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Corporate governance and state expropriation risk☆

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ABSTRACT

Recent studies show that the transfer of corporate governance structure across borders has significant valuation consequences. It is equally important to consider the valuation effect of state expropriation risk as well as its interaction with quality of corporate governance. Using a sample of cross-border acquisitions during 1989–2009, we find that targets, which operate under some degree of state expropriation risk, receive a significantly lower premium. The target shareholders are not fully rewarded for the improvement in firm governance since the benefits of improvement are mitigated under predation. Our results provide evidence for twin-agency theory of Stulz (2005) through cross-border mergers.

"Businesspeople need to think harder about political risk", The Economist, February 10th 2011"

1. Introduction

A number of studies have investigated the valuation impact of cross-border investments. In general, the improvements resulting from transfer of investor protection and corporate governance as well as bonding to better institutions have positive valuation effects.[2] However, in view of the "twin agency problems" identified by Stulz (2005), it is important to condition the valuation effects on government intervention broadly defined as expropriation.[3] Indeed, recent surveys conducted by the Economist Intelligence Unit suggest that political risk has jumped towards the top of corporate agendas.[4] World Bank's Multilateral Investment Guarantee Agency (MIGA)

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[2] See for example, La Porta et al. (2002), Chari et al. (2010), Kuipers et al. (2009), Doidge et al. (2004), and Bris and Cabolis (2008).

[3] The term "expropriation" refers to a wide range of activities including the outright seizure of firm assets, solicitation of bribes, overregulation and confiscatory taxation. Throughout the paper we use the terms "political risk" and "expropriation risk" interchangeably since state expropriation is a common form of political risk, which is broadly defined as the involuntarily forced divestment of foreign direct investment. In our empirical analysis, however, our main measure focuses on the risk of contract viability/expropriation and profits repatriation.

[4] See for example World Investment Prospects to 2011 – Foreign Direct Investment and the Challenge of Political Risk, p.7 available at (http://www.eiu.com). Also see Bloomberg (October 20th, 2010) for the court action by Exxon and ConocoPhillips against Venezuela and by Yukos against Russia.

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reveals in their most recent survey that expropriation is the third most cited cause for companies that have scaled back, canceled, or delayed investments in conflict-affected states.[5]

The potential impact of a predatory state should be reflected in the market's expectation of cross-border merger premia. Indeed, the valuation discount due to state expropriation risk should result in target shareholders receiving a lower merger premium. Further, according to the twin agency theory of Stulz (2005), managerial diversion and state expropriation are complementary. In countries with predatory governments, managers will consume more private benefits because any money they leave in the firm may be partially expropriated by the state. Moreover, while more transparency makes it harder for insiders to appropriate from outside investors, it makes expropriation by the state easier. As a result, shareholders find it costly to improve governance and disclosure since the benefits of restraining managerial diversion are not fully realized by the shareholders but are shared with the state.[6] Thus, the value of cross-border transfer of better governance and more disclosure is also in question under predation.

Hence, in this paper, we investigate two related issues. First, what is the valuation impact of state expropriation for cross-border mergers that involve targets from predatory states. Second, what is the effect of improved shareholder protection and transparency when the target is subject to significant expropriation risk.

Our paper is related to studies that identify a number of country-level variables such as culture difference, market segmentation, legal environment and investor protection difference as sources of value gains in cross-border mergers, see for example, Moeller and Schlingemann (2005), Francis et al. (2008) and Chakrabarti et al. (2009). Nonetheless, the value implications of target government policies that influence foreign investment decision have not yet been reported.[7] In a recent paper, Ellis et al. (2012) investigate whether a country's governance explains the shareholder wealth creation by studying the stock-price reaction of cross-border acquirers to merger announcements. However, there are major differences between their and our study. First, we are interested in the wealth accrued to target shareholders and thus we look at target announcement returns (premia). Second, their governance index is a composite index that does not differentiate legal institutions from political institutions. We differentiate between the two in order to study the impact of state expropriation as well as its interaction with the legal institutions.[8] Third, our samples and methodologies are different. Their sample contains public acquirers and both public and private targets whereas we focus only on public firms for both acquirers and targets. They conduct their tests on unadjusted cross-border acquirer returns. We use a matching acquisition methodology and measure the target cross-border merger premium relative to a similar domestic acquisition for univariate tests. For multivariate tests, we use unadjusted target cumulative abnormal returns. Our work is also related to studies that focus on the value created by the transfer of corporate governance and legal standards through cross-border mergers, see for example, Bris and Cabolis (2008), Chari et al. (2010), Feito-Ruiz and Menéndez-Requejo (2011), Kuipers et al. (2009) and Martynova and Renneboog (2008). These studies find that abnormal returns are higher when acquirer's corporate governance standards are stricter than the target's. We argue that the positive value of bonding to better investor protection and stricter accounting standards are conditional on the target country's government policies towards firms. Studies by Desai et al. (2007), Desai and Dharmapala (2006) and Stulz (2005) focus on the relation between firm governance and state expropriation but do not investigate their implications on firm value. Cosset et al. (2014) study the impact of political institutions on foreign firms' choice of their U.S. cross-listing venue. Finally, whereas Durnev and Fauver (2011) study cross-sectional relationship between predation, governance and value, we use cross-border merger events to analyze the valuation effects of *changes* in corporate governance and not the levels. Further, Durnev and Fauver (2011) use Tobin's q which is significantly affected by industrial organization and hence should be adjusted with respect to firm's industry (Lindenberg and Ross, 1981).[9] For an international sample this might be more challenging since there may not be sufficient number of firms in each industry for each country.

We use a sample of 902 cross-border acquisitions from 36 target countries during the period from 1989 to 2009. Our sample period covers the period when expropriation risk posed a great threat to businesses as we acknowledge that outright asset expropriations are far less common now than they were a few decades ago. Our results, however, could extend beyond our sample period and are applicable to today's business environment as expropriation risk might take other forms such as contract viability, overregulation and confiscatory taxation. These risks still rank as some of the highest concerns on corporate agendas as they consider investing in Latin-America, Middle East and North Africa.[10]

We investigate cross-border mergers since they introduce an exogenous shock to domestic firm's ownership and thus offer an opportunity to explore the valuation consequences of detrimental state policies against foreign firms. Moreover, the target firm usually adopts the accounting standards, disclosure practices, and corporate governance regulations of the country of the acquiring firm. The

[5] See MIGA World Investment and Political Risk Report, p.94 available at (http://www.miga.org/documents/WIPR10ebook.pdf).

[6] The first order condition that equalizes marginal benefits of improving firm governance with its marginal costs shows that the optimal level of firm governance drops when the state becomes more predatory. Thus, it is optimal for shareholders to set up weaker governance and distort managerial contract from pure value maximization when state expropriation risk is high. See Stulz (2005) and Durnev and Fauver (2011) for the theoretical models. See Durnev et al. (2009) for empirical evidence on sub-optimal corporate transparency when there is state expropriation risk.

[7] The importance of political risk on volatility of stock returns and cost of capital has been studied extensively. See for example Boutchkova et al. (2012) and Beaulieu et al. (2005).

[8] We are not the first one to treat them separately. Qi et al. (2010) analyze the joint impact of country-level political institutions and legal institutions in determining a firm's cost of debt finance in international credit markets. Moreover, there is an ongoing debate in financial and economic development literature as to which institutional factors are most important. Haber et al. (2008) term this debate as the "legal origins view" versus the "political institutions view." See their paper for more detail.

[9] Most studies that explore governance-value relation use industry-adjusted Q. See for example, Gompers et al. (2003) and Bebchuk and Cohen (2005). For an extensive review on recent corporate governance and corporate control research see Netter et al. (2009).

