. As it turns out, a large part of the new flow of funds was used to finance a conditional cash transfer program (*Asignación Universal por Hijo*) and an extension of pension coverage to individuals who had not made the required contributions during their work life. The stock, on the other hand, did not see much change after nationalization (see Cohan, Díaz-Frers, and Levy-Yeyati, 2010; and Basualdo, Arceo, González, and Mendizábal, 2009).
[12] The list of firms can be found in the Appendix.

composition. Since these directors have the distinguishing characteristic of being appointed by the government, we can interpret the number of GADs as a measure of a firm's political connections (see, e.g., Faccio, 2006), and exploit the nationalization of the pension system as an exogenous shock to political connections to estimate the causal effect of having political connections on firm risk.

2.3. Data

Our measure of political connections is the number of potential GADs in each firm. The number of directors that any shareholder can appoint depends, mainly, of its shareholdings and the firm's statutes. We obtained the number of potential GADs (*Number of GADs*) by firm from the FGS.[13] We computed the fraction of the board represented by these directors (*Proportion of GADs*) by computing their ratio to board size, obtained from proxy statements.[14] We define a treated firm as a firm in which the government has the right to be represented as of 2009, the year after the nationalization of the AFJPs' funds. Control firms are those in which the government acquired shares, but does not have the right to appoint directors.

The main outcome of interest is firm risk, which we estimate with a firm's (equity) beta (*Beta*) – a measure of the volatility or systematic risk of its securities as compared to the market portfolio. Betas are calculated as the slope coefficients in an OLS regression of the return of a share on a constant and the return of the market index of the Buenos Aires Stock Exchange (*Bolsa de Comercio de Buenos Aires*). Specifically, for each firm we calculate one beta per year from 2003 to 2014, using the daily closing prices of its shares. Historical stock data were obtained from Bolsar, the financial website of the Buenos Aires Stock Exchange.[15]

[13] See http://fgs.anses.gob.ar/.
[14] See http://www.cnv.gov.ar/info_Financiera.asp?Lang=0.
[15] See www.bolsar.com.

Since some shares trade infrequently, betas could be biased downwards (Dimson, 1979), especially when daily data is used (Scholes and Williams, 1977). To avoid an infrequent trading bias we use a trade-to-trade method (Marsh, 1979; and Dimson and Marsh, 1983) to estimate betas, by using stock and market index prices only on the dates when the stock was actually traded to compute returns.

Summary statistics are reported in Table 1.

[Table 1 about here]

3. Empirical strategy and results

3.1. Empirical strategy

To identify the effect of political connections on a firm's beta we exploit the variability in the composition of boards over time. Formally, we want to estimate the following difference-in-differences equation:

$$\beta_{it} = \delta * T_{it} + \alpha_i + \mu_t + \varepsilon_{it} = \delta * (D_t * I_i) + \alpha_i + \mu_t + \varepsilon_{it} \qquad (1)$$

where β_{it} is the beta of firm i in year t; D_t is a dummy equal to 1 from 2009 on (*Post 2008* in the tables below); I_i is the number (or proportion) of potential GADs in firm i; α_i is a firm fixed effect; μ_t is a year fixed effect; and ε_{it} is the usual error term. In this equation the parameter of interest is δ.

The ANSES acquired shares in 44 firms after nationalization, but for the period of analysis (2003-2014) we have market data to compute betas for only 35 of them (the ones listed on the Buenos Aires Stock Exchange), so we restrict the sample to these 35 firms. The treated group consists of the 19 firms in which the government could potentially appoint directors, whereas the control group includes the 16 firms in which the government could not be represented in the board.

Identification exploits the unexpected pension system reform that varied the potential composition of the boards of directors across different firms. Given that the government participation in some boards was the result of political and economic decisions about the country's pension system**,** then the fact that some private firms ended up having GADs in their boards can be considered exogenous to the firms' financial outcomes, thus validating our empirical approach. A cross-sectional analysis would be inappropriate since the most represented firms in the AFJPs' portfolios can be different from other firms in ways that we cannot observe, and their particular characteristics can be correlated with the betas. The main advantage of the difference-in-differences methodology is that it controls for any time-invariant unobserved heterogeneity and also by shocks common to all firms in a given time.

