# What is Different about Government-Controlled Acquirers

# in Cross-Border Acquisitions?

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October 2010

# Abstract

We examine the motives for and consequences of 4,026 cross-border acquisitions constituting \$434 billion of total activity that were led by government-controlled acquirers over the period from 1990 to 2008. We evaluate hypotheses related to corporate- and political economy-related motives to understand how government-controlled acquirers are different and test them by benchmarking this activity at the aggregate country level and also at the deal level with cross-border acquisitions involving corporate acquirers. Government-led deal activity is higher between geographically-closer yet industrially less-similar countries but also relatively less sensitive to differences in the level of economic development of the acquirer's and target's home countries and in the quality of their legal institutions. Government-led acquirers are from countries with larger current account surpluses and accumulated foreign-currency reserves and are more likely to pursue larger targets with greater growth opportunities. Share-price reactions to the announcements of such acquisition deals are, however, not different. We do find important differences involving sovereign wealth funds (SWFs) and other state-controlled investment funds. Policy implications are discussed, especially in light of recent regulatory changes in the U.S. and other countries that seek to restrict foreign acquisitions by government-controlled entities.

Keywords: Cross-border mergers and acquisitions; government-controlled corporations. JEL Classification codes: G3, F3.

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"A signal event of the past quarter-century has been the sharp decline in the extent of direct state ownership of business as the private sector has taken ownership of what were once government-owned companies. Yet governments are now accumulating various kinds of stakes in what were once purely private companies through their cross-border investment activities...Governments are very different from other economic actors. Their investments should be governed by rules designed with that reality very clearly in mind."

Lawrence Summers, July 30, 2007<sup>2</sup>

# 1. Introduction

The growing participation of government-controlled firms in the market for cross-border acquisitions has drawn much attention in the media. Prominent deals include the failed \$19.5 billion investment (18% stake) by Chinalco, China's state-owned metals group, in Rio Tinto, the U.K. and Australian dual-listed mining company, in 2009 and the acquisition attempt by Dubai World Ports, a ports management company owned by the government of the United Arab Emirates (UAE) to acquire Peninsular & Oriental Steam Navigation Company for \$6.8 billion in 2006. Though some of the largest deals involving sovereign acquirers gaining the most attention did indeed fail, many have been successfully completed. During the two years 2007-2008 alone, almost \$130 billion across 590 cross-border mergers and acquisition deals (with at least a 5% stake in the target company) involved a government-controlled entity as acquirer and this activity comprised about 10% of the total value of all cross-border acquisitions during that period (see Figure 1) and more than one-third of the total of all government-led acquisitions initiated over the period from 1980 through 2008. Some sovereign acquirers involve large sovereign wealth funds, like the Abu Dhabi and Kuwaiti Investment Authority, Singapore's Temasek Holdings and the China Investment Corporation, but the vast majority of the deals involve state-controlled corporations and agencies, like Malaysia's Petronas (\$2.5 billion acquisition of Australia's Santos in 2008) and Japan Tobacco Inc. (\$14.8 billion purchase of the U.K's Gallaher Group in 2006).

There are serious and growing concerns about the expanded role of governments in global capital markets in general, about foreign block acquisitions led by government agencies, in particular, and financial economists have devoted relatively little attention to their study. The main goal of this paper is to remedy this deficiency with a comprehensive global study of government-led cross-border acquisitions over the past two decades. We seek answers to the following specific questions. Do government-controlled acquirers pursue targets domiciled in countries that differ from cross-border acquisitions led by private corporations as acquirers from the same home country? If so, do they stem from political economy objectives related to the level of economic, institutional or financial development of the acquirer's home country? Are the characteristics and attributes of the target firms different for government-led acquisition different from those of a corporate acquisition? Do these motives and consequences differ by type of government acquirer, like sovereign wealth funds or other state-controlled funds?

Target firms become, at least, partially state-owned in such transactions and, as such, a major concern is that they become less efficient or less profitable than if they remained privately-owned firms following the

<sup>&</sup>lt;sup>2</sup> "Sovereign funds shake the logic of capitalism," in *The Financial Times* (July 30, 2007).

acquisition. Indeed, there is a large literature that rationalizes how public enterprises are inefficient with excess employment and wages and with goods production that is closer to the needs of self-interested politicians or bureaucrats than any consumers. This inefficiency view arises naturally in a model of bargaining (through subsidies and bribes) between politicians and managers in Shleifer and Vishny (1994) and through agency problems in the internal organization of governments between bureaucrats and politicians and among bureaucrats themselves. Tirole (1994) refers to these problems as "dissonant objectives" in the division of labor within government entities (due to information problems or incentive contracts). This view is different from that which regards public enterprise objectives as one of maximizing social welfare, curing market failures, and improving on the decisions of private enterprises when monopoly power or externalities introduce divergence between private and social objectives (Atkinson and Stiglitz, 1980). Tirole (2001) devises a formal model of stakeholder capitalism and investigates how managerial incentives and control structures need to be modified to deal with deadlocks in decision-making and the lack of a clear mission for management. Whether one accepts the inefficiency or the stakeholder-interest views of public enterprises, there is an understanding that their financial and operating decisions differ from those of private enterprises. Indeed, there is supportive empirical evidence in the relatively poor performance of state-owned banks and banking systems (by, among others, Berger, Clarke, Cull, Klapper and Udell, 2005; Mian, 2006; Micco, Panizza, and Yanez, 2007; and, Taboada, 2008) and of existing state-owned and newly-privatized firms (such as, Boyko, Shleifer and Vishny, 1993; Megginson, Nash and Randenborgh, 1994; and, Dewenter and Malatesta, 1997, 2001).

What motivates us to examine the determinants and consequences of cross-border acquisition activities of government-led acquirers is not only the significant increase in the activity in recent years, but also the heightened regulatory concerns that are now globally widespread. Consider, for example, the Dubai World Ports deal that was originally blocked by the U.S. Congress in March 2006 as it involved the potential transfer to a foreign government agency eleven terminals in six U.S. ports. One year later, Congress passed the Foreign Investment and National Security Act (FINSA) of 2007 that gave legal status to the little-known Committee on Foreign Investment in the U.S. (CFIUS), a multi-agency group formed in 1975 to monitor U.S. policy on foreign investments that may have any effect on national security.<sup>3</sup> In August 2008, China formed a committee to review foreign acquisitions of local companies for national security concerns as an outgrowth of its 2006 Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors.<sup>4</sup> In March 2009, Germany's Federal Council approved an amendment to the German Foreign Trade and Payments Act to allow the German Federal Ministry of Economics and Technology to prohibit investors from outside Europe from buying German

<sup>&</sup>lt;sup>3</sup> H.R. 556 Foreign Investment and National Security Act of 2007 was signed into law by President Bush on July 26, 2007. The Act intends "to ensure national security while promoting foreign investment and the creation and maintenance of jobs, to reform the process by which such investments are examined for any effect they may have on national security, to establish the Committee on Foreign Investment in the United States, and for other purposes." The full text is available at <u>http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h556</u>. CFIUS was created in 1975 in the Exon-Florio Amendment to the Defense Production Act of 1950 in which, as the designee of the President, authority was granted to conduct an investigation into the possible impact on national security of acquisitions involving "foreign persons which could result in foreign control of persons engaged in interstate commerce in the United States" (Title 50, U.S. Code § Appendix 2170(a)). <sup>4</sup> "China forms committee to review foreign acquisitions, citing security," (*Wall Street Journal*, August 26, 2008).

enterprises (or voting stakes of 25% or more) if such acquisitions constitute a threat to security or public policy.<sup>5</sup> If government-led acquirers do pursue different kinds of targets and if target firms' shareholders react differently to the announcements of such acquisitions, the knowledge of how these deals differ in type and in terms and conditions can provide useful guidance on what kind of economic consequences such regulatory restrictions might have. Of course, if no differences are detectable, then one might wonder about the real value of such regulatory actions at all.

We are further motivated to pursue this question by a potential advantage of our empirical design.<sup>6</sup> One of the challenges in implementing tests of the theoretical models of public enterprises due to political bargaining over control rights, agency problems in bureaucracies or the pursuit of broader social or stakeholder objectives is that the predictions are diffuse. No specific alternative hypotheses arise and none can thus be rejected in favor of the null that the decisions of public and private corporations are similar. All of this limits the power of the tests. To meet this challenge, we build our sample of government-led cross-border acquisitions involving majority and minority stakes in target firms around the world by culling it from the broader sample of all cross-border acquisitions led by corporate acquirers. We can thus anchor our inferences and tests with an appropriate benchmark that is novel and useful.

This benchmarking exercise allows us to benefit from a rich literature on corporate-led cross-border acquisitions that has advanced specific hypotheses as to why firms pursue them and has tested them empirically. For example, there is considerable work on cross-border mergers - linked with other international investments as foreign direct investment (FDI) - that focuses on the role of internal factors, including corporate synergies, relative labor costs, tax incentives, research and development (R&D) or technology advantages, to explain why a foreign firm would value domestic assets more highly than a domestic firm (see, among many others, Caves, 1971; Williamson, 1979; Dunning, 1981, Cushman, 1987; Morck and Yeung, 1991; and, Graham and Krugman, 1995, for a survey). More recent studies of FDI flows and cross-border merger activity advocate the importance of external factors, such as unexpected exchange rate shocks (Froot and Stein, 1991; Klein and Rosengren, 1994; Dewenter, 1995; Klein, Peek and Rosengren, 2002; and, Baker, Foley and Wurgler, 2009), tariffs on trade, capital controls and taxes (Buckley and Casson, 1976; Desai, Foley and Hines, 2004a, 2004b, 2006; and, Morck, Yeung, and Zhao, 2008), of geography and stock market valuation differences (Erel, Liao and Weisbach, 2010), differences in corporate governance and legal systems (Rossi and Volpin, 2004; Antrás, Desai and Foley, 2009;

<sup>&</sup>lt;sup>5</sup> See "Germany Establishes National Security Review of Foreign Investments" (*Gibson, Dunn & Crutcher LLP Publications*, April 17, 2009 and <u>http://www.bmwi.de/BMW/Redaktion/PDF</u>). On August 4, 2009, Australia's Treasurer Wayne Swan announced an easing of certain foreign investment rules to a higher threshold of 15% worth A\$219 million or more (Media Press Release No. 089, <u>http://ministers.treasury.gov.au</u>). A February 2008 Report of the U.S. Government Accountability Office, entitled "Laws and Policies Regulating Foreign Investment in 10 Countries," provides a useful comparison of foreign investment review procedures in different countries (GAO-08-320, Table 3).

<sup>&</sup>lt;sup>6</sup> This experimental design is similar to that advocated by Bargeron, Schlingemann, Stulz and Zutter (2008) in which they show that private acquirers pay lower premiums to target shareholders than public acquirers. The power of their tests stems from cross-sectional regressions of target returns and bid premiums, dummy variables for the type of acquirer (private or public entity) and a number of control variables associated with alternative hypotheses that motivate acquisitions.

Bris and Cabolis, 2008; and Bris, Brisley and Cabolis, 2008), the role of institutional investors (Ferreira, Massa and Matos, 2010) and differences in market-wide capital scarcity (Chari, Chen and Dominguez, 2009).

The arguments for each of these potential drivers of cross-border activity guide us to specific alternative hypotheses for the government-led acquisitions based on the *inefficiency view* of Shleifer and Vishny (1994) and Tirole (1994). For example, Froot and Stein (1991) argue that wealth effects matter in cross-border deals because information problems in financial contracting cause external financing to be more costly than internal financing. When a firm's value increases (such as from an unexpected exchange rate appreciation in the currency of their home country), then the potential foreign acquirer can bid more aggressively for domestic assets than a domestic rival. Self-interested politicians or bureaucracies encumbered by information problems that, in turn, influence government agencies pursuing such overseas acquisition may be relatively less positively influenced by a real currency appreciation than an equivalent corporate acquirer domiciled in the same country. We expect that inefficiency is associated with more diffuse objectives and any resulting exchange rate relationship would be attenuated. We would expect to see in a similar fashion weaker responses of government-led acquisition activity to stock market valuation differences or differences in corporate governance and legal systems. This constitutes a well-defined and specific testable alternative hypothesis that can be rejected in favor of the null that governmentand corporate-led acquisitions are no different. To pursue the most powerful tests, we evaluate many alternative hypotheses in terms of country-level factors that impact the overall level of cross-border activity across markets, in terms of the characteristics and attributes of target firms that government- and corporate-led acquirers pursue, and, finally, in terms of the share-price reactions to announcements of acquisitions by the two types of acquirers.