[10] See World Investment and Political Risk 2013 Report (WIPR) available at http://www.miga.org/documents/WIPR13.pdf and for recent examples in Russia see http://expropriationnewsrussia.com/en/.

nationality of a target firm also changes when it is 100% acquired by a foreign firm, which implies that target firm becomes subject to acquirer country laws. Thus, cross-border mergers provide an excellent setting to test value implications of firm and country-level governance as well as a cleaner test that is less subject to endogeneity concerns of traditional tests of firm governance and value. We follow previous studies and calculate the valuation effect of the merger as the targets' cumulative abnormal return around the announcement date. We control for other factors identified by past studies as determinants of the premium, to isolate value effects for our variables of interest.[11]

We find that under some degree of expropriation risk, targets receive a significantly lower premium. *Ceteris paribus*, a one standard deviation increase in expropriation risk (for example, the target is a Russian firm instead of a South Korean firm) decreases the premium by 4.57%, which is 21% of the average cross-border merger premium. Since there is no evidence that relative expropriation risk between the target and the acquirer country matters, we focus on target country expropriation risk. Although, the merger premium is significantly larger in acquisitions for which the shareholder protection of the acquirer is better than the target's in the absence of state expropriation, the positive value of investor protection transfer is not realized for targets in predatory states. Indeed, the target shareholders are not rewarded for the improvement in firm governance since the benefits of improvement are mitigated under predation. Our findings are similar when we look at the transfer of accounting standards instead of shareholder protection. Overall, our results suggest that the value of the transfer of better shareholder protection and accounting standards depends on the target country's government policies towards firms. Thus our results provide evidence in support of the twin-agency theory of Stulz (2005).

Disentangling the valuation implications of minority shareholder expropriation either by insiders or by state is challenging due to high correlations between the country-level indices. Cross-border merger setting allows us to use *differences* in investor protection, not the levels, which helps with the issue. In addition, we provide further robustness tests using sub-sample analysis and firm-level corporate governance scores. Next, we form portfolios of individual target firms in a given industry within each country and calculate their average premium. Averaging premia at the portfolio level helps average deal-specific synergies at the industry-level and reduces problems associated with correlated errors, thus making the tests much more efficient.[12] Since the decision to participate in a cross-border acquisition is an endogenous choice and the firm and deal characteristics might be endogenously related to country characteristics, we employ treatment effects regressions. We also use alternate measures of state expropriation, alternative samples and event windows. Our results remain robust.

The paper is organized as follows. We describe our framework, the data and the empirical methodology in the next section. Section 3 discusses the empirical results. Robustness tests are provided in Section 4. Final section concludes.

2. Methodology and data

2.1. Methodology

We proxy the merger premium with the target abnormal returns at the announcement of the acquisition. All returns are denominated in U.S. $ and returns are estimated using symmetric event windows around the announcement date. Cumulative abnormal returns (CARs) sum the abnormal returns over the event- window, with abnormal returns estimated using the following market model.

$$R_{ijt} = a_i + b_i^m R_{mjt} + b_i^w R_{wt} + e_{it}$$

where R_{ijt} refers to the daily stock return for the target firm i in country j, R_{mjt} is the market return in country j, and R_{wt} is the return on the MSCI world index.[13] The residual eit is the excess return for each firm and day.[14] The market model is run using 250 days, with the estimation window ending 42 days before the event. We compute and accumulate the target abnormal returns over the following event windows: $(-2, +2)$, $(-5, +5)$, $(-30, +30)$ and $(-30, -3)$. We use $(-2, +2)$ event window as our proxy for the merger premium in our main tests. In the robustness section, we repeat our tests using longer event windows.

In our univariate tests, we measure the cross-border merger premium relative to a similar domestic acquisition that takes place in the same target country and industry. Because the two target firms in each pair are from the same country and industry, matching-acquisition-adjusted premia measure the incremental announcement effect of the cross-border acquisition that is driven by the foreign nationality of the acquirer.[15] However, the difference between cross-border merger premium and domestic merger premium matched by country and industry may introduce errors, which the control variables included in the multivariate analysis may not be able to eliminate. Hence, for multivariate tests, we follow Ellis et al. (2012) and use unmatched CARs.[16]

[11] These factors include bargaining power, competition in the market for corporate control and managerial ability. For more details, see Bris and Cabolis (2008).
[12] We thank Laura Starks for the suggestion.
[13] We report our results with the value-weighted indices. The results are similar when we use equally weighted indices instead.
[14] Daily data is based on trading days.
[15] Matching procedure not only helps us eliminate the effect of other target country- and industry-specific variables, but also is used by Bris and Cabolis (2008) and therefore helpful in benchmarking our results.
[16] We thank an anonymous referee for this suggestion.

Table 1
Summary statistics.

Panel A. Construction of the sample

		Number of acquisitions	Median total assets-target ($M)	Median total assets-acquirer ($M)	Median transaction value ($M)
SDC sample (1)	Cross-border mergers	2927	171.05	2995.60	148.25
	Domestic mergers	10,949	156.10	1139.85	83.88
	Difference (p-value)		*(0.0005)*	*(0.0000)*	*(0.0000)*
	Total	13,876	159.00	1339.45	94.39
SDC sample with stock price information (2)	Cross-border mergers	1463	185.40	3492.20	194.81
	Domestic mergers	5853	178.50	1317.70	113.69
	Difference(p-value)		*(0.0339)*	*(0.0000)*	*(0.0000)*
	Total	7316	179.50	1569.75	126.92
Difference between (1)-(2)			*(0.0000)*	*(0.0000)*	*(0.0000)*
Final Sample (3)	Cross-border mergers	902	172.55	3829.40	246.42
	Domestic mergers	902	151.05	1112.60	189.29
	Difference (p-value)		*(0.0223)*	*(0.0000)*	*(0.0106)*
	Total	1804	161.90	2095.80	217.65
Difference between (2)-(3)			*(0.0087)*	*(0.0000)*	*(0.0000)*
Difference between (1)-(3)			*(0.8771)*	*(0.0070)*	*(0.0000)*

The table shows the total assets for the target and the acquirer firms at the announcement of the acquisition and the transaction values for the three samples. SDC sample (1) consists of all domestic and cross-border mergers of publicly listed firm between January 1989 and December 2009. Leverage buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, minority stake purchases, acquisitions of minority interest, and privatizations are excluded. SDC sample with stock information (2) contains the acquisitions where the historical stock price information is available on DataStream for both for target and acquirer firms. Final sample (3) includes only the cross-border mergers for which a matching domestic acquisition where the target firm belongs to the same country and industry and the closest in size to the cross-border target can be identified. Total assets and transaction values are reported in $ millions. Tests of differences are based on Wilcoxon rank sum test. *p-values* are reported in parentheses.