Difference-in-differences estimates assume that the change in betas in control firms is an unbiased estimate of the counterfactual. While this assumption cannot be tested, it is possible to check whether beta trends in treated firms and control firms were the same in the pre-treatment period. If time trends are parallel in the pre-treatment period, then it is likely that they would have continued to be parallel in the post-treatment period in the absence of the treatment. Column (1) of Table 2 shows the results of estimating a modified version of equation (1) that includes a linear trend and, instead of the treatment variable, an interaction between the linear trend and a dummy variable that takes the value of 1 if the firm will be eventually treated and 0 if the firm will never be treated, using only observations from the period prior to the nationalization of the AFJPs. In column (2) of Table 2 we have included instead separate year dummies for the exposed firms. If the pre-intervention trend of firms which were not treated (control group) and the pre-intervention trend of those which will eventually be treated are not significantly different, then we can be confident that the trends in the two groups would have remained similar in the absence of

intervention (thus providing validity to the assumption that the trend in the control group is a good counterfactual for the trend in the treated group in the post-intervention period).

[Table 2 about here]

As reported in Table 2, for neither specification can we reject the hypothesis that pre-intervention trends are the same for the eventually treated and control firms. In column (1) we find that the linear trend is not significant, and in column (2) we see that all dummy variables capturing the interaction between the year effects and the dummy for the exposed firms also turn out non-significant. Even though we are exploiting a well-documented natural experiment, the results in Table 2 provide additional confidence on the difference-in-differences assumption.

3.2. Results

Table 3 reports estimates of equation (1) for two different definitions of treatment: number and proportion of GADs. In the two cases the coefficient on GADs is positive and statistically significant. Specifically, the coefficient on number of GADs is statistically significant at the 5 percent level, and the coefficient on proportion of GADs is significant at the 10 percent level. The results are not only statistically significant but also relevant: the incorporation of one GAD to the board of directors increases a firm's beta in 0.08 – a more than 10% increase with respect to the sample mean. The alternative definition of treatment indicates a similar result: an increase of one standard deviation in the proportion of GADs (+12 percentage points) increases a firm's beta also in 0.08. To sum up, political connections seem to make a firm more risky (as perceived by the market).

[Table 3 about here]

The usual assumption in econometrics is that the observations are independent. In this context, however, there might be a potential correlation between year-to-year observations for the

same firm. Thus, in all regressions, aside from usual Huber-White robust standard errors, we cluster standard errors at the firm level. In this case the coefficient on number of GADs is significant at the 10 percent level, whereas the coefficient on proportion of GADs is no longer statistically significant at the usual levels.

In Table 4 we perform a placebo test. We restrict the sample to the pre-treatment period (6 years, from 2003 to 2008), assigning a fake treatment to those firms that were eventually treated. We use a fake treatment variable that takes a value of one after 2005 (the mid-point in the pre-treatment period) and interact it with our measures of political connections.[16] We report estimates for the effect of political connections on betas using the fake treatment and, as expected, all the coefficients associated to the fake treatment variable are small and not significantly different from zero. These findings provide additional support to the validity of our identification strategy – as expected given the exogenous variation provided by our natural experiment.

[Table 4 about here]

4. Discussion

Having established a causal link between the presence of government representatives in boards and changes in firm betas, we now move on to explore that link further.

4.1. Political connections and financial performance

Most papers that use stock market data to assess the impact of political connections on firm value and performance (e.g., Cooper, Gulen, and Ovtchinnikov, 2010; Faccio, 2006; Fisman, 2001; Goldman, Rocholl, and So, 2009; and Jayachandran, 2006) find a positive effect. The closest to our paper is Goldman, Rocholl, and So (2009), who focus on the political connections of the board

[16] We have tried with other fake dummies, with similar results (which are available upon request).

of directors, and explore the impact of these connections on the value of publicly traded U.S. companies.