We can also test other alternative hypotheses specifically related to the *stakeholder-interest view* of Atkinson and Stiglitz (1980) and Tirole (2001). A number of potential social, economic, and political objectives that could influence government agencies pursuing overseas targets can be explored. For example, government-controlled firms may be used to diversify the industrial base of their home country by seeking overseas targets in global industries in which their home country is underrepresented (as in the case of China and access to the mining and resource sectors; see Bremmer, 2010). Government-controlled acquirers are also likely to be better financed, better enabled and thus more active in cross-border deals from countries with larger government budgets, current account surpluses, accumulated foreign currency reserves, and a more substantial presence through aggressive domestic acquisition strategies. We expect shareholders of targets to be less enthusiastic in reacting to announcements of deals motivated by political, economic or other social objectives.

Finally, our experimental design allows us to contribute in a complementary way to the recent literature focusing on sovereign wealth funds (SWFs) and their investment strategies around the world. Studies by Kotter and Lel (2008), Bernstein, Lerner and Schoar (2009), Chhaochharia and Laeven (2009), Dewenter, Han and Malatesta (2009), Fernandes (2009), Fotak, Bortolotti, Megginson and Miracky (2009), Knill, Lee and Mauck (2009) examine a list of SWFs from the Sovereign Wealth Fund Institute (<u>www.swfinstitute.org</u>) or other related

sites and compile data on equity investments for each SWF using a variety of sources.<sup>7</sup> Most of these studies examine only investments in publicly traded firms (except Bernstein, Lerner and Schoar), almost all evaluate the share price reactions to their announcements and some consider longer-run consequences, and most differentiate between different SWFs by their varying levels of quality of governance and transparency as guided by a scoring index developed by Truman (2007). These studies find a positive and statistically significant share price reaction around the announcement of an SWF acquisition in a public target (e.g. 0.8% in Fotak, Bertolotti, Megginson and Miracky), but also negative longer-run buy-and-hold returns; Bernstein, Lerner and Schoar show that the price-to-earnings ratios of the industry peers of the firms in which SWFs invest drop after the investment; and, while Dewenter, Han and Malatesta uncover evidence of active monitoring by SWFs after the investment, Kotter and Lel show no evidence that operating performance or corporate governance changes.

An important challenge for each of these studies is how to define the appropriate benchmark against which to judge these investment decisions. Most studies exploit the cross-section of SWFs by governance or transparency scores of Truman (2008), by the extent to which external managers or politicians are involved in investment decisions, by whether the acquisitions are domestic or cross-border, and only one – Chhaochharia and Laeven – calibrates the country allocations of SWFs against those of other global investors, specifically U.S. mutual funds (they find that SWFs strongly prefer investments in closer proximity geographically, and by language, ethnicity, and culture). Our study contributes to this emerging literature on SWFs by widening the lens on not just SWF acquisitions, but also those by government-controlled corporations and agencies that are not SWFs.<sup>8</sup> Moreover, in our experiments, we are able to calibrate the cross-border acquisition choices of SWFs against non-SWF government acquirers as well as those of corporate acquirers. Our sample of government-led acquisitions is also by definition larger than most of these other studies which provides helpful statistical power for our basic inferences. Of course, we do only focus on acquisition blocks that exceed 5% of the target firm's shares, so we are not able to compare our findings to those of Fernandes (2009), in which the sample exceeds 21,000 acquisitions, but for which the median size of the SWF investment stake in the target firm is only 0.25%.

We use Thomson Reuters Security Data Corporation's (SDC) Platinum Mergers and Corporate Transactions database to collect data on 127,053 announced cross-border acquisitions between 1990 and 2008 with a total (constant dollar) transaction value equal to \$8.8 trillion. Government-controlled acquirers are identified as those in which the acquirer's ultimate parent is flagged as a government entity. Our sample of government-controlled acquirers represents 4,026 withdrawn and completed cross-border deals constituting over \$434 billion over the period from 1990 to 2008. Our supplementary analysis of SWFs and other government-controlled investment funds includes another 733 deals representing over \$158 billion over this period.

<sup>&</sup>lt;sup>7</sup> SWFs are broadly defined as public investment agencies which manage part of the foreign-currency assets of national states and are typically funded by commodity export (e.g. oil) revenues or the transfer of assets directly from official foreign exchange reserves. Useful background studies on SWFs as a growing force in global capital markets and their legal and organizational structures include Butt, Shivdasani, Stendevad and Wyman (2008), Jory, Perry and Hemphill (2008), Balding (2008) and new books by Saw and Low (2009) and Bremmer (2010).

We find significant cross-country variation in the cross-border activity that is led by government acquirers in terms of the country of domicile of the acquirers and of the host targets. China's government-controlled corporations represent the largest contingent having initiated \$99 billion worth of acquisitions over this period, and is followed closely by those from France (\$81 billion), Singapore (\$28 billion) and Saudi Arabia (\$22 billion). As a fraction of the total dollar value of cross-border activity by the acquiring country, Venezuela, UAE, China and Saudi Arabia lead with over 70% comprising government-led deals. Among countries that represent the prime targets for these government-led acquisitions, the U.S. is the largest in absolute terms (\$78 billion), followed by Hong Kong (\$58 billion), the U.K. (\$48 billion), and Australia (\$24 billion), but, relative to the flow of corporate cross-border acquisitions that target their countries, the leaders are UAE (48%), Hong Kong (45%), Malaysia (25%), Finland (21%) and the Slovak Republic (21%). We test the hypothesis that the overall crosscountry determinants of cross-border acquisition flows are different for government-led deals and find that it is relatively more intense for geographically-closer yet industrially less-similar countries, but also relatively less sensitive to differences in the level of economic development of the acquirer's and target's home countries and in the quality of their legal institutions. Government-led acquirers are from countries with larger current account surpluses and accumulated foreign-currency reserves and are more likely to pursue targets in countries with deficit positions and fewer reserves. Some of these findings are consistent with the stakeholder-interest view of government enterprises; very few, however, can be interpreted as consistent with the *inefficiency view*. In fact, the most important takeaway from all of these tests is that the systematic differences in the determinants of government-controlled and corporate acquisition flows are economically small.

When we turn our attention to a deal-level analysis, we show that there are few, if any, firm-specific, dealrelated, and country-level attributes that affect the likelihood of a cross-border deal led by a government acquirer any differently than a corporate acquirer. There is some evidence that government-led acquirers are more likely to pursue larger targets with greater growth opportunities (market-to-book ratios), and more financial constraints, but the explanatory power of these logistic regression models are generally quite low. We are able to reject almost all of the specific alternative hypotheses that we explore in favor of the null that these government-led acquisitions are no different than corporate acquisitions in the types of deals they pursue. So, we interpret this evidence in the cross-border acquisition market as not supportive of the predictions of theories about resource misallocation due to political bargaining, agency problems of the *inefficiency view* or the mandate of social and economic objectives of the *stakeholder-interest view*. Interestingly, when we examine supplementary tests of differences between acquisitions by SWFs and other government-controlled funds and those by other government-led acquirers, there is considerably more explanatory power in these tests than in those comparing all government-led and corporateled acquisitions. Acquisitions by SWFs and other government-controlled funds are less likely to be withdrawn than other government-led acquisitions and they are more likely to pursue targets that are larger in total assets and that are located in more democratic and economically more-developed countries. Finally, we show that the median cumulative abnormal market-adjusted returns (CMARs) around announcements (with a three-day investment horizon) of cross-border deals by corporate acquirers are 6.9% (1.5%) for those seeking majority (minority) stakes while those of government acquirers are only 3.1% (1.0%). In cross-sectional tests, we are unable to detect any significant differences once we control for various country-level and firm-specific factors. The CMARs using longer horizon investment windows around the announcements are larger (up to 13.5% for 21 day window), reliably positive, but still not significantly different between government-led and corporate-led cross-border acquisitions. The three-day CMARs are significantly positive for cross-border acquisitions by SWFs and other government-controlled funds, but there is reliable evidence that the former's stock price reactions are significantly lower than those for government-controlled corporations (median 1.50% for government corporations instead of 0.85% for sovereign funds).<sup>9</sup> Our novel calibration exercise of SWF investments relative to other government-led acquisitions thus lends an important new perspective on how much – or, more precisely, how little - the market reacts to SWF announcements.

In the next section, we outline how we built our data and provide preliminary statistics on the level of crossborder activity that is led by government-controlled acquirers. Section 3 presents regression analysis of the determinants of the aggregate level of cross-border acquisition activity across countries by government-led and by corporate acquirers. In Section 4, we shift to a deal-level analysis using a logistic regression analysis of government-led versus corporate-led deals. Our analysis of the share price reactions to the deal announcements follow in Section 5 and we end the paper with some concluding remarks.

#### 2. Data and Descriptive Statistics

## A. The Sample of Cross-Border Deals

We use Thomson Reuters Security Data Corporation's (SDC) Platinum Mergers and Corporate Transactions database to collect data on 127,053 announced cross-border acquisitions between 1990 and 2008 with a total (constant dollar) transaction value equal to \$8.8 trillion. We collect a number of data items, including the announcement date, whether it succeeded or was withdrawn, the target's name, its status (subsidiary, joint venture partner, private, government-owned or publicly-listed company), its 4-digit Standard Industrial Classification (SIC) code and country of domicile, the name of the acquirer, its SIC code and country of domicile, its intermediate and ultimate parent firm's name, status (if either relevant), and the deal value, if disclosed, and the fractional stake in the target that the deal represents. We only consider deals in which the fractional stake in the target is less than 50%. We also collected other deal characteristics, including the medium of exchange (cash/stock payment), whether the shares were purchased on the open market or through private negotiation and the premium paid for

<sup>&</sup>lt;sup>9</sup> To calibrate our results to other SWF studies, we also evaluate announcement returns for the sample including target firms in the financial services and utilities industries. The three-day CMARs equal 0.84% for the 287 SWF and government fund acquisitions we study is very close in magnitude to the 0.82% 5-day market-model-adjusted returns in Chhaochharia and Laeven (2009), and the 0.81% volatility- and market-adjusted 3-day returns in Fotak, Bortolotti, Megginson and Miracky (2009), but smaller than the 1.52% and 2.15% 3-day market-model-adjusted returns in Dewenter, Han and Malatesta (2009) and Kotter and Lel (2008), respectively.

the shares acquired calculated as the offer price relative to the 1-day, 1-week, and 4-week trailing price of the target's shares. We convert all deal values reported into U.S. dollars using national exchange rates from the WM/Reuters prevailing at the time of the deal (WMR quotes are based on 4:00pm London (Greenwich Mean Time) in U.K. Pound Sterling, which are, in turn, converted into U.S. dollars at the U.S. dollar/Pound Sterling national exchange rate) and we further report them in Constant 2000 U.S. dollar terms using the U.S. Consumer Price Index.

We exclude leveraged buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases and privatizations and we exclude acquirers from overseas territories of the U.K. and Netherlands that are tax havens, including the Bahamas, British Virgin Islands, Cayman Islands, Guernsey, Isle of Man, Jersey and Netherland Antilles. This filter on cross-border acquirers from overseas territories excluded 10,962 corporate deals worth cumulatively \$353 billion (in Constant 2000 U.S. dollars) or 6% of the original sample count and 3% of the total value. We also exclude countries in which there are fewer than 50 cross-border acquisitions, whether led by government-controlled or corporate acquirers. This filter has only a modest impact on the overall sample and is used to include countries with sufficient acquisition activity to justify its consideration. About 11% of the deals (4% of total deal value) are excluded as a result.

Government-controlled acquirers are identified as those in which the acquirer or acquirer's ultimate parent is flagged as a government entity, and these include corporations and "financial buyers," which are typically, commercial, savings or investment banks, real estate or private equity investment funds or trusts for which primary SIC codes range between 6000 and 6999. The variable of interest is "AUPPUB" and whether it identifies the ultimate parent as government-owned, which SDC defines as one in which 50% or more of the shares outstanding are government owned. We are ultimately left with a sample of 4,759 withdrawn and completed cross-border deals constituting over \$592 billion over the period from 1990 through 2008. We proceeded to double-check the ultimate parent's ownership status at the time of the deal's announcement by hand using a variety of company annual reports, regulatory filings, on-line news reports and other resources. We sorted from highest to lowest all of the government-led acquirers by total U.S. dollar Constant 2000 value (again using the U.S. Consumer Price Index) across all deals in which they were involved. We confirmed by hand the governmentcontrolled status of the top 72 acquirers which ultimately represented 78% of the cross-border deal value (\$461 billion) and over 526 of the deals. Consider, for example, that the EDF (Electricité de France) Group of France, which was a 100% government-controlled until 2004 and is still 84%-owned by the government, initiated 19 acquisition deals between 1992 and 2008 totaling \$42.3 billion and its targets included Constellation Energy Group (U.S., \$4.5 billion), Délmagyarórszági Aramszólgálta (Hungary, \$3.6 billion) and PowerGen plc (U.K., \$3.4 billion).