Panel B. Number of acquisition

Target nation	SDC sample		Final Sample		Acquirer nation	SDC sample		Final Sample		Expropriation risk
	N	% of sample	N	% of sample		N	% of sample	N	% of sample	
Argentina	28	0.20	1	0.11	Argentina	14	0.10	3	0.33	6.20
Australia	682	4.91	71	7.87	Australia	606	4.37	27	2.99	3.69
Austria	27	0.19	1	0.11	Austria	39	0.28	4	0.44	2.34
Belgium	53	0.38	4	0.44	Belgium	69	0.50	11	1.22	2.89
Brazil	115	0.83	9	1.00	Brazil	81	0.58	3	0.33	5.61
Canada	1552	11.18	102	11.31	Canada	1465	10.56	59	6.54	2.91
Chile	28	0.20	2	0.22	Chile	13	0.09			3.35
Colombia	24	0.17	1	0.11	Colombia	21	0.15			5.31
Denmark	61	0.44	5	0.55	Denmark	80	0.58	10	1.11	3.21
Finland	55	0.40	2	0.22	Finland	70	0.50	16	1.77	2.71
France	359	2.59	37	4.10	France	438	3.16	68	7.54	2.86
Germany	246	1.77	13	1.44	Germany	280	2.02	54	5.99	2.75
Hong Kong	119	0.86	8	0.89	Hong Kong	130	0.94	11	1.22	3.49
India	186	1.34	11	1.22	India	163	1.17	10	1.11	5.20
Indonesia	32	0.23	3	0.33	Indonesia	17	0.12	2	0.22	5.40
Israel	56	0.40	3	0.33	Israel	54	0.39	12	1.33	4.44
Italy	105	0.76	4	0.44	Italy	145	1.04	21	2.33	3.32
Japan	696	5.02	13	1.44	Japan	753	5.43	28	3.10	3.04
Malaysia	93	0.67	3	0.33	Malaysia	104	0.75	4	0.44	4.36
Mexico	48	0.35	2	0.22	Mexico	43	0.31	2	0.22	3.75
Netherlands	95	0.68	19	2.11	Netherlands	151	1.09	49	5.43	2.55
Norway	129	0.93	22	2.44	Norway	95	0.68	5	0.55	3.22
Philippines	34	0.25	1	0.11	Philippines	33	0.24	3	0.33	5.12
Poland	59	0.43	1	0.11	Poland	35	0.25			3.87
Portugal	21	0.15	2	0.22	Portugal	13	0.09	1	0.11	3.29
Russia	55	0.40	1	0.11	Russia	63	0.45	5	0.55	5.48
Singapore	95	0.68	6	0.67	Singapore	95	0.68	13	1.44	2.68
South Africa	178	1.28	10	1.11	South Africa	180	1.30	16	1.77	3.88
South Korea	109	0.79	8	0.89	South Korea	107	0.77	7	0.78	3.83
Spain	83	0.60	2	0.22	Spain	119	0.86	24	2.66	2.50
Sweden	183	1.32	13	1.44	Sweden	208	1.50	31	3.44	3.18
Taiwan	67	0.48	9	1.00	Taiwan	59	0.43	5	0.55	2.51
Thailand	51	0.37	2	0.22	Thailand	38	0.27			4.87
Turkey	29	0.21	1	0.11	Turkey	14	0.10			5.37
U.K.	1100	7.93	134	14.86	U.K.	1152	8.30	141	15.63	2.61
U.S.	6417	46.25	376	41.69	U.S.	6330	45.62	181	20.07	2.58

Table 1 (*continued*)

Panel B. Number of acquisition

Target nation	SDC sample		Final Sample		Acquirer nation	SDC sample		Final Sample		Expropriation risk
	N	% of sample	N	% of sample		N	% of sample	N	% of sample	
Other	605	4.36			Other	599	4.32	76	8.42	
Total	13,876	100.00	902	100.00	Total	13,876	100.00	902	100.00	

The table summarizes the number and the frequency of acquisitions by target and acquirer country. SDC sample consists of all domestic and cross-border mergers of publicly listed firm between January 1989 and December 2009. Final sample includes only the cross-border mergers for which a matching domestic acquisition where the target firm belongs to the same country and industry and the closest in size to the cross-border target can be identified. Note that in the final sample there are no targets in the other category, however, there are 76 acquirers from 11 countries. Expropriation risk is time-series average of ICRG Investment Profile where larger values indicate greater risk.

Panel C. Description of the final sample

Target industry		Acquirer industry		Announcement year		Deal characteristics	
Agriculture and consumer products	14.67%	Agriculture and consumer products	13.79%	1989–1991	1.66%	Diversifying	41.13%
Basic manufacturing	16.55%	Basic manufacturing	18.13%	1992–1994	1.00%	Stock offer	15.96%
Machinery and electronics	26.67%	Machinery and electronics	29.26%	1995–1997	9.09%	Cash offer	78.38%
Utilities and transportation	5.78%	Utilities and transportation	8.45%	1998–2000	30.38%	Hostile	2.22%
Wholesale and retail trade	4.11%	Wholesale and retail trade	5.79%	2001–2003	16.07%	Multiple bidders	6.43%
Financial services	10.55%	Financial services	8.67%	2004–2006	20.07%	Full ownership	73.84%
Tourism and other services	21.67%	Tourism and other services	15.91%	2007–2009	21.73%	Majority ownership	89.58%
Total	100.00%		100.00%		100.00%		

The table summarizes the final sample with 902 cross-border acquisitions by target and acquirer industry, year of the merger announcement and deal characteristics. Final sample includes only the cross-border mergers for which a matching domestic acquisition where the target firm belongs to the same country and industry and the closest in size to the cross-border target can be identified. *Majority ownership* is a dummy variable that denotes whether the acquirer holds 50% or more of the target firm's equity following the acquisition. *Full ownership* is a dummy variable that denotes whether the acquirer holds 100% of the target firm's equity following the acquisition. *Cash offer* is a dummy for the deals that are paid fully with cash and *stock offer* is a dummy for the deals that are paid fully by the acquirer's stock. *Diversify* is a dummy variable that denotes whether the target is in the same two-digit SIC industry Code as the acquirer. Agriculture and consumer products are firms with two-digit SIC codes 00–19; basic manufacturing 20–29; machinery and electronics 30–39; utilities and transportation 40–49; wholesale and retail trade 50–59; financial services 60–69; tourism and miscellaneous services 70–99 s.

2.2. Data

2.2.1. Construction of the sample

Our mergers and acquisitions data come from SDC Thompson's International M&A database. We obtain information on all completed acquisitions of public companies between January 1989 and December 2009 for all available countries. We exclude leverage buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, minority stake purchases, acquisitions of minority interest, and privatizations. The initial dataset has 13,876 completed acquisitions of which 2927 correspond to cross-border deals. Stock price information is obtained from DataStream. The SDC dataset with historical stock price information has 7316 completed acquisitions of which 1463 are cross-border. Panel A of Table 1 shows that compared to the initial SDC sample (sample (1)), the acquisitions, where the historical stock price information is available (sample (2)), are composed of acquirers and targets that are larger in terms of total assets for both domestic and cross-border transactions. Median cross-border target in sample (1) has $171 million in assets whereas the one in sample (2) has $185 million. Median cross-border acquirer in sample (1) has around $3 billion in assets versus $3.5 billion in sample (2). Moreover, the median transaction value is higher in sample (2) relative to sample (1): $195 million versus $148 million for the cross-border acquisitions.

Finally, we employ a matching sample procedure by identifying a domestic merger for each cross-border merger in our sample. We select, for each cross-border deal, a domestic merger that meets the following criteria: (i) The target firm belongs to the same country; (ii) the target firm belongs to the same industry (two-digit SIC code) as the target firm of the cross-border merger; (iii) the target firm is the closest in terms of total assets to the target of the corresponding cross-border merger.[17,18]

The final sample (sample (3)) that satisfies the above criteria consists of 1804 observations. There are 902 cross-border mergers and 902 corresponding domestic mergers for which we have complete information. Panel A of Table 1 describes the construction of our final sample. For both cross-border and domestic mergers, median target total assets in the final sample (3) are smaller relative to sample (2) but not significantly different than those of the initial SDC sample. Median cross-border target has $173 million in assets whereas there are $151 million for the domestic transactions. This indicates that with respect to target firms, the matching procedure is very efficient. On the other hand, median total assets of the acquirers and the median transaction values for the cross-border

[17] Ellis et al. (2012) show that year has an explanatory power on the market reactions around acquisition announcements. When we impose that the domestic merger is announced in the same year as the cross-border merger, we lose 40% of the observations, which leaves us with a smaller cross-sectional variation in terms of state expropriation as well as investor protection. Thus, we report our main univariate analysis without year matching and control for year-fixed effects in the multivariate analysis.

[18] The final sample also excludes observations when there is a single acquisition in a given country, and industry as well as when the matching target firm is either more than double in size or less than half in size than the corresponding cross-border target. Instead of target size, we have also alternatively matched with acquirer size and the ratio of the acquirer to target size. The results do not change.

acquisitions are larger relative to both sample (1) and sample (2), with $3.8 billion and $246 million, respectively. For all three samples, the targets and acquirers in cross-border mergers are significantly larger in size than the corresponding targets and acquirers of the domestic mergers. In addition, cross-border mergers are higher in transaction value relative to the domestic mergers.