To examine the financial performance of politically connected firms, we run regressions similar to equation (1), but replace betas on the left-hand side with several measures of financial performance: return on assets (*ROA*, computed as net profit / book value of total assets), return on equity (*ROE*, computed as net profit / book value of equity), Tobin's Q (*Tobin's Q*, calculated as market value / book value of total assets), and market-to-book ratio (*MTB ratio*, calculated as market value of equity / book value of equity).[17] Results are reported in Table 5.

[Table 5 about here]

We find no effect of political connections on financial performance, however measured.[18] Although all the point estimates are negative across the different specifications, they are always non-significant. Contrary to Goldman, Rocholl, and So (2009), we do not find a positive effect of the political connections of the board of directors on the value of publicly traded firms (if anything, the effect is negative). As pointed out by Faccio (2010), the magnitude of the benefits of political ties might depend on the specific country of analysis. Hence it would be interesting to know how much of this difference in results is explained by the very different institutional environments in Argentina and the U.S.

4.2. Political connections and financial leverage

There is ample evidence that politically connected firms are more leveraged than non-connected peers (see Faccio, 2010). This could be due, for example, to easier access to credit (Claessens, Feijen, and Laeven, 2008; Dinç, 2005; Johnson and Mitton, 2003; Khwaja and Mian,

[17] Accounting information was obtained from http://www.cnv.gov.ar/info_Financiera.asp?Lang=0. Data on market values were obtained from www.bolsar.com. We compute market value as the market value of equity plus the book value of total liabilities and preferred stock, where the market value of equity is defined as the total number of common shares outstanding times the closing stock price at the end of the fiscal year.

[18] Our results are unchanged if we use one-period lags in the denominators of the different financial ratios.

2005) or a higher probability of being bailed out in case of financial trouble (Faccio, Masulis, and McConnell, 2006). Since the degree of financial leverage has an impact on a firm's beta (Gahlon and Gentry, 1982; Hamada, 1972; and Hill and Stone, 1980), it could be the case that an increase in political connections causes an increase in financial leverage at the firm level, which would explain the increase in beta that we have documented in Table 3. To rule this explanation out, we run regressions similar to equation (1), but replace beta on the left-hand side with the debt-to-assets ratio (*Debt/Assets*), as our measure of financial leverage.[19] As can be seen from Table 6, we find no effect of political connections on financial leverage, which cannot then explain the increase in betas.

[Table 6 about here]

4.3. The grabbing hand of government?

Bertrand, Kramarz, Schoar, and Thesmar (2007) raise the possibility that political connections might entail some costs to firms, because connected CEOs alter business decisions in order to favor the politicians they are connected with. This is just an example of how politicians can also extract rents from connections by interfering with the regular management of a business – a general point made already in Shleifer and Vishny (1994).[20]

A decision that could be altered by GADs to extract rents for the government is the decision about dividend payments. For instance, government representatives on the board could force higher dividends (or lower retention) than optimal reinvestment would require in order to increase available funds. This increased risk of interference (or expropriation) should be reflected in a higher beta for politically connected firms. We examine the effect of political connections on

[19] Book values of debt and assets were obtained from financial statements available at http://www.cnv.gov.ar/info_Financiera.asp?Lang=0.

[20] See Shleifer and Vishny (2002) for an elaboration of the idea of the grabbing-hand view of the interaction between bureaucrats and entrepreneurs.

dividend policy by estimating a model like equation (1) with a firm's dividend payout ratio (*Dividend Payout Ratio*) as the dependent variable.[21] Results are reported in Table 7.

[Table 7 about here]

We find evidence of a higher payout ratio in politically connected firms. The coefficients associated to our treatment variables are all positive, and statistically significant (except for the case of number of GADs and firm-level clustering, where the p-value is 0.200). An additional GAD implies that firms pay an extra $.25 on every dollar of net income.

Of course, it could be the case that payout policy was not optimal to begin with, and GADs are forcing higher dividend payments to mitigate existing agency problems, for instance, by reducing free cash flow (see, e.g., DeAngelo, DeAngelo, and Stulz, 2006; and Jensen, 1986). Such a change should be beneficial for the firm's performance. However, the evidence in Table 5 provides no support for this alternative explanation.