We initially screen out government-controlled investment funds. They are identified as those acquirers with SIC codes in the 999A – 999G range or with government as ultimate parent and those related to investment offices, pension, health and welfare funds, trusts or holding companies with SIC codes 6019, 6371, 6722, 6726,

6798, and 6799. We also double-checked the name of the acquirer against the list of names supplied on the SWF Institute website (www.swfinstitute.org) to confirm its status as an SWF.<sup>10</sup> The largest SWFs in our data sample of cross-border acquisitions included Singapore's Temasek Corporation, which was involved in 167 deals totaling \$39.8 billion, Singapore's Government Investment Corporation (GIC; 81 deals, \$19.8 billion), Saudi Arabia's SABIC (4 deals, \$12.3 billion), China Investment Corporation (7 deals, \$7.4 billion) and the Abu Dhabi Investment Authority (22 deals, \$8.7 billion). It is noteworthy that collectively SWFs and government-controlled investment funds are prominent among the largest cross-border acquirers, but they comprise 733 deals and less than \$159 billion of the total deal value, or one-quarter of our total government-led acquisition activity. But this relatively low total value may arise from the difficulty of defining exactly what a SWF is, an important point which Fotak, Bertolotti, Megginson and Miracky (2009) so aptly point out (see their Panels A and B, Table I comparing SWF classifications by Truman (2007) and by the SWF Institute).<sup>11</sup> Lastly, to benchmark correctly corporate acquirers with government-controlled corporations, we also screen out any private investment funds in a similar manner.<sup>12</sup>

### B. Summary Statistics

Table 1 presents summary statistics – overall and by year - on the number and total value of cross-border acquisition deals involving at least a 5% stake in a target corporation. In Panel A, we report those associated with government-controlled acquirers and, in Panel B, those with corporate acquirers, both excluding investment funds as explained above, unless they are named as an intermediary parent of another acquirer. In each panel, we present the total number of deals, only those in which transaction values are reported, the total and average per deal value across all those for which data is reported, the number of withdrawn deals, those involving minority stakes (less than 50% of target shares), those involving financial acquirers and the number of targets that are publicly-listed corporations. As noted above, our overall sample across all years constitutes 4,026 deals totaling \$434 billion in value, which represents about 3% of all corporate-led acquisitions (123,027) and 5% of their total value (\$8.4 trillion). Figure 1 already demonstrated that a significant increase in government-led acquisition activity occurred in 2007 and 2008, particularly in terms of total deal value. Almost 20% of all government-led acquisition activity was also heightened during 2007-2008, but not as intensely in terms of the value of all deals (\$1.61 trillion, or only 20%).

<sup>&</sup>lt;sup>10</sup> We cross-checked not only the name of the acquirer with the list of SWF names from SWF Institute, but also that of the acquirer's immediate and ultimate parent, to include all the subsidiaries of SWF as state-controlled funds. We decided not to include the subsidiaries of SWFs since the majority of them are corporations. It is important to point out that our key inferences do not change whether or not these subsidiaries are included in government-controlled funds.

<sup>&</sup>lt;sup>11</sup> By comparison, Bernstein, Lerner and Schoar (2009) identify 1752 deals by SWFs averaging \$351 million per deal implying about \$615 billion in cumulative SWF activity, but these are not inflation adjusted and the sample runs from 1983 to 2007. Fotak, Bertolotti, Megginson and Miracky (2009) in their SDC sample evaluate 141 deals at \$572 million per deal or cumulatively \$80.6 billion. Their Bureau van Dijk "Zephyr" sample is much larger at 314 deals at €1.253 billion per deal or \$1.57 trillion over 1997-2008. Beck and Fidora (2008) report \$91.5 billion of deal activity in 2007 and 2008 alone, which is far larger than any of the other samples.

<sup>&</sup>lt;sup>12</sup> This filter on private investment funds excludes 17,524 corporate-led cross-border deals, which is less than 15% of the original sample.

Only 1,613, or about one-third, of the government-led acquisition deals report deal values which could be for one of three reasons. First, many deals involve subsidiaries, plants or joint venture transactions in which the deal value is too small to report. Second, there might be differences across countries in disclosure requirements. Lastly, the parties to the transaction, both companies themselves and their advisors, might strategically choose not to do so. The third explanation is most likely as the proportion of corporate deals for which values are disclosed is much higher at 43% (51,277 deals). The average deal value involving a government-controlled acquirer is much larger than those involving corporate acquirers (\$269 million versus \$165 million) and this difference has widened in recent years.<sup>13</sup> As a fraction of the total number of deals initiated by government-controlled acquirers, more than one-third is withdrawn (1,355 out of 4,026); by contrast, only 25% of the sample of corporate-led acquisition deals is withdrawn.

Another major difference between the government-led and corporate-led acquisitions is the proportion of them that involve minority stakes in the target firm; 60% of government-led deals involve stakes below 50%, while less than 40% of corporate deals do. The finance literature proposes that the motives behind these two types of transactions differ, so we will separate out the majority control and minority stake deals for both government and corporate acquirers in most of our analysis. About 16% of the government-led deals involve financial acquirers (a situation that SDC defines as an acquiring company buying a non-financial target company for financial reasons rather than for strategic reasons). Finally, about 20% of the sample of targets among government-led deals involves a publicly-traded firm, a much higher fraction than for corporate deals (only 12,669 or 11%). This is an important constraint for our analysis at the deal level for which we will need to obtain financial statement information to evaluate by which attributes the targets of government and corporate acquirers differ.

## 3. Determinants of Cross-Border Acquisition Activity Led by Government-Controlled Acquirers

## A. Measuring the Level of Cross-Border Acquisition Activity by Type of Acquirer

Our next goal is to measure whether the level of cross-border acquisition activity led by governmentcontrolled acquirers differs from that of corporate acquirers. Does deal activity that is led by governmentcontrolled acquirers emanate from some countries more intensely than others? Are government-controlled acquirers more likely to pursue targets in certain countries over others? If so, in either case, what are the countrylevel attributes or market conditions of those countries that dominate government-led cross-border acquisition activity and which determine the target markets that attract this activity? In order to answer these questions, we compute two kinds of cross-border ratios of deal activity: the first measures the fraction of all cross-border acquisition activity emanating from a given country i which involves government-led acquirers relative to

<sup>&</sup>lt;sup>13</sup> Though not presented in these statistics, large SWF-led acquisition deals also took place in these two years in major financial institutions. The most prominent examples include GIC of Singapore's \$9.8 billion stake in UBS, GIC and Abu Dhabi Investment Council's \$6.9 billion and \$7.6 billion stakes in Citigroup, China Investment Corporation's \$5 billion in Morgan Stanley and Singapore's Temasek Holdings and the Kuwaiti Investment Authority's \$5 billion and \$3.7 billion investment in Merrill Lynch.

corporate acquirers and the second measures the fraction of all acquisition activity that targets a particular country *j* which involves government-led acquirers relative to corporate acquirers.

In Table 2, we report the countries in rank order by those which have the highest fractions of government-led activity measured by total deal value by acquirer country (Panel A) and by target country (Panel B). The acquirer countries in which government-led deals dominate all cross-border activity include Saudi Arabia (88% by deal value, 32% by deal counts), Venezuela (87%, 44%), China (80%, 55%), UAE (73%, 41%), the Czech Republic (70%, 19%), Khazakhstan (69%, 20%) and Kuwait (62%, 29%). By raw total deal value, however, China leads the list with 673 deals and \$100 billion of deal activity, both statistics that far exceed any other countries in the sample (interestingly, France is second with 691 deals and \$81 billion). Many of the countries at the top of the list are those that are typically identified with large accumulated foreign currency reserves due to oil exports and export-driven trade, but it is not exclusively so (e.g. France, Italy, Sweden each constitute at least \$20 billion of government-led deal activity).

The leading target countries for government-led cross-border acquisition activity are somewhat more surprising. UAE has the highest fraction by deal value (48%), but its fraction by the count of deals is low (3%) indicating that several large deals dominate their market. Hong Kong is second by the fraction of deal value (45%), first by fraction of deal count (16%), and is by far the largest target market in absolute terms (446 deals, \$58 billion) on the list. Much of this activity stems from the government-led deals emanating from China, as seen in Panel A. But, in fact, the U.S. and U.K. are both large target markets at \$78 billion and \$46 billion, respectively. Because there are even more corporate-led cross-border acquisitions targeting the U.S. and U.K., the fraction of the activity that targets the U.S. and U.K. with government-led acquirers is very low (less than 2%) and therefore both are reported in the "Others" category. The other countries that are primary targets for government-led cross-border acquisitions include Malaysia (25% of deal value, 3% of deal count), Finland (21%, 4%), the Slovak Republic (21%, 6%), and Kazakhstan (21%, 11%).

Though it is relatively easy to connect the dominant presence of China's government-led acquirers in Hong Kong as the primary target market, it is more complex to discern it for the broader level of activity around the world. We will develop another more refined measure of the proportion of government-led activity by pairs of acquirer and target countries next, but Figure 2 offers a preliminary look by region. In Panel A, we report the top countries in declining rank by raw total deal value led by government-controlled acquirers and indicate which regions they target for their activity. For China's \$100 billion of deal activity, the largest target component is Developed Asia (about \$59 billion, much of which targets Hong Kong), followed by the U.S./Canada (about \$19 billion) and Developed Europe (about \$12 billion). France's \$81 billion of government-led acquisitions mostly target Developed Asia and Saudi Arabia's government-led acquirers total about \$25 billion each, but UAE's prefer Developed Asia and Europe whereas Saudi Arabia's tilt their acquisitions toward Developed Europe and the U.S./Canada. The U.S. is the largest target country for government-led acquisitions (\$78 billion) and, in Panel

B, we note that the dominant acquirer countries are surprisingly (or not) from the EMEA region (Emerging Europe, Middle East and Africa), followed by Developed Europe and then Emerging Asia. The \$46 billion in government-led acquisition activity targeting the U.K. arises from Developed Europe, Developed Asia and then the EMEA region. For Hong Kong, the dominance of Emerging Asia (mostly all China) in its \$58 billion of deal activity is quite apparent.

## B. Evaluating Alternative Hypotheses for Cross-Border Acquisition Activity

We next disaggregate our measure of cross-border activity led by government-controlled acquirers into country pairs and by year. For each country pair in each year, we compute the fraction of total number of deals (or total deal value) involving government-led acquirers that targets country *j* from country *i* to the total activity by government-led acquirers that target country *j* in year *t*. We denote this ratio,  $A^{G}_{ijt}$ , where superscript "G" represents government-led deals.<sup>14</sup>

One important advantage of our experimental design is that we can perform the exact same computations for all corporate-led cross-border acquisition activity between country pairs. We denote this ratio,  $A_{ijl}^{c}$ , where superscript "C" represents corporate-led deals. Even more importantly, we can compute an *excess* ratio, or *Excess* $A_{ijl}^{G}$  equal to  $A_{ijl}^{G} - A_{ijl}^{C}$ , the difference between the fraction of government-led activity that takes place between countries *i* and *j* and the fraction of corporate-led activity that takes place between those same two countries. In this way, we are able to determine whether government-led acquirers from country *i* disproportionately seek out targets in country *j* relative to corporate acquirers that come from country *i*. Our approach represents a natural benchmarking experiment that is similar in spirit to that employed by Rossi and Volpin (2004), Erel, Liao, and Weisbach (2010), Ferreira, Massa, and Matos (2010), and others to benchmark cross-border acquisition activity between country pairs relative to domestic acquisition activity in the target country. In order that the calculation of these ratios are sensible, we further exclude observations for a deal ratio in a given year when there is no government or corporate cross-border deals between countries *i* and *j*.<sup>15</sup>

What country-level factors determine toward which target countries government-led acquirers tilt their acquisition activity? Are these country-level factors the same as those that influence the decisions of corporate acquirers? Which factors, if any, can explain differences in the patterns of cross-border acquisitions by government-led and corporate acquirers? We first propose a number of possible explanations for these cross-country acquisition patterns as drawn from the prior literature on corporate acquisitions. Our expectations based on the *inefficiency view* of public enterprises due to political bargaining over control rights, dissonant objectives or agency problems in bureaucracies are that each of these influences should engender noise and thus be

<sup>&</sup>lt;sup>14</sup> We also compute a similar ratio evaluated by acquirer instead of target country. Here, we compute the fraction of total number of deals (or total deal value) involving government-led acquirers that targets country i from country i in year t by the total activity by government-led acquirers from acquirer country i. All of the tests and results that follow are similar.

<sup>&</sup>lt;sup>15</sup> With 64 countries represented in our overall sample of cross-border acquisitions and 19 years of activity, the potential number of country-pair observations is the square of the number of countries by year ( $64 \times 63$  or  $4,032 \times 19$  years or 76,608). The effect of these screens is to limit the number of observations to include about 40 countries. We explored a number of alternative screens and, in fact, our cross-sectional regression analysis shows the sensitivity of our inferences to different screens based on the explanatory variables we include in the various specifications.

statistically weaker and economically smaller for government-led acquisition activity. So, if a factor exists that serves as a positive driver of corporate acquisition activity between two countries, its positive effect will be attenuated for government-led acquisitions and the *excess* ratio of government-led relative to corporate acquisition activity will be *negatively* related to that factor.