Our final sample of cross-border mergers contains acquisition announcements for target firms from 36 countries and acquiring firms from 42 countries. Panel B of Table 1 provides the number and the frequency of acquisitions by target and acquirer country. The frequencies of our final sample by target country distribution are not very different from the original SDC sample and thus, a fairly good representation. A large number of our targets (376 out of 902, or 41.7%) and our acquirers (181 out of 902, or 20%) come from the United States. Our sample has 69 (7.6%) targets from Asia, 259 (28.7%) from Europe, 13 (1.4%) from Latin America, 10 (1.1%) from Africa, 104 (11.5%) from North America excluding U.S., and 71 (7.9%) from Oceania. Similarly, we have 147 (16.3%) acquirers from Asia, 411 (45.5%) from Europe, 31 (3.4%) from Latin America, 35 (3.9%) from Africa, 61 (6.7%) from North America excluding U.S., and 37 (4.1%) from Oceania. We acknowledge that our final sample is dominated by cases where the target is a US, a UK or a Canadian firm, the countries with the strongest shareholder rights. This is not only because we require continuous non-missing stock price information to conduct an event study but also because these are the countries where most of the acquisitions take place as shown by the overall SDC sample statistics. We address this concern in our robustness tests where we exclude the transactions with the US, UK and Canadian targets. Panel C describes our final sample with respect to the deal characteristics. Most of the mergers are friendly (98%) and use cash as the means of payment (78%). Almost 90% of them acquire control (more than 50% of the shares) and 74% acquire 100% of the target shares. Around 41% of them are a conglomerate, which is defined as the acquisition of a target with a different two-digit SIC code. The largest number of both targets and acquirers are from the machinery and electronics industry and the lowest number of them are from the wholesale and retail industry.

2.2.2. Quality of investor protection and state expropriation

The indices on shareholder protection and accounting standards were first provided by La Porta et al. (1998). We use the revised anti-director index from Djankov et al. (2008) as our main measure of the effectiveness of shareholder protection.[19] We multiply the anti-directors index with the efficiency of the legal system to obtain the index of shareholder protection. We follow earlier studies and calculate the *corporate governance quality transfer* through a cross-border merger as the difference between the shareholder protection index of the acquirer firm and the shareholder protection index of the target firm.[20] Expropriation risk variable is extracted from the International Country Risk Guide (ICRG). We use the variable called "ICRG Investment Profile" which is defined as the assessment of risk of investment due to contract viability/expropriation and profits repatriation. We prefer to use this index to LLSV government expropriation index because of its time-varying nature. The index ranges from 0 (high expropriation risk) to 12 (low expropriation risk). We subtract the index values from 12 so that larger numbers correspond to larger risk of expropriation. Table 1 Panel B provides the time-series averages of the state expropriation risk measure across countries. The average scores range from 2.34 (Austria) to 6.20 (Argentina). The definitions and sources of all other country-level, firm-level and deal-level variables used in the paper are provided in Appendix A.

3. Results

3.1. Merger premium: cross-border versus domestic acquisitions

First, we look at the target abnormal returns around acquisition announcements of both the cross-border and domestic M&As in our sample. We use five-day event window, $(-2, +2)$, as our proxy for the merger premium. However, in order to assess the market impact of the acquisitions in general, we also look at the event windows with longer horizon. In addition, we use these longer event windows for our robustness tests later on. Table 2 reports the average and median CARs for each of the following event windows: $(-2, +2)$, $(-5, +5)$, $(-30, +30)$ and (-30, -3). Our proxy for merger premium has a median of 16.6% (and a mean of 21.7%) for cross-border acquisitions and a median of 15.2% (and a mean of 17%) for domestic acquisitions. During the ten days surrounding an acquisition announcement (for the event window $(-5, +5)$), cross-border target firms experience a median of 20.3% abnormal return and domestic firms experience a median of 15.9 % (both significant at the 1% level). During the two months surrounding an acquisition announcement (for the event window $(-30, +30)$), cross-border target shareholders realize a 29.7% abnormal return, and domestic targets realize a 20.5% abnormal return (both significant at the 1% level). There is a significant price run-up in days $(-30, -3)$ for targets: 6.6% for cross-border mergers and 5.7% for domestic mergers. The CARs for the cross-border are significantly larger than the CARs for the domestic acquisitions for all windows.

In order to benchmark our results to prior studies, for our univariate tests we compute matching-acquisition-adjusted CARs (MACARs) for target firms of each cross-border merger in our sample. MACARs are simply calculated as the difference between the CARs of the cross-border merger and the CARs of the matching domestic merger, where the matching is done as described in the previous section. The mean and the median values of MACARs reported in Table 2 for five days surrounding the acquisition announcement (for the event window $(-2, +2)$) are 4.66% and 3.44%, respectively (both significant at 1%).

[19] To address Spamann's (2010) concern that the original anti-director index is not accurate, we use Spamann's anti- director index as a robustness check. Djankov et al. (2008) also create an anti-self- dealing index, which focuses on private enforcement mechanisms such as disclosure, approval, and litigation. They argue that this legal control system provides better legal protection for minority shareholders than the anti-director index. For robustness we use their anti-self-dealing index as an alternative measure of shareholder rights as well. The results remain unchanged.

[20] Same methodology is applied to the accounting standards index.

Table 2
Cumulative abnormal announcement returns for target firms.

	Mean			Median		
	Cross-border	*Domestic*	*Difference (p-value)*	*Cross-border*	*Domestic*	*Difference (p-value)*
CAR (−2, +2)	21.72%***	17.06%***	*(0.0000)*	16.61%***	15.23%***	*(0.0011)*
CAR (−5, +5)	24.59%***	18.67%***	*(0.0000)*	20.27%***	15.90%***	*(0.0000)*
CAR (−30, −3)	8.64%***	4.68%***	*(0.0013)*	6.59%***	5.69%***	*(0.0237)*
CAR (−30, +30)	32.01%***	18.68%***	*(0.0000)*	29.69%***	20.45%***	*(0.0000)*
MACAR (−2, +2)	4.66%***			3.44%***		

The table provides mean and median cumulative abnormal returns (CARs) for the targets of the final sample of 902 cross-border and matching domestic acquisitions. CARs are reported for various windows around the announcement day. CAR is calculated using the market model, where the parameters are estimated over the period starting 250 days to 42 days prior to the announcement using the MSCI world index and the local market index as the regressors in the market model. All event returns are winsorized at the .5% and 99.5% level. MACARs are calculated as the difference between the CARs of the cross-border merger and the CARs of the matching domestic merger. The significance level of median is based on Wilcoxon signed-rank test. Tests of median differences are based on Wilcoxon rank sum test. The difference in means t-test assumes unequal variances. *p-values* are reported in parentheses. The symbols ***, ** and * denote significance at 1, 5 and 10 percent levels, respectively.

3.2. Expropriation risk and transfer of investor protection quality

In this section, we investigate the relation between the merger premia and state expropriation as well as the interaction among the twin agency problems.[21] According to Stulz (2005) expropriation by the state leads to greater consumption of private benefits because any money the insiders leave in the firm will be partially expropriated by the state. In addition, better transparency for outside shareholders also implies being more transparent to the state, and therefore, may have additional costs in predatory states. Previous studies have shown the value in transferring better institutions that provide better governance and more transparency through cross-border mergers (Bris and Cabolis, 2008; Chari et al., 2010; Martynova and Renneboog, 2008). However, with predation the value of these transfers are in question. If the twin agency theory holds, then the value in better protection brought by the acquirer is mitigated by the target state expropriation risk. We, therefore, explore the valuation effects of corporate governance transfers in the presence of state expropriation.

3.2.1. Univariate results

In Table 3, we first classify mergers with respect to the median of the state expropriation index of the target country. We report the *medians* for both the matching-adjusted and unadjusted returns. The upper section of Panel A on Table 3 shows that, adjusting by a matching domestic acquisition, adjusted premia are significantly larger for the cross-border mergers when target state expropriation risk is below median (5.57% compared to 0.86%, the difference is significant at 5%).[22] When we look at the premia differences separately for the cross-border and the domestic mergers, the numbers are not inconsistent with our hypothesis as we should observe lower premia for the cross-border targets under predatory states but not for the domestic ones. The premia differences in Panel A show that the median is lower for those in cross-border deals (15.25% versus 17.36%, though not significant) whereas it is higher for the domestic deals (15.47% versus 13.73%).