To sum up, there is suggestive evidence that at least part of the increase in firm risk due to political connections could be attributed to the grabbing hand of government. Since the evidence is admittedly weak, we offer this explanation mainly as a conjecture in need of further testing.

5. Conclusions

By exploiting a natural experiment in Argentina, where the nationalization of the country's pension system gave the government the right to appoint directors to some firms' boards (which, we argued, is a measure of political connections), we have established a causal link from political connections to increases in firm risk (as measured by beta). This result cannot be explained by increases in financial leverage or changes in financial performance, but could be driven by an

[21] The dividend payout ratio is computed as dividends paid to stockholders over net income of the firm. Data were obtained from financial statements available at http://www.cnv.gov.ar/info_Financiera.asp?Lang=0.

increased risk of interference (or expropriation) by the government – a possibility that connects our paper to the literature on government intervention and rent seeking (Agrawal and Knoeber, 2001; Fan, Wong, and Zhang, 2007; Hadlock, Lee, and Parrino, 2002; and Helland and Sykuta, 2004).

Although the analysis was carried out for a single country, we believe that the results for Argentina apply to many other countries around the world with weak institutional environments or high corruption.[22] Argentina was perceived in 2016 as being less corrupt than, among others, Pakistan, Mexico, Russia, Ukraine, Nigeria, and Bangladesh; and as corrupt as Brazil, China, India and Colombia.[23] As previously pointed out by Fisman (2001: 1101), "[t]o the extent that perceived corruption is a reasonable proxy for the prevalence of political rents, the results of this paper suggest that political connections may play an important role in many of the world's largest and most important economies."

Appendix

Table A.1. ANSES shareholdings after nationalization

Companies	Sector (Fama&French 17 Industry Portfolios)	ANSES shares (%)
S.A. San Miguel	Food	26.96%
Imp. Y Exp. de La Patagonia S.A.	Food	20.24%
Molinos Río de La Plata S.A.	Food	19.92%
Quickfood S.A.	Food	8.97%
Cresud S.A.	Food	3.33%
Ledesma S.A.	Food	0.38%
Socotherm Americas S.A.	Oil and Petroleum Products	18.59%
Solvay Indupa S.A.	Oil and Petroleum Products	16.71%
Petrobras Energía Participaciones S.A.	Oil and Petroleum Products	14.37%
Petrobras Energía S.A.	Oil and Petroleum Products	0.95%
Y.P.F. S.A.	Oil and Petroleum Products	0.01%
Alpargatas S.A.I.C.	Textiles, Apparel & Footware	0.01%

[22] Political connections could be important even in countries with a well-functioning legal system, as shown by Goldman, Rocholl, and So (2009) for the United States.
[23] https://www.transparency.org/news/feature/corruption_perceptions_index_2016.

Companies	Sector (Fama&French 17 Industry Portfolios)	ANSES shares (%)
Juan Minetti S.A.	Construction and Construction Materials	11.31%
Siderar S.A.	Steel Works Etc	25.97%
Aluar Aluminio Argentino S.A.I.C.	Steel Works Etc	11.91%
Tenaris S.A.	Steel Works Etc	3.49%
Grupo Concesionario del Oeste	Transportation	21.56%
Mirgor S.A.	Transportation	21.54%
Metrovías S.A.	Transportation	8.55%
Gas Natural BAN	Utilities	26.63%
Edenor S.A.	Utilities	26.40%
Distribuidora de Gas Cuyana	Utilities	26.12%
Transportadora de Gas del Sur S.A.	Utilities	23.10%
Emdersa S.A.	Utilities	20.96%
Pampa Energía S.A.	Utilities	19.35%
Transener S.A.	Utilities	18.78%
Endesa Costanera S.A.	Utilities	13.40%
Camuzzi Gas Pampeana S.A.	Utilities	12.65%
Capex S.A.	Utilities	10.73%
Metrogas S.A.	Utilities	8.13%
Central Puerto S.A.	Utilities	3.95%
Transportadora de Gas del Norte S.A.	Utilities	0.73%
Banco Macro	Banks, Insurance Companies, and Other Financials (Banks)	26.85%
Consultatio S.A.	Banks, Insurance Companies, and Other Financials (Real Estate)	26.62%
Grupo Financiero Galicia S.A.	Banks, Insurance Companies, and Other Financials (Banks)	20.43%
Banco Patagonia S.A.	Banks, Insurance Companies, and Other Financials (Banks)	14.66%
Euromayor S.A.	Banks, Insurance Companies, and Other Financials (Real Estate)	9.35%
BBVA Banco Francés S.A.	Banks, Insurance Companies, and Other Financials (Banks)	7.50%
Banco Hipotecario Nac. S.A.	Banks, Insurance Companies, and Other Financials (Banks)	4.87%
IRSA Inversiones y Representaciones S.A.	Banks, Insurance Companies, and Other Financials (Real Estate)	4.47%
Alto Palermo S.A.	Banks, Insurance Companies, and Other Financials (Real Estate)	2.22%
Telecom Argentina Stet- France Telecom S.A.	Other (Communication Services)	24.98%
Grupo Clarín S.A.	Other (Newspaper, Radio-TV Broadcaster, Cable TV Operators)	9.00%
Telefónica S.A.	Other (Communication Services)	0.41%