One important factor we examine is the valuation differences between target and acquirer firms. They can affect acquisition activity through two channels. Froot and Stein (1991) argue that differences in wealth that occur because of exchange rate or other shocks provide a financing advantage, lowering the cost of a potential acquisition. A wealthier country effectively has a lower cost of capital, leading its firms to purchase assets outside the country, including other companies. The second channel through which valuations can drive mergers and acquisitions is if these valuations diverge from fundamentals (Shleifer and Vishny, 2003).<sup>16</sup> Given misvaluation, managers of a relatively overvalued firm will have incentives to purchase undervalued assets, especially if they can use their overvalued stocks as a means of payment. Erel, Liao and Weisbach (2010) find differences in real stock market returns and in real exchange rate changes explain much of the level cross-border merger activity between country pairs and argue that it largely stems from changing underlying economic conditions. We predict that stock return differences of the country indices (differences between the annual local-currency real stock market returns of the acquirer and target countries) and the relative appreciation of the two countries' currencies (differences between the annual real exchange rate return of the acquirer and target countries) each year will be associated with more acquisition activity between country pairs and, under our central null hypothesis, activity led by government-controlled and corporate acquirers would be no differently affected by these valuation differences. Our alternative hypothesis based on the *inefficiency view* predicts that larger differences in stock index and exchange rate returns between acquirer and target countries will be more positively associated with corporate-led deals than government-led deals between those countries. Details on our construction of the stock market returns and exchange rate changes are in an Appendix Table A1 and summary statistics are in Table A2.

In a world of perfect markets, corporate assets would be channeled toward their best possible use. Mergers and acquisitions facilitate this process by reallocating control over companies. However, frictions such as transactions costs, information problems, and agency conflicts can prevent efficient transfers of control. Recent studies of corporate governance employ measures of the quality of the legal and regulatory environment within a country as proxies for some of these frictions and show that differences in legal systems, regulation, accounting and disclosure requirements correlate with the development of capital markets, the ownership structure of firms, the cost of capital, and the intensity and the pattern of merger and acquisition activity around the world. Rossi and Volpin (2004), Starks and Wei (2004), Antrás, Desai and Foley (2009), Bris and Cabolis (2008) and Bris, Brisley and Cabolis (2008) find that cross-border mergers and acquisition activity between two countries increases the greater the difference in the quality of investor protections and accounting standards between the acquirer's and

<sup>&</sup>lt;sup>16</sup> For evidence of valuation drivers of domestic merger activity, see Moeller, Schlingemann and Stulz (2005), Dong, Richardson, Hirshleifer and Teoh (2006), Rhodes-Kropf and Viswanathan (2004), and, in terms of FDI flows, see Baker, Foley and Wurgler (2008).

target's countries. We also consider a related measure of the autocratic control or democratic nature of the government as a proxy for the risk of agency conflicts that stem from politicians or bureaucracies pursuing their self interests (Stulz, 2005). We predict that larger positive differences between the acquirer and target countries in investor protection (using the anti-self dealing index of Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008)), and in accounting standards (using the Center for International Financial Analysis and Research scores in La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998)) will be associated with more acquisition activity between country pairs and, under our central null hypothesis, activity led by government-controlled and corporate acquirers would be no differently affected by these governance and disclosure differences. The specific alternative hypothesis associated with the *inefficiency view* of government enterprises is that the government-controlled acquisition activity will be less positively associated with differences in investor protection, democracy and accounting standards than corporate acquisition activity.

The empirical literature on trade and FDI flows emphasizes the important role that geography plays (among others, see the gravity models of Anderson, 1979; Portes and Rey, 2005; and, Anderson and van Wincoop, 2003). The arguments are based indirectly on the role of transactions costs, tariffs and barriers that are linked to bilateral geographical distance, although they can similarly be linked to commonness of culture, language, ethnicity and religion (Stulz and Williamson, 2003). Coeurdacier, De Santis and Aviat (2009) emphasize that geographic distance is a primary force driving cross-border mergers and acquisitions, especially among developing countries, and there is additional support in Rossi and Volpin (2004) and Erel, Liao and Weisbach (2010) though they do not emphasize these findings. Kang and Kim (2010) examines 268 partial equity block acquisitions of U.S. target firms by foreign corporate acquirers and show that proximity matters here not only in terms of geographic distance, but also in terms of language, culture and similarity of legal systems. Chhaochharia and Laeven (2009) show that foreign equity holdings of SWFs are most importantly explained by geographic distance, ethnicity, language and religion. We predict that closer geographic proximity (using great circle distance as proxy) will be associated with more acquisition activity between country pairs and, under our central null hypothesis, activity led by government-controlled and corporate acquirers would be no differently affected by geographic distance. The alternative hypothesis based on the *inefficiency view* implies that geographic proximity will be less positively associated with the level of cross-border deal activity of government-controlled acquirers.

In addition to studying these potential influences from the literature on corporate cross-border acquisitions, we assess others formulated from the *stakeholder interest view* of government enterprises that implies that broader political, economic and social objectives influence government agencies. To the extent that government-controlled cross-border acquisition activity represents an arm of a government's industrial diversification program, we may expect that government-led activity would be higher between countries with more dissimilar industrial structures. For each country pair in each year, we measure as a proxy for industry dissimilarity the sum of squared differences in their respective market capitalization-based weights of each industry (using 48 different global industry categories based on Fama and French (1997)). The greater the sum of squared differences in

industry weights, the more dissimilar the industrial structure of the acquirer and target countries. Government-led activity may also be better enabled and financed in acquirer countries with larger government budgets (as a percentage of Gross Domestic Product, GDP), larger current account surpluses, and larger accumulated total foreign currency reserves. We obtain data from the World Bank's Development Indicators database by year and compute the differences between each country pair. We also measure the scope of a government's presence in the economy each year in terms of the fraction of *domestic* acquisition activity involving government acquirers over the preceding five year period using the same SDC's Mergers and Corporate Transactions database we use to capture cross-border activity. The more acquisitive government enterprises are in a country, the greater their involvement in the economy and capital markets, and the more likely they would influence government-controlled cross-border activity is no different dictates that none of these stakeholder interest factors should influence cross-border acquisition activity and, to the best of our knowledge, no study has explored any of them to date.

We examine a number of other variables that have been proposed as a potential driver of cross-border merger and acquisition flows in the literature. We include differences in the logarithm of GDP per capita, as a measure of the country's wealth, and in real GDP growth as a proxy for the change in macroeconomic conditions. Rossi and Volpin (2009), Chari, Chen and Dominguez (2009), and Erel, Liao and Weisbach (2010) show that developed countries' firms are, in fact, more likely to acquire less developed countries' firms. Couerdacier, De Santis and Aviat (2009) show that the European integration process – through joining the European Union (EU) and/or the European Monetary Union (EMU) – led to a doubling of merger and acquisition activity towards their members and away from the rest of the world, so we include a dummy variable for those country pairs that involve both as members of the EU. We also create a dummy variable if the target country is a tax haven, as designated by the International Monetary Fund's List of Countries, Territories and Jurisdictions with offshore financial centers (see Table A1). We include a measure of correlation of returns between the national indexes of the two countries to evaluate the importance of risk diversification motive for the acquire.<sup>17</sup>

#### C. Regression Results

Table 3 presents the results of our panel regressions of the level of government-controlled acquisitions across country pairs and years. The first two specifications (Models 1 and 2) are estimated separately for activity involving corporate acquirers only (acquisition deal ratio,  $A_{ijt}^{C}$ ) and government-controlled acquirers only ( $A_{ijt}^{G}$ ). Table A2 indicates that as many as 15,911 country-pair years meet our filter requirements in the panel. The remaining specifications (Models 3 through 14) are estimated for the excess ratio,  $ExcessA_{ijt}^{G}$ . The models are all estimated with year fixed effects using ordinary least squares (OLS) with robust standard errors correcting for

<sup>&</sup>lt;sup>17</sup> In supplementary tests, we also explored the impact of restrictions on FDI. For a subset of OECD countries, Golub (2003) devised a scoring system for the overall restrictiveness on inward FDI for each country, based on foreign ownership limits on equity, mandatory screening, licensing and approval, nationality restrictions on board members, and input and operational restrictions. Government-controlled acquirers are, after all, more likely to be impacted by FDI restrictions because of political concerns related to threats to national security and excessive political influence (Graham and Krugman, 1995).

heteroscedasticity and clustered by target country. Of the specifications for excess ratios of government-led activity, Models 3 to 10 are measured using the total number of deals and the remaining four (Models 11 to 14) evaluate several robustness tests. We report the number of observations, the adjusted  $R^2$ , overall and for equivalent specifications without year fixed effects and with year/country fixed effects for both target and acquirer.<sup>18</sup>

Valuation effects are remarkably weak. Neither the differences in annual real stock market or exchange rate returns matter for the corporate cross-border activity and only the exchange rate returns matter for the government-led activity with the expected positive sign.<sup>19</sup> Real appreciation of the acquirer's currency in a given year increases the pace of government-led acquisition activity. The economic effect is small: a one-standard deviation increase in annual real exchange rate returns for a given country pair (16%) is associated with a 0.68% increase (0.043 × 0.16) in government-led activity which represents about 4% of its yearly standard deviation. For the models of the excess ratios, this differential sensitivity of government-controlled acquisition activity to exchange rate return differences is reliably positive in almost every specification. This evidence thus appears to reject our alternative hypothesis based on the *inefficiency view* that valuation differences influence corporate deals more than government-led deals in favor of our null that both types of deals are indistinguishable.

We do find a reliably positive association between corporate-led acquisition activity with differences in corporate governance and transparency, in ways very similar to that in Rossi and Volpin (2004), Bris and Cabolis (2008) and others. Acquirers in countries with higher index scores on anti-self-dealing and on accounting standards are more likely to pursue targets in countries with lower scores. In Model 2 for government-led acquirers, the coefficient for accounting standards is also positive and even larger in magnitude than in Model 1, but that for anti-self-dealing is surprisingly negative. Government-led acquirers tend to pursue targets domiciled in countries with better legal protections for investors. The contrasting result persists reliably in all specifications for the excess deal ratio. This result appears again to reject the alternative hypothesis based on the *inefficiency* view of government enterprises that governance differences should influence corporate deals more than government-led deals. But again the economic effects are not large: a one standard deviation difference in antiself dealing scores of 0.33 between acquirer and target translates into a 1.65% lower rate of acquisition activity for government-controlled acquirers (using Model 2's coefficient), or 8% of the standard deviation of the excess ratio. Differences in the level of economic development do matter for corporate acquirers, but not for governmentled acquirers. Acquirers from better economically developed countries are more likely to acquire firms in less developed countries. Rossi and Volpin (2004) showed this result for corporate cross-border deals, but they only proposed it as a control factor. This association with differences in Log GDP per capita is reliably positive in

 $<sup>^{18}</sup>$  We estimated all of our models using a Tobit specification to recognize the potential effects of censoring with excess ratios ranging from -100% to +100%. All of our basic inferences in Table 3 are intact and results are available upon request.

<sup>&</sup>lt;sup>19</sup> There are a couple of possible explanations for the differences between our results and other recent studies of cross-border deals (e.g. Baker, Foley, and Wurgler, 2008; Erel, Liao, and Weisbach, 2010). First, we use all cross-border deals involving the target country to compute the fraction of cross-border deals between a given country-pair whereas other studies use all domestic deals in the target country in the denominator. Second, our sample includes both minority and majority acquisitions as well as withdrawn deals.

Model 1, not so in Model 2, and is reliably negative in each of the excess ratio models. GDP growth differences between target and acquirer countries do not have any explanatory power.

Geographic proximity matters. The closer are the two countries, the higher the level of corporate- and government-controlled acquisition activity between them. Both coefficients are positive and significant in Models 1 and 2, but higher for government-led deals. The differential impact of geography on corporate- and government-led deal activity in the models on excess ratios is only reliable in half of the specifications. The market correlation measure is also reliably different from zero, and with a positive sign in Models 1 and 2. Government-controlled acquirers are, however, somewhat more likely to pursue targets in countries that are likely to diversify their risks (smaller positive coefficient). This difference stands up in all but one of the specifications for excess deal ratios. There is a good chance that the market correlation measure proxies for the same kind of proximity measures that other cross-border merger studies have uncovered associated with regional blocs, religion, culture or language. It is surprising that the effect is weaker for government-controlled cross-border deals, and this finding runs counter to the prediction of our alternative hypothesis based on the *inefficiency view* of government enterprises.