We also investigate if acquirer state expropriation risk is an important factor. In the lower section of Panel A, we report the median unadjusted and adjusted CARs for target firms based on the expropriation risk of both target and the acquirer country. While we recognize that the CARs appear to be relatively smaller when acquirer is from a country with a higher expropriation risk than the target; the median differences are not statistically significant. We, thus focus on target state expropriation risk for the remaining part of our analysis.

Next, we classify cross-border mergers relative to the investor protection indices of target and acquirer firms as well as the target state expropriation risk. We use two different indices for the quality of the investor protection: shareholder protection and accounting standards. Panel B of Table 3 shows that both the adjusted and unadjusted merger premia are larger when the acquirer shareholder protection is better than the target's compared to the acquisitions where target shareholder protection is better than the acquirer's. This is consistent with earlier literature showing that better shareholder protection in the acquirer's country results in a higher merger premium. When we decompose the sample into two with respect to target state expropriation risk, we find that the difference in premium due to better shareholder protection of the acquirer is only significant in the below-median-expropriation risk sample. To be specific, for the low expropriation risk sample, the median premium is 19% when the acquirer has better shareholder protection and 12.35% when the opposite is true (the difference is significant at 1%). However, for the high expropriation risk sample, the differences in premia between the two subsamples are not statistically significant indicating that the differences in shareholder protection do not determine the merger premium. The univariate results with matching-adjusted premia in the lower panel are consistent with the results with the unadjusted premia.[23]

[21] After the merger, the target firm becomes subject to the government policies in the country of the acquiring company as well as to those in its home country. Since the merger premium should reflect market expectations of potential wealth creation from the merger, we also checked whether the acquirer state expropriation risk has any valuation impact on target returns. Our findings are consistent with the main results that focus on target state expropriation.

[22] We also use alternative cut-off points to classify the target countries with respect to state expropriation risk. The difference between adjusted premia remains significantly larger for acquisitions when target state expropriation risk is below the mean or the 75th percentile.

[23] Panel B of Table 3 also tells us that it is 2.7 times more likely that the acquirer has lower or equal shareholder protection relative to the target. This is due to the fact that our sample is dominated by cases where the target is a US, a UK or a Canadian firm, the countries with the strongest shareholder rights. We address this in the robustness section.

Table 3
Median target CARs and state expropriation risk.

Panel A

	Target State Expropriation Risk		
	Below Median	Above Median	Difference *(p-value)*
Cross-border CAR	17.36%***	15.25%***	*(0.1798)*
Domestic CAR	13.73%***	15.47%***	***(0.0410)***
Matching Acquisition-adjusted CAR (MACAR)	5.57%***	0.86%	***(0.0224)***
N	439	463	

	State Expropriation Risk			
	Acquirer is more risky than the target (1)	Acquirer is less risky than the target (2)	Acquirer is equally risky as the target	Difference (1)−(2) *(p-value)*
Cross-border CAR	14.97%***	17.47%***	17.83%***	*(0.1750)*
Matching Acquisition-adjusted CAR (MACAR)	1.83%**	3.46%***	4.69%**	*(0.5612)*
N	341	319	242	

Panel B

Quality of Investor Protection		Shareholder protection				Accounting standards			
		State Expropriation Risk				State Expropriation Risk			
		All	Below Median	Above Median	N	All	Below Median	Above Median	N
Cross-border CARs	Acquirer > Target	18.78%***	19.00%***	18.41%***	243	18.35%***	20.91%***	14.35%***	489
	Acquirer < Target	13.34%***	12.35%***	14.89%***	659	14.38***	12.42%***	16.42%***	413
	Difference *(p-value)*	***(0.0002)***	***(0.0000)***	*(0.7063)*		***(0.0711)***	***(0.0034)***	*(0.2317)*	
	N	902	439	463		902	439	463	
		State Expropriation Risk				State Expropriation Risk			
		All	Below Median	Above Median	N	All	Below Median	Above Median	N
Matching Acquisition-adjusted CAR (MACAR)	Acquirer > Target	4.64%***	8.01%***	0.59%	243	1.78%**	5.30%**	−1.21%	489
	Acquirer < Target	2.11%**	4.94%***	1.27%	659	5.77%***	6.86%***	4.66%***	413
	Difference *(p-value)*	***(0.0869)***	***(0.0878)***	*(0.7101)*		*(0.2040)*	*(0.7852)*	***(0.0144)***	
	N	902	439	463		902	439	463	

The table shows median CARs and matching-acquisition adjusted CARs (MACARs) for the target firms during a five-day event window around cross-border merger announcements. CAR is calculated using the market model, where the parameters are estimated over the period starting 250 days to 42 days prior to the announcement using the MSCI world index and the local market index as the regressors in the market model. All event returns are winsorized at the .5% and 99.5% level. MACARs are calculated as the difference between the CARs of the cross-border merger and the CARs of the matching domestic merger. We report the median of the MACARs. We classify deals based on the index of state expropriation of the target country and then also based on the indices of investor protection of the target and acquirer country. State expropriation index is increasing in the expropriation risk. The significance tests are based on Wilcoxon signed-rank test. Tests of differences are based on Wilcoxon rank sum test. *p-values* are reported in parentheses. The symbols ***, ** and * denote significance at 1, 5 and 10 percent levels, respectively.

When we look at the accounting standards for the overall sample, the unadjusted premia results are consistent with those that use the shareholder protection indices. For the overall sample, merger premium is higher when acquirers have better accounting standards. After taking the target state expropriation risk into account, the higher merger premia due to better accounting standards of the acquirers are only pronounced for low state expropriation risk targets (20.91% versus 12.42%, significant at 1%). In the lower panel, after adjusting with a matching domestic acquisition, better accounting standards in the acquirer's country relative to the target's country results in a lower adjusted premium, but the difference is not statistically significant. When we classify the sample again depending on the target state expropriation, for targets with low state expropriation risk, the accounting standards difference in acquirer versus target country does not affect the matched merger premium. For targets with high state expropriation risk, the market does not reward targets that can potentially adopt the better accounting standards of the acquirer. Overall, these results suggest that value of the transfer of better shareholder protection and accounting standards depends on the target country's government policies towards firms. However, these univariate results may also be driven by many other factors. Therefore, in the next section we run multivariate fixed-effect regressions to account for these factors.

3.2.2. Multivariate results

In this section, we explore the relation between the merger premium and target state expropriation, as well as the value effects of the interaction between investor protection and predatory government policies after controlling for other factors. We control country characteristics such as differences between the economic development of the acquirer nation and the target nation. Our proxy for economic development is GDP per capita. The regulatory environment regarding mergers may also affect the competition in the market for corporate control, and hence the merger premia. We therefore construct a dummy variable that equals one when the country has merger

control laws in place in the year of announcement of the corresponding cross-border merger, and equals zero otherwise. Both theoretical and empirical M&A literature has shown that deal characteristics affect merger premia. Hence we control for the following deal characteristics: the attitude of the deal (hostile versus friendly), the industry relatedness of the target and the acquirer (focused versus diversifying), means of payment (all cash, all stock or mixed) and the number of bidders (Bradley et al., 1988). We also control for the ADR listing of target firms, which is an alternative way of committing to a higher quality of investor protection (Doidge et al., 2004). We construct a dummy that equals one when the target firm has an ADR listed at the time of the merger announcement and zero otherwise.[24] Finally, we use pre-announcement stock price run-up to control for the prior stock performance as well as other stock-specific issues (such as illiquidity) that could potentially influence merger premium. Since we are using dollar returns, we do not separately control for exchange rate changes, which determine target returns and the frequency of cross-border acquisitions (Erel et al., 2012).