Source: ANSES.

References

Adams, Renée B. and Daniel Ferreira (2009). "Women in the Boardroom and their Impact on Governance and Performance," *Journal of Financial Economics*, Vol. 94, No. 2, (Nov., 2009), pp. 291–309.

Adams, Renée B., Benjamin E. Hermalin, and Michael S. Weisbach (2010). "The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey," *Journal of Economic Literature*, Vol. 48, No. 1, (Mar., 2010), pp. 58–107.

Agrawal, Anup and Charles R. Knoeber (2001). "Do Some Outside Directors Play a Political Role?," *Journal of Law and Economics*, Vol. 44, No. 1, (Apr., 2001), pp. 179–198.

Basualdo, Eduardo, Nicolás Arceo, Mariana González, and Nuria Mendizábal (2009). "La Evolución del Sistema Previsional Argentino," Documento de Trabajo No. 2, Centro de Investigación y Formación de la República Argentina (CIFRA), November.

Bertrand, Marianne, Francis Kramarz, Antoinette Schoar, and David Thesmar (2007). "Politicians, Firms and the Political Business Cycle: Evidence from France," unpublished manuscript, University of Chicago Graduate School of Business, CREST-INSEE, MIT Sloan, and HEC, March.

Cetrángolo, Oscar and Carlos Grushka (2004). "Sistema Previsional Argentino: Crisis, Reforma y Crisis de la Reforma," Serie Financiamiento del Desarrollo No. 151, CEPAL, United Nations, December.

Claessens, Stijn, Erik Feijen, and Luc Laeven (2008). "Political Connections and Preferential Access to Finance: The Role of Campaign Contributions," *Journal of Financial Economics*, Vol. 88, No. 3, (Jun., 2008), pp. 554–580.

Cohan, Luciano, Luciana Díaz-Frers, and Eduardo Levy-Yeyati (2010). "Lineamientos para una reforma previsional," Documento de Trabajo No. 50, Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento (CIPPEC), September.

Cooper, Michael J., Huseyin Gulen, and Alexei V. Ovtchinnikov, (2010). "Corporate Political Contributions and Stock Returns," *The Journal of Finance*, Vol. 65, No. 2, (Apr., 2010), pp. 687–724.

DeAngelo, Harry, Linda DeAngelo, and René M. Stulz (2006). "Dividend Policy and the Earned/Contributed Capital Mix: A Test of the Life-Cycle Theory," *Journal of Financial Economics*, Vol. 81, No. 2, (Aug., 2006), pp. 227–254.

Dimson, Elroy (1979). "Risk Measurement when Shares are Subject to Infrequent Trading," *Journal of Financial Economics*, Vol. 7, No. 2, (Aug., 1979), pp. 197–226.

Dimson, Elroy and Paul Marsh (1983). "The Stability of UK Risk Measures and the Problem of Thin Trading," *The Journal of Finance*, Vol. 38, No. 3, (Jun., 1983), pp.753–783.