In the model specifications of excess deal ratios (Models 3 to 10), we retain all of the variables discussed above as base regression model and then consider additional variables one at a time that we constructed to capture possible political, economic or social objectives associated with the *stakeholder interest view*. For example, in Model 4, we find a reliable, positive coefficient on industry dissimilarity; that is, government-led acquirers are more likely to pursue targets domiciled in countries with different industrial structures than their own country of domicile. This result is consistent with a broad political or economic objective of industrial diversification. The economic magnitude is small: a one standard deviation increase in the dissimilarity measure (0.02) is associated with 1.72% ( $0.86 \times 0.02$ ) higher rate of acquisition activity for government acquirers than corporate acquirers in a given year, which constitutes 9% of the standard deviation of the excess deal ratio. In Model 5, a negative coefficient arises for the PolityIV democracy variable implying that government-led deals are more likely to arise in acquirer countries that are less democratic than their targets. We find reliably positive evidence that larger government budgets, current account surpluses and larger accumulated foreign currency reserves in the acquirer country influence government-controlled acquirers in pursuing overseas targets more than corporate acquirers. In Model 8, the coefficient on prior domestic acquisition activity by government acquirers is not only positive, but economically larger: a one standard deviation increase in domestic activity (0.06) leads to a 10% higher rate of cross-border acquisition activity by government-controlled relative to corporate acquirers from that country, which constitutes about 55% of the annual standard deviation of excess ratios. In the most comprehensive multivariate specification (Model 10), this domestic acquisition variable and that on government expenditures are the only ones that retain reliable explanatory power. Overall, we uncover some positive evidence in support of the alternative hypothesis based on the *stakeholder view* that political, economic and social objectives influence disproportionately government-controlled acquirers in cross-border deals.

The adjusted  $R^2$  in Model 1 is very small for the corporate-led cross-border deals (0.14), but that for the government-controlled acquirers is even lower (0.05). Similarly, the adjusted  $R^2$  for the excess ratio specifications are modest averaging around 0.05. What is notable is that what explanatory power there is arises from year and target country fixed effects. For example, in Model 10, the adjusted  $R^2$  reaches 0.26, and declines to only 0.15 without any fixed effects. For the other models, the explanatory power of these variables without fixed effects ranges between 3% and 12%. This finding suggests that there is substantial variation in the differential rates of cross-border acquisition activity between government- and corporate acquirers that is unexplained *and* more than half of that explainable across countries is unobservable even with the large number of variables that existing studies have collectively put forward to rationalize cross-border deals.

Several robustness tests are furnished in Models 11 to 14. We replicate our experiment for excess ratios of government-controlled versus corporate cross-border activity defined in terms of the value of deals instead of the count. The sample size is adversely impacted by this check<sup>20</sup>, but the previously reliable differences uncovered with respect to Log GDP per capita, market correlations, anti-self-dealing index scores all disappear. Government-controlled acquirers in countries with large government budgets and aggressive domestic acquisition programs are still reliable. In Model 12, we exclude deal activity (again, in terms of the count of deals) that involve majority control transactions for both government- and corporate-led acquisitions, because governmentcontrolled acquirers are much less likely to engage in a control transaction, as we saw in Table 1. The overall explanatory power is weaker than for all deals, but many of the variables that were reliable in Model 10 are similarly so here. One important concern is that our instrument for identification of a government-controlled acquirer is a weak one. We follow SDC's rule that a government or agency as intermediate or ultimate parent must hold at least 50% of its outstanding shares. After all, a government could exert its influence in terms of political, economic or social objectives over many corporate acquirers indirectly, through its powers of moral suasion and certainly with less than a 50% ownership stake. In Model 13, we attempt to deal with this concern by excluding as corporate-led acquisitions any acquiring firms that have had a legacy of government ownership. We screened our corporate acquisitions for the subset that were flagged as privatized former state-owned enterprises (SOEs) by the SDC New Issues database as well as the SDC Mergers and Corporate Transactions database between 1980 and 2008. There are about 12,199 unique acquirers and 37,894 deals (of the 123,027 total) that met these criteria which we then deleted. The sample size for Model 13 is smaller and the overall explanatory power is higher, which is as expected if these privatized firms were inhibiting the distinct qualities of governmentcontrolled and corporate acquirers in the excess ratios. Most of the key variables from Model 10 are similarly reliable, with the same signs and the economic magnitudes are somewhat higher. The last specification excludes withdrawn deals, which government-led acquisitions are more likely to experience (by Table 1). None of the inferences about individual variables or about their overall explanatory power change.

<sup>&</sup>lt;sup>20</sup> One important deficiency of SDC data is that many deals do not have the deal value reported. More than half of our sample does not have a deal value, a finding similar to what has been reported elsewhere. Both Netter, Stegemoller, and Wintoki (2009) and Di Giovanni (2005) report that 55% of mergers and acquisition deals in SDC do not have a value attached.

#### 4. What Factors Drive Government-Controlled Acquirers in Cross-Border Deals?

# A. Logistic Regression Analysis

We have documented so far that a number of country-level factors do play a role in determining which firms are likely to merge with or acquire stakes in other firms across borders and that there are differences among those that influence government-controlled acquirers. They are more likely to pursue targets in geographically-closer, yet industrially-dissimilar countries than corporate acquirers are and they are more likely to be domiciled in countries with larger government budgets, current account surpluses, accumulated foreign currency reserves and more aggressive domestic acquisition programs by government acquirers. What we have also shown, however, is that these differences between acquisitions led by government-controlled acquirers and those led by corporate acquirers are surprisingly small in economic magnitude. One of the problems with this analysis is that it is aggregated activity at the level of country pairs for our sample period. Consequently, it fails to account for firmlevel and deal-specific factors that potentially affect the decision to acquire. There is a substantial literature that shows that the likelihood of being a merger target or even that involving a minority stake is affected importantly by the target firm's own financial and operating conditions, ownership structure, governance, those of the acquirer, as well as the terms and conditions of the deal. Unfortunately, to control for firm-level factors, we must rely only the subsample of target firms for which we have public data. This subsample is necessarily unrepresentative of the overall sample of mergers and acquisitions. In fact, in Table 1, and as discussed earlier, the number of public targets of government-controlled acquirers falls dramatically (4,026 to 715 deals) and those for corporate deals falls by almost 90% (123,027 to 12,669 deals). The sample erodes because we exclude target firms in the financial services and utilities sectors and even further depending on what firm-specific variables are readily available in Thomson Reuters' Worldscope database, our primary source. The impact of this constraint may be disproportionate for targets in emerging markets where Worldscope's coverage may be even more limited. The key for our analysis, however, is that the impact of these data constraints and consequences are no different for those deals involving government-controlled acquirers than corporate acquirers.

With these cautions in mind, we perform the following experiment. We estimate a logistic regression (logit) model to predict whether an observed cross-border acquisition is initiated by a government-controlled acquirer (dependent variable equals one) or a corporate acquirer (equals zero). Intuitively, this approach presumes that corporate-led acquisitions represent a reasonable benchmark through which we can understand the nature of government-controlled acquirers. Specifications include country (target) and year fixed effects with robust standard errors controlling for heteroscedasticity. When we introduce country-level variables, we remove country fixed effects. The coefficients are all reported in terms of marginal effects to allow for economic interpretation.

Given that such a large proportion of government-controlled acquisitions involve minority stakes in the targets, we test our models for minority and majority-control deals separately.<sup>21</sup>

# B. Evaluating Alternative Hypotheses for Deal Determinants

Our central null hypothesis is that government-controlled acquirers are not any more likely to occur than corporate acquirers in cross-border acquisition deals and that the firm-level and deal-specific determinants are not different for the two types of deal. To give power to our tests, we identify firm-level and deal-specific variables associated with specific alternative hypotheses that we might be able to reject in favor of the null. Some of these alternative hypotheses carry over from our analysis at the country level in the previous section. Valuation differences can matter at the deal level in cross-border transactions due to unexpected changes in exchange rates or market returns or due to deviations of those valuations from fundamentals. In deal-specific setting, we evaluate valuations using the trailing 12-month market and exchange rate returns in the target country. The *inefficiency view* of government enterprises as an alternative hypothesis predicts that market and exchange rate returns should influence government-led deals less positively than corporate-led deals.

We evaluate the governance motive not just by use of the anti-self dealing, accounting standards or PolityIV democracy index scores but also by employing a variable related to the ownership structure of the target. The corporate governance literature has emphasized the monitoring role of outside shareholders (Shleifer and Vishny, 1986; Pagano and Roell, 1998). Yet, greater monitoring by large blockholders does not necessarily assure value maximizing policies (see, among others, Grossman and Hart, 1986; Burkart, Gromb and Panuzzi, 1997; and, Bennedsen and Wolfenzon, 2000). Whether target firms have large blocks of shares held closely by institutions, corporate directors or managers could play a role in an environment characterized by agency problems. Indeed, the fraction of closely-held shares is often used as a proxy for agency costs (Faccio and Lang, 2002; Doidge, Karolyi, Lang, Lins and Stulz, 2008) and Leuz, Lins and Warnock (2009) show that a large block of closely-held shares can deter foreign investment in the firm. We use a proxy for closely-held share ownership from Worldscope.<sup>22</sup> Specifically, we create a dummy variable for those target firms that lie in the highest quartile of all Worldscope firms in terms of closely-held shares. We predict, under our null hypothesis, that government-controlled acquirers are no less likely to pursue a target in another country with a higher fraction of shares closely-held by institutions and insiders than are corporate acquirers. The alternative hypothesis based on the *inefficiency view* predicts, by contrast, that government-led deals would avoid such targets less often.

We also investigate other motives for cross-border acquisitions that arise from the literature on minority or partial block acquisitions and include a series of firm-level control variables. Product market relationships between customers and suppliers are often strengthened by a partial integration of the two firms. Studies by

<sup>&</sup>lt;sup>21</sup> One concern is that logit models with relatively rare events may produce biased and inefficient estimates, according to King and Zeng (2001). Indeed, the number of cross-border deals involving government-controlled acquirers is relatively rare at around 2% of the whole sample. King and Zeng devise a weighting scheme with rare-events corrections. Unfortunately, their procedure is not conformable to reporting with marginal effects as we prefer. We repeated each of our logit tests with the King-Zeng corrections and compared our baseline results (without marginal effects). Almost all of our inferences obtain and certainly all those involving key results.

<sup>&</sup>lt;sup>22</sup> See Kho, Stulz and Warnock (2009) for a useful discussion about the problems and limitations associated with the Thomson Reuters' Worldscope variable "Closely-held Shares" (Worldscope data item WS08021, see Table A1).

Williamson (1979), Grossman and Hart (1986) and Aghion and Tirole (1994) have rationalized circumstances in which full integration (merger) versus partial integration (partial equity stakes) might be optimal with specific regard to information environments in which incomplete contracting arises. One variable related to product market relationships is a dummy variable that is a proxy for whether product market relationship might exist and it simply identifies deals in which the acquirer and target are in the same industry (based on the first three digits of the firm's Standard Industrial Classification (SIC) code).<sup>23</sup> Circumstances in which target and acquirer are in the same industry are more likely to involve a minority or majority stake, but, under our null hypothesis, we predict that government-controlled acquirers are not more likely than corporate acquirers to pursue cross-border deals with such circumstances. Our alternative hypothesis based on the *inefficiency view* predicts that corporate-led deals would be more likely to be affected by product market relationships.

Another reason for at least partial equity stakes is that target firms are financially constrained. Firms facing high asymmetric information problems seek financing from intermediaries, such as banks (Fama, 1985), private placement investors (Hertzel and Smith, 1993) and venture capitalists (Chan, 1983) who conduct ex-post monitoring. Another corporation, however, may also possess sufficient knowledge or experience in the industry of the target so that an equity stake can furnish cheaper forms of external capital than other means. Firms facing difficulties in raising capital are more likely to sell partial equity stakes to other firms and empirical studies of the U.S. markets by Allen and Phillips (2000) and Fee, Hadlock and Thomas (2006) provide support for this idea. Liao (2009) shows that financial constraints are even more important in other countries and especially in crossborder partial equity acquisitions. We use several proxy variables for financial constraints including one based on a composite index from an intertemporal investment model by Whited and Wu (2006) and another proposed by Hadlock and Pierce (2010) incorporating firm size, firm age, operating cash flows and leverage (and based on previous work of Kaplan and Zingales (1997, 2000)), and a simple dummy variable if the firm pays no dividend. In the case of the Whited-Wu and Hadlock-Pierce variables, we create dummy variables of financial constraints for those in the upper quartile of all Worldscope firm-years over our sample period (1990 to 2008). See Table A1 for details on variable construction and summary statistics in Table A2. All are computed based on information in the year prior to the deal. Our null hypothesis specifies that government-controlled acquirers in minority stake or majority control cross-border acquisitions are no more likely than corporate acquirers to pursue targets that are financial constrained. Under our alternative hypothesis based on the *inefficiency view* of government enterprises, corporate acquirers are more likely to pursue financially-constrained targets.