Table 4 reports our results. We start with regressions that only include investor protection to benchmark our results to recent studies. Bris and Cabolis (2008) results show that the difference in shareholder protection and accounting standards between the two countries involved explains merger premia.[25] Therefore, in model (1) we regress the merger premium on the difference in shareholder protection indices between the acquirer and the target in 100% acquisitions. Our results confirm their findings. The merger premium is significantly larger in acquisitions for which the shareholder protection of the acquirer is better than the target's. A one standard deviation increase in the difference in shareholder protection results in 4.5% increase in the average premium.[26] We then split the corporate governance index differences into positive and negative values to see whether the value effects of the transfer are symmetric.[27] Our results suggest that it is not. In model (2), the coefficient is only significant for the positive shareholder protection difference implying that the shareholders of a target firm that is acquired by a firm from a stronger shareholder protection environment receive a significantly larger premium while those acquired by a firm from a weaker shareholder protection environment do not receive a significantly lower premium.[28]

In model (3), we include the expropriation risk index of the target country, alongside its interaction with the shareholder protection difference. We use the differences in shareholder protection and accounting standards, not the levels, in order to avoid the artifacts of collinearity. Though the correlations between expropriation risk and investor protection are high for levels, they are much lower for differences.[29] If the value in better protection brought by the acquirer is mitigated by the target state expropriation risk, we would expect the interaction to have a negative coefficient. The results suggest that the targets with predatory states receive a significantly lower premium. The discount due to target state expropriation is economically significant. A one standard deviation increase in expropriation risk decreases the premium by 4.57%, which is 21% of the average cross-border merger premium.[30] When we include state expropriation risk, the coefficient on shareholder protection difference is no longer significant. The negative coefficient on the interaction term of expropriation risk with shareholder protection transfer suggests that the positive value of better investor protection transfer is mitigated by the target state expropriation risk. Model (4) indicates further evidence for this relation. The negative difference in indices, which implies a lower premium when targets are acquired by a firm from a weaker shareholder protection environment under no risk of expropriation, now implies a larger premium for those targets under risk of expropriation. The coefficients on the control variables are mostly consistent with the previous M&A studies. Acquisitions that are paid by stock are associated with significantly lower premia in all specifications. Moreover, the coefficients on the industry diversification have the expected signs though they are not significant. The positive coefficients of the GDP per capita difference between the acquirer and the target suggest a higher premium for the targets that are acquired by more developed acquirers. The proxies for the competition in the market for corporate control (multiple bidders and merger laws indicators) also have the expected signs. Finally, in some of the specifications, target pre-announcement stock price run-up has significantly positive effects on the premia.

We run similar regressions, models (5)-(8), using accounting standards as proxy for the quality of investor protection. The results are similar to those with the shareholder protection. The transfer of better accounting standards hence more transparency is associated with higher merger premium only in the absence of state expropriation. Overall, these results provide evidence for the twin agency problems.[31] The exogenous shocks to corporate governance are valued differently in the presence of state expropriation.

3.3. Portfolio approach

In this section, in order to reduce problems associated with correlated errors, we form portfolios of individual target firms in a given industry within each country and calculate an average premium for these target portfolios. Averaging premia at the portfolio level also helps averaging deal-specific synergies at the industry-level, thus making the tests more efficient. Target-industry portfolios

[24] We also take into account whether the acquirer has an ADR. This is important since some of these acquirers are large multinational that are based in low governance countries but are bonded to stronger regulations via ADRs. When we exclude those we lose 21.6% of our acquirers, but the main results do not change.

[25] They also show that it is significant only for 100% acquisitions. Thus, in our multivariate tests we define investor protection difference only for 100% acquisitions.

[26] The number is calculated as 0.294*15.3, where 15.3 is the standard deviation of the difference in shareholder protection for 100% acquisitions.

[27] In Table 3, observations where there was no difference in investor protection were included with the negative protection difference; however, in this section they are excluded so that when we use the interaction, the coefficient on expropriation risk could be identified.

[28] This result is also consistent with Bris and Cabolis (2008) and Martynova and Renneboog (2008) results.

[29] We report the correlations in the Appendix B.

[30] The number is calculated as −2.767*1.65, where 1.65 is the standard deviation of the target state expropriation risk. The average cross-border premium is 21.7% as reported in Table 2.

[31] We also test whether insider ownership has any effect on the value of corporate governance transfers and whether state expropriation matters for this relationship. We use insider ownership from Worldscope measured as the percentage of closely held shares relative to the total shares outstanding. In unreported results, we find that higher insider ownership prior to the merger reduces the adverse impact of poor country governance particularly for targets that operate under predatory states. These results are consistent with Stulz's argument that that higher insider ownership is optimal especially for firms that face twin agency problems.

Table 4
CARs, quality of investor protection and target state expropriation.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Quality of Investor Protection	Shareholder Protection				Accounting Standards			
Expropriation risk			−2.767***	−2.843***			−3.535**	−2.973*
			(0.865)	(0.647)			(1.453)	(1.666)
Investor protection difference (A -T)	0.294**		0.165		0.505*		0.171	
	(0.124)		(0.107)		(0.272)		(0.703)	
Exprop risk* Investor prot. diff			−0.098**				−0.017	
			(0.043)				(0.015)	
Positive Investor prot. diff		0.468***		0.618		−0.359		0.246***
		(0.120)		(0.424)		(0.776)		(0.093)
Negative Investor prot. diff		−0.097		−0.161		−1.086		−0.323**
		(0.059)		(0.402)		(0.942)		(0.133)
Exprop risk*Pos Investor prot. diff				−0.083				−0.070***
				(0.106)				(0.024)
Exprop risk*Neg Investor prot. diff				0.023**				0.156***
				(0.011)				(0.041)
Log GDP per capita difference (A -T)	1.588	2.966	3.693**	3.017*	11.264***	5.807***	5.771***	2.380
	(1.755)	(2.396)	(1.751)	(1.651)	(1.948)	(1.767)	(1.766)	(1.774)
Diversify	−0.556	−0.262	−0.346	−0.477	−1.264	−0.832	−0.655	−1.249
	(1.956)	(2.360)	(2.394)	(2.027)	(1.476)	(1.625)	(1.597)	(1.661)
Stock offer	−6.049*	−6.783***	−7.401**	−6.980***	−6.351**	−6.139*	−6.251*	−5.790*
	(3.395)	(2.622)	(3.155)	(2.538)	(3.203)	(3.377)	(3.730)	(3.332)
Hostile	0.147	4.846	2.689	4.231	1.241	−0.418	0.249	2.458
	(6.976)	(7.859)	(8.305)	(4.882)	(4.771)	(4.882)	(0.476)	(5.125)
Merger law	−26.685***	−2.837	−30.015***	−9.614	−6.979	−25.354**	−29.519**	−26.962***
	(8.576)	(7.824)	(8.916)	(7.211)	(9.432)	(12.642)	(13.224)	(9.833)
ADR	−5.688	−0.734	−4.113	−0.729	−1.551	−5.719	−5.293	−5.202
	(4.066)	(2.727)	(4.001)	(3.524)	(2.272)	(3.704)	(3.432)	(3.971)
Multiple bidders	3.047	3.451	2.991	2.739	2.246	3.022	3.011	1.654
	(3.372)	(4.862)	(2.097)	(3.064)	(2.191)	(2.646)	(2.609)	(2.691)
Target stock price run-up	1.029	3.603*	0.116	3.021**	2.519	−0.948	−0.971	0.546
	(4.581)	(2.064)	(4.153)	(1.439)	(6.377)	(6.538)	(6.511)	(4.848)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-square-adjusted	0.097	0.059	0.096	0.068	0.063	0.096	0.096	0.100
N	658	658	658	658	642	642	642	642