Dinç, I. Serdar (2005). "Politicians and Banks: Political Influences on Government-Owned Banks in Emerging Markets," *Journal of Financial Economics*, Vol. 77, No. 2, (Aug., 2005), pp. 453–479.

Faccio, Mara (2006). "Politically Connected Firms," *The American Economic Review*, Vol. 96, No. 1, (Mar., 2006), pp. 369–386.

Faccio, Mara (2010). "Differences between Politically Connected and Nonconnected Firms: A Cross-Country Analysis," *Financial Management*, Vol. 39, No. 3, (Autumn, 2010), pp. 905–927.

Faccio, Mara, Ronald W. Masulis, and John J. McConnell (2006). "Political Connections and Corporate Bailouts," *The Journal of Finance*, Vol. 61, No. 6, (Dec., 2006), pp. 2597–2635.

Fan, Joseph P. H., T. J. Wong, and Tianyu Zhang (2007). "Politically Connected CEOs, Corporate Governance, and Post-IPO Performance of China's Newly Partially Privatized Firms," *Journal of Financial Economics*, Vol. 84, No. 2, (May, 2007), pp. 330–357.

Fisman, Raymond (2001). "Estimating the Value of Political Connections," *The American Economic Review*, Vol. 91, No. 4, (Sep., 2001), pp. 1095–1102.

Gahlon, James M. and James A. Gentry (1982). "On the Relationship between Systematic Risk and the Degrees of Operating and Financial Leverage," *Financial Management*, Vol. 11, No. 2, (Summer, 1982), pp. 15–23.

Goldman, Eitan, Jörg Rocholl, and Jongil So (2009). "Do Politically Connected Boards Affect Firm Value?," *The Review of Financial Studies*, Vol. 22, No. 6, (Jun., 2009), pp. 2331–2360.

Goldman, Eitan, Jörg Rocholl, and Jongil So (2010). "Political Connections and the Allocation of Procurement Contracts," unpublished manuscript, Indiana University, ESMT European School of Management and Technology, and University of Korea, December.

Griffin, Harry F., and Michael T. Dugan (2003). "Systematic Risk and Revenue Volatility," *The Journal of Financial Research*, Vol. 26, No. 2, (Jun., 2003), pp. 179–189.

Güner, A. Burak, Ulrike Malmendier, and Geoffrey Tate (2008). "Financial Expertise of Directors," *Journal of Financial Economics*, Vol. 88, No. 2, (May, 2007), pp. 323–354.

Hamada, Robert S. (1972). "The Effect of the Firm's Capital Structure on the Systematic Risk of Common Stocks," *The Journal of Finance*, Vol. 27, No. 2, (May, 1972), pp. 435–452.

Hadlock, Charles J., D. Scott Lee, and Robert Parrino (2002). "CEO Careers in Regulated Environments: Evidence from Electric and Gas Utilities," *Journal of Law and Economics*, Vol. 45, No. 2, (Oct., 2002), pp. 535–563.

Helland, Eric and Michael Sykuta (2004). "Regulation and the Evolution of Corporate Boards: Monitoring, Advising or Window Dressing?," *Journal of Law and Economics*, Vol. 47, No. 1, (Apr., 2004), pp. 167–194.

Hermalin, Benjamin E. and Michael S. Weisbach (2003). "Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature," *Federal Reserve Bank of New York Economic Policy Review*, Vol. 9, No. 1, (Apr., 2003), pp. 7–26.

Hill, Ned C. and Bernell K. Stone (1980). "Accounting Betas, Systematic Operating Risk, and Financial Leverage: A Risk-Composition Approach to the Determinants of Systematic Risk," *Journal of Financial and Quantitative Analysis*, Vol. 15, No. 3, (Sep., 1980), pp. 595–637.

Hong, Gwangheon and Sudipto Sarkar (2007). "Equity Systematic Risk (Beta) and Its Determinants," *Contemporary Financial Research*, Vol. 24, No. 2, (Summer, 2007), pp. 423–466.