Important attributes of a deal can matter. We obtain information from SDC as to whether the deal is withdrawn and in the case of majority control transactions, whether the offer was all cash and the fraction of shares in the target the acquirer was after. We also include target firm-specific control variables from the year

 $<sup>^{23}</sup>$  Aghion and Tirole argue that property rights become blurry and contracting more complex when it comes to research and development (R&D) activities, so firms that partner and share knowledge in such industries can easily benefit or hurt the other party in ways outside the scope of any contract. We construct a dummy variable based on whether the firm operates in industries with high R&D expenses and do not find supporting evidence using this alternative proxy for contracting motive.

prior to the deal including the (logarithm of) total assets, market-to-book ratio, return on assets, leverage (long-term debt to assets), and sales growth (preceding year in real terms).

# C. Deal-Level Results

Table 4 presents the results of the logit regressions. We present five model specifications for acquisitions involving minority stakes (Models 1 to 5) and five others for majority control acquisitions (Models 6 to 10). Coefficients are reported as marginal effects, both country and year fixed effects are included, pseudo-R<sup>2</sup> (with and without fixed effects), the unconditional likelihood of the event of a government-controlled deal, and the number of observations are presented at the bottom of the table. Standard errors are robust to heteroscedasticity. With the data constraints that we impose above, our sample of minority acquisition targets includes 3,896 observations, of which 4% are government-controlled acquisitions, and that of majority acquisition targets includes 1,958 observations of which 3% are government-controlled acquisitions. The lower actual number of observations in each of the specifications is dictated by the combination of explanatory variables we choose.

For minority acquisition stakes, we find that several variables are statistically reliable predictors of government-controlled relative to corporate acquisitions. The zero-dividend proxy in Model 1 for financial constraints is significantly positive (of 0.015) which implies that government-controlled acquirers are more likely to pursue financially-constrained targets. About 47% of target firms do not pay dividends, but we find that they are associated with a 1.50% higher likelihood of a government-controlled acquisition, which is sizeable compared to the unconditional mean likelihood. The Whited-Wu proxy, which is a dummy variable mostly based on low cash flows, low dividend payout, high leverage, low total assets and high past sales growth (about 21% of our sample firms are so classified) is also reliably positive in Model 2 (coefficient of 0.020). We carry this variable for Models 4 and 5 in which we introduce country variables and drop country fixed effects, but its explanatory power disappears. The Hadlock-Pierce financial constraint variable in Model 3 is not significant. So, there is some weak statistical support for the alternative hypothesis that the financing motive emphasized by Allen and Phillips (2001), Fee, Hadlock and Thomas (2006) and Liao (2009) matters more for government-controlled acquirers, but, in economic terms, it is not a large effect.

There is no evidence that the contracting motive matters, as the related industry dummy has no explanatory power in any specification. We also find that the closely-held shares variable has no explanatory power. There is no evidence that government-controlled acquirers in cross-border deals are deterred by the fact that more shares of the target are held closely by institutions or insiders than corporate acquirers are. Among the control variables in Models 1 to 3, there is weak evidence that government-controlled acquirers are more likely to be withdrawn relative to corporate acquirers. Government-controlled acquirers are also more likely to be associated with larger target firms, given the positive and significant coefficient on total assets and target firms with more growth opportunities (reliably positive coefficient on market-to-book ratio). In Models 4 and 5, the coefficient on total assets disappears. Overall, the low pseudo- $R^2$  coefficients in these models (which average around 7% absent

country fixed effects) do not really support our alternative hypothesis based on the *inefficiency view* of government enterprises.

Country-level factors that we explore in these logit models matter little. The valuation motive, for which we found weak support in the previous section on country-level acquisition flows, plays no role in the logit model. In each of these two models, the coefficients on the trailing 12-month market and exchange-rate returns in the country of the target are indistinguishable from zero. Knowing that the target is domiciled in a country with low income per capita, poor legal protections for investors, weak accounting standards has no explanatory power. Though we found some usefulness in evaluating attributes of the acquirer country related to the *stakeholder view* of government enterprises for government-led acquisition flows in Table 3, few of these attributes help to predict a government-controlled acquisition at the deal level. The size of the government budget, the current account surplus position, and how dissimilar its industrial structure is from that of the target are all three statistically unreliable variables in our logit models. The level of domestic acquisition activity led by government-controlled corporations is positively associated with a cross-border government deal. But the economic effect is small: a one standard deviation increase in domestic activity (0.06) is associated with a 1.27% increase in the likelihood of a government-led cross-border deal, which represents about 6% of its standard deviation.

For the logit models of majority-control transactions in Models 6 to 10, the sample sizes are smaller again by half. The variables of interest on the Whited-Wu financial constraint dummy variable, the related-industry dummy for the contracting motive, or the closely-held shares dummy variable for the governance motive, are all insignificant. Interestingly, none of the control variables on the size of the firm, its growth opportunities, or leverage seem to explain any variation. We include two variables related to majority control transactions, such as the terms of payment and the size of the acquisition stake. It turns out that cross-border acquisition deals that involve majority control in our sample (on average 87% of shares of target acquired) involve exclusively cash and no stock 73% of the time. Indeed, government-controlled acquirers are more likely to use cash only, but this again is not a large economic effect. The higher pseudo- $R^2$  for majority control transactions (10% without country fixed effects, 26% with them) likely arise from the smaller sample available to us and likely the greater importance of unobservable country and market conditions factors picked up by the country and year fixed effects.

# D. Sovereign Wealth Funds and Other State-Controlled Funds

In Table 5, we perform an additional analysis of government-controlled acquisitions that are led by SWFs and those by other state-controlled investment funds. That is, the dependent variable equals one if the acquisition is led by a SWF or state-controlled fund and zero, if it is led by a government-controlled corporation. We define those funds which are SWFs or state-controlled, as discussed above, according to whether it is listed on the SWF Institute's website, whether it is classified as such with SIC codes in the range 999A to 999G, or whether it is government-owned at the ultimate parent status with SIC codes associated with investment offices, pension, health and welfare funds, trusts or holding companies.

We believe this is an important exercise because it tests the *inefficiency view* and *stakeholder interest view* for yet another group of government-controlled acquirers and because it helps to calibrate the findings in a number of recent studies of SWF investments. For example, Chhaochharia and Laeven (2009, their Table 9) present a matched-sample analysis of 76 SWF equity investments in which the benchmark firms are drawn from the same country, industry and are similar in size (total sales), but are not necessarily the targets of other similarly-motivated entities. They find that SWFs do not seek out targets with unusual growth opportunities (Tobin's q ratio) or leverage, but do so for those that are more financial constrained (using Kaplan and Zingales' (1997, 2000) indexes). Fernandes (2009, his Table V) performs cross-sectional regressions of over 7,000 SWF investments - though most of which involve very small stakes in the targets (median less than 0.25%) – and finds that there are preferences toward larger, more profitable firms and those with lower dividend yields and leverage. But again, he benchmarks against the population of all Worldscope firms and not necessarily those that are involved as targets of other entities' acquisitions.

We present two sets of tests in Table 5, Models 1 to 3 in which we include targets of government-controlled acquirers in the financial services and utilities sectors (they were excluded in Table 4) and Models 4 to 13, in which such targets are excluded. The sample sizes for the latter set of tests drop significantly. The variables are identical to those in Table 4 with country and year fixed effects, also as before. Several interesting findings arise. First, the related-industry dummy has statistically reliable negative coefficients in each of the first three model specifications. SWFs and state-controlled funds are less likely to pursue targets in the same industry than other government-controlled entities, which suggests that the inefficiency, if any, in public enterprises stems mainly from government-controlled funds. We need to apply caution here as this result is hardly surprising when a related-industry definition for the SWFs and state-controlled funds is the financial services sector (with SIC codes between 6000 and 6999) and most funds naturally invest in a variety of industries. Second, investments by SWFs and state-controlled funds are less likely to be withdrawn than other government-led entities. This is one of the most reliable and robust findings across all specifications in the table, though we have no way of knowing whether it is consistent with the *inefficiency view* of government-controlled funds or not since withdrawing from a bidding war could also be optimal for the acquirer. There is some evidence that state-controlled funds are more likely to be deterred by targets with more closely-held shares by a controlling family, management or institutions. The effect of this variable is weaker in Models 7 to 13 where we include country-level factors in the specifications and drop country fixed effects. We offer only weak evidence that other firm-specific variables matter, such as leverage (funds seem more likely to pursue highly-levered targets). Unlike Fernandes (2009) and Chhaochharia and Laeven (2009), our findings on the importance of these firm-specific variables are very weak. How one benchmarks these SWF and state-controlled fund investments does matter. We uncover a few interesting patterns when using several country-level factors. Though SWFs and state-controlled funds are not differently influenced by market valuations relative to other government-controlled corporations, they are more likely to pursue targets in better developed economies. This is exactly opposite to what corporate acquirers do, again suggesting that the

inefficiency, if any, in public enterprises stems mainly from government-controlled funds. Turning to the *stakeholder interest view*, SWFs and state-controlled funds are also more likely to be domiciled in countries with larger current account surpluses and less democratic systems (PolityIV Democracy), similar to other government-controlled acquirers. However, SWFs and state-controlled funds are less likely to be domiciled in countries with large government budgets or to pursue social objectives such as diversifying the industrial structure of the market. In Model 9, the coefficient on the industry dissimilarity variable is reliably negative and it is economically large (a one standard deviation increase in the sum of squared deviations of industry market-cap weights is associated with a 12% lower likelihood of involving a SWF or state-controlled fund, of which the unconditional likelihood is 23%). Any evidence in favor of the *stakeholder interest view* we saw in Table 3 for state-controlled acquirers does not appear to extend to SWFs or state-controlled funds. It is worth mentioning that the Pseudo R<sup>2</sup> in the tests of government-controlled funds versus government-controlled corporations are actually much larger than those in previous tests.

# 5. Market Reactions to Announcements of Cross-Border Deals Led by Government-Controlled Acquirers

We next examine how shareholders react to the announcements of cross-border deals led by governmentcontrolled acquirers. As we have done throughout this study, we benchmark the magnitude of these reactions to minority and majority stake acquisitions led by corporate acquirers. Under the central null hypothesis that government-controlled and corporate cross-border acquirers are not different, we predict that the shareholders' reactions to the announcements of such deals should also be indistinguishable. We also investigate alternative hypotheses related to political, economic and social motives to rationalize how target shareholders may react differently to acquisition announcements involving government-controlled acquirers. Whether such deals manifest additional risks due to inefficiencies from bargaining games between politicians and bureaucrats or agency problems among bureaucrats or whether they arise due to broader stakeholder goals of industrial diversification, the redeployment of accumulated foreign currency reserves or the general expansion of government's role in markets, we expect the share-price reactions to government-led deals to be more attenuated than for corporate-led deals.<sup>24</sup>

The challenge that we face with this additional analysis is that we need to collect stock returns data from Datastream for the sample of public targets and this will adversely impact the sample sizes. For majority acquisitions, our sample of government-controlled and corporate acquirers falls to 2,964 observations and, for minority deals, our sample includes 5,778 observations. Financial services and utilities sector target firms are excluded. We compute the cumulative market-adjusted returns for varying-length windows around deal announcements obtained from SDC, report the average (median) reactions for government-controlled and corporate acquisitions, and perform cross-sectional tests of the reactions using variables that are related to the

<sup>&</sup>lt;sup>24</sup> Ideally, we would also like to examine how shareholders of acquirers react to the announcement of cross-border deals. But most of these government-controlled acquirers do not have publicly traded stocks, which limits the power of such a test.

various motives as well as control variables. For as many observations as possible, we also collect bidder premiums defined as the bid price relative to the closing stock price of the target some time prior to the announcement date. This additional data helps us to control for whether the reactions differ because the terms of the offer are systematically different for government-led acquisitions.

We also do a supplementary analysis of the market reactions to cross-border deal announcements comparing those involving SWFs or state-controlled funds with those of other government-controlled entities as acquirers. Our sample here includes 490 observations with financial and utilities sector targets excluded and 954 observations with them included. Our goal is again to calibrate the findings in other recent studies of share price reactions of SWF investments, but specifically using non-SWF government acquisitions and corporate acquisitions as benchmarks.

## A. Cumulative Market-Adjusted Returns (CMARs)

To measure the share price reactions, we compute cumulative market-adjusted buy-and-hold returns (CMARs) over three different windows around the deal announcements: 21 days (from 10 days before announcement to 10 days after, denoted "(-10, +10)"), 11 days ("(-5, +5)"), and 3 days ("(-1, +1)"). The market index returns are those based on market-capitalization-weighted index for each country from Datastream.