This table reports the results of the panel regressions where the dependent variable is CARs (in %) for the target firms during a five-day event window surrounding the cross-border merger announcements. CAR is calculated using the market model, where the parameters are estimated over the period starting 250 days to 42 days prior to the announcement using the MSCI world index and the local market index as the regressors in the market model. All event returns are winsorized at the .5% and 99.5% level. *Investor protection difference* and *GDP per capita difference* are defined as the difference between the acquirer and target (A -T). *Investor protection difference* is only defined for 100% acquisitions. *Diversify* is a dummy variable that denotes whether the target is in the same two-digit SIC industry Code as the acquirer. *Stock offer* is a dummy for the deals that are entirely paid by the acquirer's stock. *Merger law* is a dummy that denotes the existence of takeover regulations in the target country. *ADR* is a dummy that equals one if the target firm has an ADR listed by the time the acquisition is announced. *Stock price run-up* is the CAR of the target firm over the window (−30, −3) preceding the deal announcement. Variable definitions are provided in Appendix A. Fixed effects include year, industry, target and acquirer country. Mean coefficient estimates are reported with robust standard errors in parentheses. Standard errors are corrected for clustering in target country and year. The symbols ***, ** and * denote significance at 1, 5 and 10 percent levels, respectively.

are formed at the two-digit SIC level within each country. We only consider 100% acquisition deals and end up with 156 industry portfolios from 26 countries. We repeat our main analysis, both in a univariate and a multivariate fashion, for industry portfolio CARs (PCARs). Panel A of Table 5 reports the univariate results. Analogous to Table 3, we first divide the overall sample into two based on target state expropriation risk and then into four based on the investor protection indices of the acquirer and the target. The results are consistent with earlier findings. The median industry portfolio CARs (PCARs) are lower for target firms with high versus low state expropriation risk (14.96% versus 21.06%). The difference in premium due to better shareholder protection of the acquirer is pronounced in the overall sample as well as the low expropriation risk sample. However, for the high expropriation risk sample, the differences in shareholder protection do not affect the merger premium. When we look at the accounting standards for the overall sample, better accounting standards in the acquirer's country relative to the target's country leads to a slightly lower premium, though the differences are not statistically significant. When we classify the sample depending on the target state expropriation risk, for targets with high state expropriation risk, the portfolio of acquisitions where the acquirer has better accounting standards than the target are associated with significantly lower average premium.

Next, we conduct a multivariate analysis on the PCARs and report the results in Panel B of Table 5. Analogous to our earlier tables, specifications (1)–(3) use shareholder protection and (4)-(6) use accounting standards as the measure of investor protection. In specifications (1)–(2) and (4)–(5), we capture the cross-sectional variation due to industry characteristics through industry fixed-effects, whereas in specifications (3) and (6) we use the industry averages of control variables; size, q and cash, which are associated with abnormal returns around merger announcements. We lose 30% of the industries when we use industry accounting ratios. PCARs are significantly positively related to the shareholder protection transfers in two out of three specifications. The transfer of accounting

Table 5
Target industry portfolios.

Panel A. Portfolio Approach- Median Industry PCARs, Univariate Analysis.

	State Expropriation Risk						
	All sample	N	Below Median	N	Above Median	N	Difference *(p-value)*
All sample	18.41%	156	21.06%	82	14.96%	74	***(0.0270)***
Shareholder Protection							
Acquirer > Target	19.95%	66	22.63%	29	13.21%	37	***(0.0301)***
Acquirer < Target	16.20%	90	17.85%	53	16.01%	37	*(0.2409)*
Difference *(p-value)*	***(0.0694)***		***(0.0230)***		*(0.3725)*		
Accounting Standards							
Acquirer > Target	17.63%	75	22.15%	33	12.33%	42	***(0.0269)***
Acquirer < Target	18.98%	81	19.27%	49	16.62%	32	***(0.0431)***
Difference *(p-value)*	*(0.5315)*		*(0.3606)*		***(0.0782)***		

This table reports median portfolio CARs (PCARs) for the industry portfolios of target firms during a five-day event window around cross-border merger announcements. CAR is calculated using the market model, where the parameters are estimated over the period starting 250 days to 42 days prior to the announcement using the MSCI world index and the local market index as the regressors in the market model. The returns are winsorized at the .5% and 99.5% level. Industry-portfolios are formed at two-digit SIC level within each target country. Only 100% deals are considered. We classify portfolios based on the index of state expropriation of the target country and then also based on the indices of investor protection of the target and acquirer country. State expropriation index is increasing in the expropriation risk. The significance tests are based on Wilcoxon signed-rank test. Tests of differences are based on Wilcoxon rank sum test. *p-values* are reported in parentheses. The symbols ***, ** and * denote significance at 1, 5 and 10 percent levels, respectively.

Panel B. Portfolio Approach- Industry PCARs, Multivariate analysis.

	(1)	(2)	(3)	(4)	(5)	(6)
Expropriation risk $_{T}$		−1.274*** (0.244)	−1.861*** (0.358)		−1.367*** (0.311)	−2.255 (1.912)
Shareholder protection difference $_{(A-T)}$	0.153** (0.074)	0.202 (0.125)	0.259* (0.133)			
Accounting standards difference $_{(A-T)}$				0.031 (0.024)	0.021 (0.073)	0.024 (0.052)
Exprop risk* Shar. prot. diff $_{(A-T)}$		−0.021* (0.012)	−0.027* (0.014)			
Exprop risk* Acc. Stds. diff $_{(A-T)}$					−0.073*** (0.022)	−0.026** (0.011)
Size			0.055 (0.118)			0.070 (0.055)
Q			0.070 (0.043)			0.015 (0.066)
Cash			0.128*** (0.035)			1.380** (0.598)
Industry fixed effects	Yes	Yes	No	Yes	Yes	No
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Target country fixed effects	No	No	Yes	No	No	Yes
R-square-adjusted	0.0995	0.1187	0.1325	0.0946	0.1485	0.1069
N	141	141	98	137	137	92

This table summarizes the results of the panel regressions where the dependent variable is industry portfolio CARs (PCARs in %) of targets during a five-day event window surrounding the cross-border merger announcements. Industry portfolios are formed at two-digit SIC level within each target country. Only 100% deals are considered. Industry-level controls include average industry accounting ratios (size, q and cash) of the target firms. Mean coefficient estimates are reported with robust standard errors in parentheses. Standard errors are corrected for clustering in target country and year. The symbols ***, ** and * denote significance at 1, 5 and 10 percent levels, respectively.

standards on the other hand, are not significant in any of the specifications. The coefficients for state expropriation risk are negative, and significant in 3 out of 4 specifications, implying that average industry premia are lower for countries with high expropriation risk. The interaction terms are also negative and significant in all specifications, supporting the univariate results as well as our earlier findings with the firm-specific CARs. Our results might still be subject to a number of econometric and sample issues. We, therefore, address these concerns in the next section.

4. Robustness

4.1. Endogeneity

In previous sections, we controlled for firm and deal characteristics that affect merger premium. These characteristics, however, might be endogenous to country characteristics. In a cross-country setting, firms' ability to choose deal characteristics may be limited due to either legal restrictions or lack of demand. Starks and Wei (2013) show that acquirers from countries with better corporate governance are more likely to finance acquisitions of U.S. firms with stock. Indeed, investors are reluctant to accept stock payment from acquirers with poor governance. On the other hand, stock payment could be used to mitigate the information asymmetry between the target and the acquirer (see Officer et al. (2009)) as these asymmetries are more of a concern in cross-border deals. The endogenous nature of deal characteristics may have induced a spurious relationship in our tests. We address this concern in two ways. First, we run our main regressions on subsamples based on two deal characteristics: means of payment and industry diversification.[32] Second, we run a Heckman two-step model (Heckman, 1979). In the first step we estimate the likelihood of an acquisition

[32] Note that we did not have enough number of hostile deals in our final sample to run an analysis on subsamples based on the deal attitude.

being financed with cash rather than stock and the likelihood of a diversifying acquisition rather than a non-diversifying acquisition. In the second step, we use the predicted values of those likelihoods rather than the dummy variables we used previously.

Table C.1 in the Appendix reports the results of the multivariate regressions by deal types. The first two columns are based on payment method and the last two are based on industry diversification. In all of the subsamples, the signs of the coefficients are consistent with the previous findings. Remarkably, the discount on premium due to target state expropriation risk is significant in all specifications The negative coefficient on the interaction term remains significant except for non-diversifying acquisitions.