Isuani, Ernesto Aldo (2008). "La Política Social Argentina en Perspectiva," in G. Cruces, J. M. Moreno, D. Ringold and R. Rofman (eds.), *Los Programas Sociales en Argentina hacia el Bicentenario. Visiones y perspectivas*, Washington, DC: World Bank. Available at http://documents.worldbank.org/curated/en/651311468210566492/Los-programas-sociales-en-Argentina-hacia-el-Bicentenario-Visiones-y-perspectivas.

Jayachandran, Seema (2006). "The Jeffords Effect," *Journal of Law and Economics*, Vol. 49, No. 2, (Oct., 2006), pp. 379–425.

Jensen, Michael C. (1986). "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," *The American Economic Review*, Vol. 76, No. 2, (May, 1986), pp. 323–329.

Johnson, Jonathan L., Catherine M. Daily, and Alan E. Ellstrand (1996). "Boards of Directors: A Review and Research Agenda," *Journal of Management*, Vol. 22, No. 3, pp. 409–438.

Johnson, Simon and Todd Mitton (2003). "Cronyism and Capital Controls: Evidence from Malaysia," *Journal of Financial Economics*, Vol. 67, No. 2, (Feb., 2003), pp. 351–382.

Khwaja, Asim Ijaz and Atif Mian (2005). "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market," *The Quarterly Journal of Economics*, Vol. 120, No. 4 (Nov., 2005), pp. 1371–1411.

Kroszner, Randall S. and Thomas Stratmann (1998). "Interest-Group Competition and the Organization of Congress: Theory and Evidence from Financial Services' Political Action Committees," *The American Economic Review*, Vol. 88, No. 5, (Dic., 1998), pp. 1163–1187.

Mandelker, Gershon N. and S. Ghon Rhee (1984). "The Impact of the Degrees of Operating and Financial Leverage on Systematic Risk of Common Stock," *Journal of Financial and Quantitative Analysis*, Vol. 19, No. 1, (Mar., 1984), pp. 45–57.

Marsh, Paul (1979). "Equity Rights Issues and the Efficiency of the UK Stock Market," *The Journal of Finance*, Vol. 34, No. 4, (Sep., 1979), pp. 839–862.

Masulis, Ronald W.; Christian A. Ruzzier, Sheng Xiao, and Shan Zhao (2012). "Do Independent Expert Directors Matter?," MPRA Paper No. 68200, Munich Personal RePEc Archive, June. Available at https://mpra.ub.uni-muenchen.de/id/eprint/68200.

OSS (2011). "Caracterización del Fondo de Garantía de Sustentabilidad del SIPA," Observatorio de la Seguridad Social, Administración Nacional de la Seguridad Social, Argentina, May. Available at http://observatorio.anses.gob.ar/.

Scholes, Myron and Joseph Williams (1977). "Estimating Betas from Nonsynchronous Data," *Journal of Financial Economics*, Vol. 5, No. 3, (Dec., 1977), pp. 309–327.

Shleifer, Andrei and Robert W. Vishny (1994). "Politicians and Firms," *The Quarterly Journal of Economics*, Vol. 109, No. 4 (Nov., 1994), pp. 995–1025.

Shleifer, Andrei and Robert W. Vishny (2002). *The Grabbing Hand. Government Pathologies and Their Cures,* Cambridge, MA: Harvard University Press.

UADE (2008). "Informe AFJP," Instituto de Economía, Facultad de Ciencias Económicas, Universidad Argentina de la Empresa, September.

Table 1. Summary statistics

	(1) Obs.	(2) Mean	(3) SD
Beta	384	0.7539	0.5150
Number of GADs	35	1.0571	1.3272
Proportion of GADs	35	0.1156	0.1256
ROA	407	0.0315	0.0657
ROE	407	0.0138	0.9090
Tobin's Q	369	1.0138	0.4928
MTB ratio	369	1.4893	4.1431
Debt/Assets	407	0.5777	0.2173
Dividend Payout Ratio	394	0.3740	2.9217

Notes: *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors, *ROA* is return on assets (computed as net profit / book value of total assets), *ROE* is return on equity (computed as net profit / book value of equity), *Tobin's Q* is calculated as market value / book value of total assets, *MTB ratio* is the market-to-book ratio (calculated as market value of equity / book value of equity), *Debt/Assets* is the debt-to-assets ratio, and *Dividend Payout Ratio* is dividends / net income.