Table 6 presents summary statistics of the CMARs. In Panel A, we compare the CMARs for governmentcontrolled and corporate led cross-border acquisitions separately for minority and majority stakes and, in Panel B, we do so for the SWF, state-controlled funds compared to other government-controlled acquisitions for target samples separately that include and exclude financial services and utilities sectors. The means and medians and the numbers of observations are presented for each of the three investment windows around deal announcements. We also report the *p*-values associated with paired two-tailed *t*-statistics for tests of the differences of the means and Wilcoxon rank-sum *z*-statistics for differences in the medians between the comparisons of interest.

For majority acquisitions, the target firm's CMARs for our sample of corporate acquirers in majority control transactions average around 26% for the 21-day window and 15%, for the 3-day window. Both of these means are statistically reliably different from zero. The sample is skewed significantly by some large positive reactions as the equivalent median returns are 14% and 7%, respectively. Both medians are also reliably different from zero based on Wilcoxon-rank-sum tests. The sizes of these reactions are comparable to those in other recent studies of cross-border mergers. For example, in Bris and Cabolis (2008) for their sample of 420 target firms, they find a positive and statistically significant 14% cumulative abnormal return (CAR) for a 5-day window and a further 11% CAR for up to 10 days following the announcement window. Starks and Wei (2004) report a statistically-significant 28.24% CAR for their 11-day window in cross-border mergers. When we cull out the government-controlled acquirers alone, we find CMARs of 22% for the 21-day window and 14% for the 3-day window. The equivalent medians are also smaller in magnitude at 11% and 3%, respectively. These are economically smaller than for the corporate-led acquisitions, but in each case, the *p*-values for the tests on the means and medians reject that they are different.

We also examine a larger sample of minority stake acquisitions. The corporate cross-border acquisitions average 13% for the 21-day window and only 5% for the 3-day window; the associated median reactions are smaller at only 3% and 1% for the respective windows. Again, we can compare these reactions to other studies. Kang and Kim (2008) find 9% CARs in their out-of-state partial equity acquisitions and Allen and Phillips (2000) uncover a 6.9% reaction for their full sample of minority block acquisitions. Both studies use long windows (close to 21-day horizon) but focus on U.S. firms and domestic transactions only. Liao (2009) compares minority block acquisition deals that are domestic and cross-border around the world and finds that her 4,780 domestic deals (in 49 countries around the world) have an average CMAR of 8.7% for a 21-day horizon and 7.42% for her 1,851 cross-border deals. The CMARs in our minority-stake sample involving government-controlled acquirers are smaller than the corporate deals and, at least for the longer windows around announcement. Reactions are only 11% for the 21-day window on average (3% median), but the economic magnitudes of these differences are not great. Both *p*-values for mean and median differences are insignificant. The comparisons for the 11-day and 3-day horizons also show the reactions to government-controlled acquirers are more muted and these simple differences are not significant.

In Panel B, we perform the same kind of comparisons of market reactions to government-controlled crossborder acquisitions, but this time compare those led by SWFs and state-controlled funds to those led by other government-controlled entities. Whether financial services or utilities targets are included or not, the differences are economically large and significant statistically. On average, reactions to SWF and state-controlled fund acquisitions are only 3.27% for the 3-day horizon and 4.97% for the 21-day horizons; the equivalent reactions to other government-led acquisition announcements are 8.78% and 13.40%. The magnitude of the differences in medians is smaller (0.85% for SWFs and state-controlled funds versus 1.50% for other government deals in the 3day window, for example, with *p*-value of 6% in this case), but the differences are larger for longer horizons, even with medians. The magnitude of the reactions to SWF and state-controlled fund acquisitions when financial services and utilities targets are included are even larger (3.43% for 3-day horizon compared to only 3.27%), but almost all of our inferences comparing reactions by type of government acquirer remain.

By comparing the share price reactions of SWF investment announcements to those of non-SWF governmentcontrolled acquisitions, we get a very different perspective than from those of other recent studies of SWF investments. For example, Fotak, Bortolotti, Megginson and Miracky (2009, their Table 7, Panel B) find a statistically significant average CMAR of 0.46% (0.81% on volatility-adjusted basis) for the equivalent 3-day window for their 212 SWF investment announcements. Kotter and Lel (2008, their Table 3) find 3-day CARs of 1.84% for their sample of 148 cross-border SWF investment announcements. Chhaochharia and Laeven (2009, Table 9) find an average 0.97% CAR for a 5-day horizon around their 89 investment announcements.<sup>25</sup> What we learn is that these reactions, though reliably positive (which we readily acknowledge as important), are actually

<sup>&</sup>lt;sup>25</sup> Fotak, Bertolotti, Megginson and Miracky (2009 and Chhaochharia and Laeven (2009) do not indicate how many of the announcements are associated with cross-border acquisitions and which are only domestic by the SWFs, so a direct comparison is difficult.

smaller than what one might expect if comparing to those of other non-SWF government-controlled acquirers and especially to those of corporate-led cross-border acquisitions.

In both sets of comparisons (government-controlled versus corporate deals or SWF versus non-SWF government-controlled deals), it is important to ascertain whether these reactions are significantly different even after controlling for a variety of country-level, deal- and firm-specific factors. One important factor is the terms and conditions of the deal offered, such as the bid price offered by the acquirer. One of the reasons we are unable to reject the null that reactions to government- and corporate-led acquisition announcements are no different could be that government-controlled acquirers offer higher bids. Cross-sectional regression analysis follows, but first we report summary statistics on the bidder premiums paid in the government-led deals, at least for the subset of deals we examine for which the data is readily available in SDC. The bid premium is computed as the bid price as a percentage of the closing price of the target stock four weeks, one week and one day before the announcement. Panels C and D furnish the equivalent statistics as Panels A and B, but for the three bid premiums. There is some evidence in Panel C that the bid premiums for government-led deals are higher for the majority control transactions, but the differences are not economically large and almost never reliably different statistically. For the four-week bid premium, for example, corporate acquires bid 42% and government acquirers almost 50%, with a p-value of 0.22. Part of the problem is the reduced sample size which includes only 36 of 69 government-led deals with bid price information (see the subset of counts in square brackets below the statistics). Interestingly, the bid premiums for government-led deals involving minority stakes are smaller than for corporate-led deals. Again, the differences are too small to make serious inferences, but the sign of these differences clearly rejects the possibility that government-controlled acquirers offer higher bids.

The differences in bid premiums between SWFs and state-controlled funds compared to other governmentcontrolled acquirers in Panel C are somewhat more noteworthy. Those of SWFs and state-controlled funds offer smaller bid premiums at the longer four-week and one-week horizons and these differences are significant in comparing medians whether financial and utilities as targets are included or not. The relative differences diminish for the one-day bid premium, which implies that target's price has adjusted during the prior month's preannouncement period more so for deals involving SWFs or state-controlled funds due to rumors about negotiations. The differences in means show less statistical precision and indicates there may be some large positive outliers in the sample of bid premiums for the SWF and state-controlled fund bids.

#### B. Cross-Sectional Test Results

Table 7 reports results from cross-sectional regressions of the 21-day CMARs of cross-border acquisition announcements on country-level, deal- and firm-specific variables. These variables are the same as what we included in our logit models in the previous section and we line them up with the various corporate and political, economic and stakeholder-oriented alternative hypotheses that have been put forward to motivate such deals. In each of the model specifications in Panel A, we include a dummy variable for those which are government-controlled acquirers. In Panel B, the sample includes the government-controlled acquirers as well as SWFs and

other state-controlled funds. These models are estimated with ordinary least squares and robust standard errors for the coefficients are computed with corrections for heteroscedasticity. We include year fixed effects in all specifications and country fixed effects in those specifications that do not include country-level variables.

In Model 1 of Panel A, we confirm the finding in Table 6 that CMARs of government-controlled acquirers are indistinguishably different from those of corporate acquirers, though this time with robust standard errors and country and year fixed effects. In each of the additional specifications that we consider (Models 2 to 4) with different combinations of control variables, this finding does not change. There is a positive, but statistically unreliable coefficient on the one-week bid premium in this model, a finding that we expected based on univariate statistics in Table 6. What we do find is that the share-price reactions for what are ultimately withdrawn deals are higher. This is reliable in each specification and averages around 5% of the target's share price reactions.<sup>26</sup> Recall that government deals were more likely to be associated with withdrawn deals in our logit experiments in Table 4. In the other specifications, we find no evidence that reactions differ for deals involving related industries, financially-constrained targets (high Whited-Wu index), or those with concentrated ownership. What does matter is that reactions are smaller for smaller targets in terms of total assets and for more growth-oriented firms with higher market-to-book ratios. We also include additional country-level variables in the last two specifications associated with the political and economic motives associated with the stakeholder interest view outlined in earlier sections. We see that target firms domiciled in countries with better accounting standards experience higher reactions; the differences statistically reliable but economically small. A one-standard deviation higher Accounting Standards score (7.51 points going from a low to high standards country) is associated with 2.3% higher 21-day CMARs around a cross-border acquisition announcement, which is still sizeable relative to the unconditional mean CMAR of 9%. None of the other country-level variables related to industry dissimilarity, political democracy, government budgets, current account or even domestic acquisition activity have any explanatory power for these share-price reactions.

Overall, we confirm that targets in cross-border acquisitions involving government-controlled acquirers experience no different market reactions to their announcements than those involving corporate acquirers. The finding is robust to a number of control variables, some of which have useful explanatory power for the cross-section of CMARs. Generally, the explanatory power of the models we investigate is low (around 12%).

In Panel B, we examine the share-price reactions to cross-border acquisitions involving SWFs and statecontrolled funds to those of other government-controlled acquirers examined in Panel A and here we include in each model specification a dummy variable for SWF and state-controlled fund acquirers. Models 1 and 2 include

<sup>&</sup>lt;sup>26</sup> A higher, positive share-price reaction to failed deals is a surprising finding. Bates and Lemmon (2003, their Table 8), for example, examined corporate acquirers in the U.S. and showed that three-day cumulative abnormal returns to targets of failed or withdrawn majority-control deals in the U.S. averaged 3.9% lower than successful deals. When we examine only U.S. domestic corporate acquirers in our sample, we confirm that the failed or withdrawn majority deals have 7.70% lower three-day CMARs than successful U.S. deals and that the minority deals that fail are significantly higher by 4.40%. A similar contrast between majority and minority deals arises in the global sample of failed deals and likely drives our overall result in Table 7.

both financials and utilities whereas Models 3 to 13 exclude firms operating in financials and utilities. The number of observations average around 900 events (see Panel B of Table 6), but are as few as 236 observations appear in our largest model specification (Model 1). Several results are noteworthy. First, the early indication in Table 6 that market reactions to SWF- and state-controlled fund acquisitions are lower than those for other government-controlled acquirers is confirmed here in some specifications and but it is not robust to all combinations of control variables. The coefficient on the state-controlled fund acquirer dummy averages around -0.06 and is statistically significant for Models 3, 7 and 8. A 6% lower CMAR in this sample is economically large relative to the unconditional mean of around 11% and represents about 22% of the cross-sectional standard deviation in CMARs for this smaller set of observations (about 33%). Second, there is some empirical support for the financing and governance motives in this sample of only government-controlled acquirers. The coefficient on the Whited-Wu financial constraint dummy variables is positive and significant, and there is evidence that shareprice reactions of targets of government acquirers are smaller for those that are larger in total assets, for those that are growth-oriented with higher market-to-book ratios and for those with faster growing sales. In many instances, the coefficient on the one-week bid premium is positive, but only significant in one of the specifications. The withdrawn deals dummy variable has a positive coefficient in the simplest specification of Model 1, but no explanatory power for share price reactions when additional control variables are included in the specifications.

In Models 5 to 12 that drop country fixed effects and include many country-level variables that have had some explanatory power in our logit and cross-country activity flow analyses earlier, we see little explanatory power for the share price reactions. There is modest support that the valuation motive (using 12-month market returns) matters for government-led acquirers, but only in two specifications.<sup>27</sup> The key finding in these regressions is that, though SWF and other state-controlled funds' cross-border investments are indeed associated with positive and statistically significant market reactions (in Table 6), they are somewhat smaller than those of other government-controlled acquirers and corporate acquirers. Most of the differences are economically small and could be explained by deal-related, firm-specific, and country-level characteristics.

## 6. Concluding Remarks

In this study, we examine the motives for and consequences of 4,026 cross-border acquisitions constituting \$434 billion of total activity that was led by government-controlled acquirers over the period from 1990 to 2008. We benchmark this activity at the aggregate country level and also at the deal-specific level relative to cross-border acquisitions involving corporate acquirers over the same period and uncover several important findings.