Next, we report the results of the two-step estimation. Panel A of Table C.2 reports the probit regressions where we test whether the likelihood of the deal being financed by cash or being diversifying depends on target and acquirer country characteristics. We find evidence consistent with the literature. The targets that have stronger shareholder protection are more likely to be paid for with cash and the likelihood is decreasing in the difference between the indices. We also find that acquirers with state expropriation risk are more likely to finance the acquisitions with cash. This may be because acquirer stock is selling at a discount due to the state expropriation risk. Neither corporate governance nor the state expropriation risk, however, has an effect on the likelihood of the deal being diversifying. Using the predicted values of the likelihoods that are estimated in columns (2) and (4) in Panel A, we run the second step regressions that are analogous to our main regressions. We report the results in Panel B of Table C.2. After accounting for endogeneity, the results mainly remain consistent.[33]

4.2. Sample selection bias

The decision to participate in a cross-border acquisition is an endogenous choice made by the target and acquirer firms. Target or acquirer government policies may affect the decision to participate in a cross-border M&A. To our knowledge, none of the studies have shown the effects of these policies on the intensity of cross-border M&As.[34] We, thus, first run a probit regression on the initial SDC sample and estimate the probability that a target firm will take a cross-border rather than a domestic deal. The results are reported in Panel A of Table C.3. The explanatory variables are based on the studies on the determinants of FDI and cross-border M&As (See for example Erel et al., 2012; Makaew, 2012; Rossi and Volpin, 2004). The results of the selection equation support previous findings that target firms are more likely to sell their shares to a foreign acquirer if the investor protection is weak in the target country. The results also show that a firm is less likely to be a target in a cross-border acquisition if the target government is predatory. This is not surprising since studies have shown the detrimental effect of political risk on the volume of FDI inflows to a country. Since the indices of corporate governance and state expropriation risk are significant, we employ Heckman (1979) procedure. We report the results in Panel B of Table C.3. After controlling for the selection bias, the results continue to hold.

4.3. Alternative measures of state expropriation

We would like to ensure that our findings are not specific to the state expropriation measure used. First, we employ a more comprehensive measure, the ICRG political risk rating, which provides a means of assessing the political stability of the country. It ranges from 0 (least stable) to 100 (most stable). We subtract the scores from 100 so that the higher values indicate greater political risk. First three columns of Table C.4 replicate our tests using this political risk rating. The results are consistent with the earlier findings.

The political risk measures provided by ICRG are usually subject to criticism due to their ex-post nature (see Glaeser et al. (2004)). Ideally, a good proxy for political institutions should capture investors' ex-ante views of government behavior rather than the ex-post government performance. We therefore use Freedom House (2009) political rights index as an alternative measure to quantify a country's overall political environment. The political rights index ranges from one to seven, where a lower rating corresponds to stronger political rights. Strong political rights indicate a political system that includes free and fair elections, those who are elected rule, competitive political parties or other political groupings, the opposition plays an important role and has actual power, and minority groups have reasonable self-government or can participate in the government through informal consensus. We repeat our main tests using this measure and report the results in Table C.4 through columns (4)-(6). The results remain consistent. Overall, these results suggest that our previous findings were not specific to our state expropriation measure.

4.4. Multicollinearity issues

A common limitation of the international studies is that country-level indices regarding the legal and political institutions are highly correlated.[35] In our main tests, we use a pooled sample and an interaction term to test the relationship between corporate governance transfers and state expropriation. Even though we use the transfer of governance (the difference between the acquirer and target investor protection) rather than the target corporate governance in our analysis, we still would like to establish that the significance on the interaction term is not an artifact of correlated terms.[36] We, therefore, first run our regressions on valuation effects of corporate governance transfers for two subsamples: (1) acquisitions where the target state expropriation risk is higher than the median and (2) acquisitions where the target state expropriation risk is lower than the median. Our results are reported in Table C.5.

[33] The lambda coefficients (Mill's ratio) are significant for the means of payment suggesting evidence of endogeneity.

[34] Although the importance of changes in political institutions and the influence of relevant policies in host countries have received considerable attention in overall FDI literature. See for example Jun and Singh (1996), Jensen (2003) and Gastanaga et al. (1998).

[35] We report the correlations table for our variables of interest in the Appendix B.

[36] We thank Bo Becker for pointing out this issue.

Overall, the transfer of better transparency and shareholder protection is associated with higher premium only for targets with low state expropriation risk.

Next, we repeat our tests using firm-level corporate governance practices. In a domestic M&A study, Wang and Xie (2009) use firm-level corporate governance scores and find that the difference between shareholder rights has significant positive effects on both target, and bidder announcement returns. We use corporate governance ratings that are provided under Intangible Value Assessment (IVA) rating model by the Institutional Shareholder Services (ISS). The ratings are mostly concerned with board structure and shareholder rights and are provided for an international sample of firms, which constitute the MSCI index. In our M&A sample, only 37 observations have the firm-level corporate governance rating available for both the acquirer and the target firm. We repeat our main regressions using this sample and report the results in Table C.6.[37] We recognize that the rather small sample size may affect the power of our tests. Nonetheless, our main results carry through. Overall, these results are consistent with our main findings and suggest that the value of the corporate governance transfers is contingent on target state policies.

4.5. Alternative samples and event windows

Our sample is dominated by U.S., U.K. and Canadian firms. It is thus possible that our results come from the differences between these three countries and the others. Therefore, in this section we replicate them, first excluding each of these countries separately, and then altogether from our sample. We lose 43% of the initial sample when we exclude U.S., 17% of the observations when we exclude U.K and 9% of the sample when we exclude Canadian target firms. Table C.7 reports the results. The coefficients on the expropriation risk remain negative in all alternative samples and significant in three out of the four subsamples. The transfer of shareholder protection, when included alone is significantly positive for samples that exclude U.S. only, Canada only as well as all three countries together. It is, however, not significant when we exclude U.K targets alone. The interaction term is negative and significant when we exclude U.S., U.K, Canadian targets separately as well as when we exclude them altogether. Thus, our results are robust to such country exclusions.

So far our analysis is based on the merger premium measured around a five-day event window. As the leakage of the news is likely to start earlier and the market reactions could drag over a longer period, in this section we use longer event windows to check the robustness of our main results.[38] Table C.8 shows that the main results continue to hold when the dependent variables are CARs for the event windows $(-5.+5)$ and $(-30.+30)$.

5. Conclusion

Recent studies show that the transfer of corporate governance structure across borders has significant valuation consequences. However, it is important to consider the valuation effect of expropriation risk by the state as well as the interaction among the so called "twin agency problems". According to "twin agency theory" (Stulz, 2005), expropriation by the state leads to greater consumption of private benefits because any money the insiders leave in the firm will be partially expropriated by the state. In addition, better transparency for outside shareholders also implies being more transparent to the state, and therefore, may have additional costs in predatory states. Previous studies have shown the value in transferring better institutions that provide better governance and more transparency through cross-border mergers. However, in the presence of state expropriation, it may be optimal for firms to operate with poorer governance and disclose less information. Therefore, the value of cross-border transfer of better governance and more disclosure is also in question under predation.

In this paper, we look at the merger premium for cross-border merger targets. We find that targets that operate in states with expropriation risk receive a significantly lower premium. We also show that the exogenous shocks to corporate governance are valued differently in the presence of state expropriation. Without state expropriation, the cross-border merger premium is significantly larger for acquisitions where acquirer shareholders are better protected than the target shareholders. However, we find that under risk of expropriation, better protection transfer is associated with a lower premium. We interpret these findings as such that the target shareholders are not fully rewarded for the improvement in firm governance since the benefits of improvement is very likely mitigated when the state is predatory. Our findings are similar when we look at the transfer of accounting standards instead of shareholder protection. Overall, our results suggest that the value of the transfer of better shareholder protection and accounting standards depends on the target country's government policies towards firms. We thus provide evidence on the valuation impact of twin-agency problems through cross-border mergers.

Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jcorpfin.2015.04.005.

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[37] Note that this is the largest sample we can obtain for our mergers and acquisitions dataset.
[38] We thank an anonymous referee for this suggestion.

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