Table 2. Pre-treatment trends

Dependent variable:	(1) *Beta*	(2) *Beta*
Trend	-0.0383	
	(0.0257)	
	[0.0352]	
Trend x Eventually Treated	0.0068	
	(0.0319)	
	[0.0433]	
Dummy 2003 x Eventually Treated		0.0041
		(0.2069)
		[0.2446]
Dummy 2004 x Eventually Treated		-0.0766
		(0.1863)
		[0.2080]
Dummy 2005 x Eventually Treated		-0.1007
		(0.1775)
		[0.1900]
Dummy 2006 x Eventually Treated		-0.2480
		(0.3398)
		[0.4511]
Dummy 2007 x Eventually Treated		0.0518
		(0.2130)
		[0.1533]
Observations	183	183

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects. The model in Column (2) includes year fixed effects. *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.

Table 3. Political connections and firm risk

	(1)	(2)
Dependent variable:	*Beta*	*Beta*
*Post 2008 * Number of GADs*	0.0804	
	(0.0321)**	
	[0.0448]*	
*Post 2008 * Proportion of GADs*		0.6617
		(0.3776)*
		[0.5381]
Observations	384	384

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects and year fixed effects. *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors and *Post 2008* is a dummy variable equal to 1 after 2008. *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.

Table 4. Placebo test

	(1)	(3)
Dependent variable:	*Beta*	*Beta*
*Post 2005 * Number of GADs*	0.0201	
	(0.0388)	
	[0.0576]	
*Post 2005 * Proportion of GADs*		0.1874
		(0.4152)
		[0.6106]
Sample	2003-2008	2003-2008
Observations	183	183

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects and year fixed effects. *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors and *Post 2005* is a dummy variable equal to 1 after 2005. The sample is restricted to the pre-treatment period (2003 to 2008). *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.

Table 5. Political connections and financial performance

Dependent variable:	(1) *ROA*	(3) *ROE*	(5) *Tobin's Q*	(7) *MTB*
*Post 2008 * Number of GADs*	-0.0052	-0.0571	-0.0307	-0.1925
	(0.0044)	(0.0385)	(0.0305)	(0.1441)
	[0.0071]	[0.0399]	[0.0525]	[0.2219]
*Post 2008 * Proportion of GADs*	-0.0439	-0.5277	-0.2413	-1.5559
	(0.0465)	(0.3547)	(0.3360)	(1.3811)
	[0.0741]	[0.4033]	[0.6086]	[2.2721]
Observations	407	407	369	369

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects and year fixed effects. *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors and *Post 2008* is a dummy variable equal to 1 after 2008. *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.

Table 6. Political connections and financial leverage

Dependent variable:	(1) *Debt/Assets*	(3) *Debt/Assets*
*Post 2008 * Number of GADs*	-0.0141	
	(0.0086)	
	[0.0228]	
*Post 2008 * Proportion of GADs*		-0.1112
		(0.0852)
		[0.2168]
Observations	407	407

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects and year fixed effects. *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors and *Post 2008* is a dummy variable equal to 1 after 2008. *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.

Table 7. Political connections and dividends

Dependent variable:	(1) *Dividend Payout Ratio*	(2) *Dividend Payout Ratio*
*Post 2008 * Number of GADs*	0.2557 (0.1588)* [0.1956]	
*Post 2008 * Proportion of GADs*		3.4397 (1.9893)* [2.0783]*
Observations	394	394

Notes: Robust standard errors are shown in parentheses. Standard errors clustered at the firm level are shown in brackets. All regressions include firm fixed effects and year fixed effects. *Number of GADs* is the number of government-appointed directors, *Proportion of GADs* is the proportion of government-appointed directors and *Post 2008* is a dummy variable equal to 1 after 2008. *Significant at the 10% level. **Significant at the 5% level. ***Significant at the 1% level.