<sup>&</sup>lt;sup>27</sup> Among the SWF studies that measure market reactions to their investment announcements, Kotter and Lel (2008, their Table 5) provide some useful comparisons for our findings. They find in their sample of 124 investments that target firm characteristics have little or no explanatory power compared to those associated with the type of SWFs (level of transparency and governance, per Truman (2007) scoring index). Only the level of institutional ownership is associated with higher 2-day CARs, but the economic magnitudes are difficult to determine. They show that target firms' market reactions are not affected by the legal environment, but those from better developed markets (market capitalization to GDP ratio) experience higher CARs. The explanatory power of their models is high (around 50%) but they also include industry controls.

First, we test whether the cross-country determinants of cross-border acquisition activity are different for government-controlled and corporate acquirers and find that government-led deals are relatively more intense for geographically-closer yet industrially less-similar countries. The activity is also relatively less sensitive to differences in the level of economic development of the acquirer's and target's home countries and in the quality of their legal institutions. Government-led acquirers are from countries with larger current account surpluses and accumulated foreign-currency reserves. Overall, however, we find that the differences in the determinants of the two types of acquisition flows are economically small.

Second, we examine whether firm-specific and country-level attributes of the acquirer and target firms have any different influence on the likelihood of a cross-border acquisition led by a government-controlled than a corporate acquirer. We uncover some evidence that government-led acquirers are more likely to pursue larger targets with greater growth opportunities, but the overall explanatory power of these tests are generally quite low. We are able to reject a number of alternative hypotheses related to corporate motives for such acquisitions, such as the role of product-market relationships, financial constraints, corporate governance, or market-timing, motives that might allow us to differentiate government-led and corporate-led acquisitions. Similarly, we reject the importance of alternative hypotheses related to political, economic and broader stakeholder oriented motives, such as considerations of industrial diversification of the acquirer's home market, democratic reforms, and the size of the government's budget, its current account position or the size of its accumulated foreign currency reserves. When we compare deals involving government-controlled acquirers with those that involve sovereign wealth funds (SWFs) and other state-controlled funds, however, we do find some interesting differences. Acquisitions led by state-controlled funds are less likely to be withdrawn and they are more likely to pursue targets that are larger in total assets, those with smaller controlling shareholder stakes and with fewer financial constraints. Statecontrolled funds are much more likely to lead acquisitions from less democratic, less economically developed countries and those with larger current account surplus positions. They are also much less likely to be domiciled in countries with large government budgets or to pursue targets in countries that diversify the industrial base of their country of domicile compared to other government-controlled acquirers.

Thirdly, we show that the cumulative market-adjusted returns (CMARs) around announcements of crossborder acquisitions led by government-controlled and corporate acquirers are large and positive (median reactions are 3% and 7%, respectively, for a 3-day announcement-day window), but not significantly different for the two types. This result holds up even when we control for different possible motives for such acquisitions based on country-level, deal- and target firm-specific attributes. An important difference in market reactions we do find, however, is between government-controlled acquisitions led by SWFs and state-controlled funds compared to those of other government agencies. Though both are positive and statistically significant reactions, the CMARs for SWF-led acquisitions are statistically and economically much smaller and some of these differences hold up in cross-sectional regressions that control for a variety of country-level and target firm-specific attributes. These findings are important not only because of the large and growing amount of cross-border acquisition activity that involves government-controlled acquirers, but also because of the heightened regulatory concern about such deals in many countries around the world. The Foreign Investment and National Security Act of 2007 in the U.S. has instituted much tougher scrutiny of potential foreign acquirers that involve a government entity, and similar legislation is in place or forthcoming in China, Australia and Germany, among many other countries. Our findings suggest that these concerns may be unwarranted for most government-led acquisitions. Greater attention on SWFs and state-controlled funds as a particular type of government acquirer may indeed be worthy of further scrutiny, but the vast majority of government-led foreign acquirers in terms of deal count and total value of deal activity appears to be motivated no differently than corporate-led cross-border deals and the short-run economic consequences appear to be indistinguishably different.

Our study also makes an important contribution to the literature on the operational and financial performance of state-owned enterprises. A number of scholars have argued why and how government firms are less efficient or less profitable due to the natural conflicts that arise from self-interested politicians and bureaucrats and there is considerable evidence that government-controlled firms are indeed associated with poorer operational and financial performance. Our study involves a special experiment to examine these questions that focuses on transactions in which the target firm becomes, at least partially, a state-owned enterprise. We exploit a natural benchmark in terms of corporate-led deal activity and also existing theoretical and empirical research that guides us to different possible motives for such transactions. These motives furnish two kinds of testable alternative hypotheses to juxtapose against the null hypothesis that acquisitions by government-led and corporate acquirers are not different and thus allow us more powerful tests. One hypothesis proposes that government-led crossborder acquisitions reflect inefficient decisions of self-interested politicians and of bureaucracies encumbered by agency problems (the *inefficiency view*) and the second hypothesis argues that they manifest political, economic and social objectives (the stakeholder interest view) that corporate acquirers would not consider. We offer little evidence in our experiment in favor of the former and, though there is more *statistical* support for the stakeholder view, the overall explanatory power for the differences that we do observe in cross-border acquisition activity, in the types of targets identified by acquirers and in the shareholders' reactions to those announcements, is small.

We also offer an important new perspective on findings in the recent growing literature focused on SWF acquisitions by benchmarking their decisions and outcomes relative to acquisitions led by other government-controlled entities. We find that the attributes and characteristics of targets and SWFs are somewhat different and, though the market reactions are positive to SWF investment announcements (as other studies have shown), they appear to be smaller than those associated with other government-controlled acquirers.

There are still many open questions. We readily admit that there are several possible alternative explanations for government-led acquisitions that we have not yet considered. For example, we have not yet tried to identify characteristics of the different types of government agencies that represented these acquirers. We have also not tried to separate out the types of SWFs or state-controlled funds by governance and transparency attributes, as the other studies of SWFs have done. Our study only examines the short-term reactions to these governmentcontrolled acquirers. Indeed, there are likely important longer-term operational and financial consequences from their newly-acquired stakes and even in terms of financial investment returns and risks from the perspectives of the acquirers. Another form of analysis that we have largely ignored is at the policy level. A number of countries have instituted rules and legislation for foreign investment reviews and we have not evaluated what, if any, are the consequences of those rule changes for cross-country acquisition activity or for terms and conditions at the deal level. Finally, we have not evaluated any positive or negative externalities of cross-border government-led deal activity for other social, political, and economic objectives. After all, decision-makers that influence the government-controlled acquirers that we study likely have a broader set of stakeholder concerns than just which targets are chosen and how shareholders react to their announcement.

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#### Table 1. Summary Statistics.

This table presents summary statistics on cross-border block acquisitions involving at least a 5% stake in the target corporation announced during the period of 1990 to 2008. The data are obtained from Thomson Reuter's Security Data Corporation's (SDC) Platinum Mergers and Corporate Transactions database. We exclude leveraged buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases and privatizations and deals in which acquirers are domiciled in overseas territories of the U.K. (Bahamas, British Virgin Islands, Cayman Islands, Guernsey, Isle of Man) and the Netherlands (Netherland Antilles) and we exclude direct investments by sovereign wealth funds and other government-sponsored investment funds. We further exclude countries in which there are fewer than 50 cross-border acquisitions, whether led by government-controlled or corporate acquirers, over the period from 1990 to 2008. The acquirer's ultimate parent public status is used to identify government controlled acquirers, which is defined as at least 50% cash flow ownership. We collect announcement dates, their public status, and percentage of shares acquired, the medium of payment, open market or private negotiation, premium paid. By year, we report the total number of deals, the subset with disclosed values, the average deal value (measured in millions of constant US dollars as of 2000), the total deal value, the number of withdrawn deals, the number involving minority stakes (less than 50%), the number involving a financial acquirer (defined by SDC as the acquiring company buying a non-financial target company for financial reasons rather than for strategic reasons), and the number of publicly-traded target firms.

Year	Total No. of Deals	No. of Deals with Values Disclosed	Average Deal Value (Constant 2000 US\$ millions)	Total Deal Value (Constant 2000 US\$ millions)	No. of Withdrawn Deals	No. of Minority Acquisitions	No. of Financial Acquirers	No. of Public Targets
Panel A: G	overnment-Controll	ed Acquirers						
1990	180	69	\$469	\$32 343	54	91	36	30
1991	206	60	\$130	\$8 330	66	117	45	29
1992	175	48	\$120	\$5,781	47	90	37	27
1993	173	58	\$120	\$7,473	74	121	37 47	42
1994	170	50	\$52	\$2,602	56	106	32	25
1995	179	55	\$116	\$6 388	57	100	27	15
1996	164	58	\$167	\$9,676	47	90	18	26
1997	184	95	\$181	\$17,216	51	113	36	52
1998	172	64	\$289	\$18,526	48	92	27	35
1999	257	92	\$320	\$29,465	57	137	28	36
2000	313	135	\$182	\$24,599	76	151	35	54
2000	246	113	\$228	\$25,716	80	121	26	41
2002	178	100	\$274	\$27,377	37	77	20	35
2003	202	78	\$140	\$10.936	78	103	16	31
2004	203	88	\$185	\$16.254	76	113	32	34
2005	214	98	\$461	\$45.215	79	109	35	39
2006	220	93	\$210	\$19,488	91	122	44	44
2007	289	119	\$514	\$61,190	144	179	40	55
2008	301	140	\$471	\$65,965	137	189	53	65
Total	4,026	1,613	\$269	\$434,549	1,355	2,222	634	715
Panel B: C	orporate Acquirers							
1990	3,121	1,422	\$130	\$185,273	623	1,253	472	332
1991	3,613	1,314	\$64	\$84,501	868	1,567	491	311
1992	3,228	1,216	\$71	\$86,909	794	1,337	406	276
1993	3,642	1,408	\$78	\$109,209	952	1,591	435	386
1994	4,484	1,779	\$79	\$140,997	1,135	2,016	554	461
1995	5,403	2,069	\$108	\$224,086	1,274	2,156	645	550
1996	5,713	2,235	\$118	\$263,948	1,267	2,166	666	532
1997	6,203	2,634	\$136	\$359,265	1,131	2,028	771	540
1998	7,500	3,125	\$200	\$626,196	1,524	2,480	964	777
1999	8,575	3,412	\$352	\$1,201,513	1,767	3,030	1,066	1,000
2000	10,355	4,263	\$236	\$1,005,214	2,404	3,887	1,170	1,132
2001	7,616	3,042	\$156	\$473,713	1,851	2,811	896	780
2002	5,648	2,397	\$105	\$252,484	1,474	2,069	702	633
2003	5,707	2,393	\$88	\$210,166	1,581	2,177	726	641
2004	6,378	2,879	\$129	\$372,219	1,679	2,323	774	619
2005	7,413	3,304	\$158	\$522,704	1,642	2,278	992	729
2006	8,905	3,976	\$179	\$710,877	2,459	3,251	1,310	925
2007	10,193	4,499	\$237	\$1,064,642	3,039	4,062	1,573	1,035
2008	9,330	3,910	\$142	\$553,965	3,010	4,099	1,316	1,010
Total	123,027	51,277	\$165	\$8,447,883	30,474	46,581	15,929	12,669

# Table 2. Intensity of Cross-Border Acquisition Activity Led by Government-Controlled Acquirers by Country of Acquirers and Targets.

This table presents the number of deals and the total deal value (in 2000 Constant US\$ millions) of cross-border block acquisitions led by government-controlled and corporate acquirers involving at least a 5% stake in the target corporation announced over the period from 1990 to 2008. See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Results are reported by country ranked by the fraction of total deal value that government-led acquirers comprise for leading acquirer countries (Panel A) and for the leading target countries (Panel B).

	Panel A: By Acquirer Country						Panel B: By Target Country							
	Nur	nber of Deals		To (2000 Co	tal Deal Value Instant US\$ mil	lions)		Nun	nber of Deals		Tot (2000 Cor	al Deal Value 1stant US\$ millio	ons)	
Acquirer	Government	Corporate	Fraction	Government	Corporate	Fraction	Target	Government	Corporate	Fraction	Government	Corporate	Fraction	
Saudi Arabia	34	71	32.4%	\$23,149	\$3,103	88.2%	UAE	6	190	3.1%	\$2,613	\$2,824	48.1%	
Venezuela	26	33	44.1%	\$2,068	\$318	86.7%	Hong Kong	446	2,296	16.3%	\$58,671	\$72,970	44.6%	
China	673	557	54.7%	\$99,929	\$24,980	80.0%	Malaysia	40	1,219	3.2%	\$5,722	\$17,150	25.0%	
UAE	85	124	40.7%	\$22,432	\$8,155	73.3%	Finland	72	1,629	4.2%	\$11,809	\$43,155	21.5%	
Czech Republic	18	77	18.9%	\$2,007	\$865	69.9%	Slovak Rep	17	262	6.1%	\$1,040	\$3,820	21.4%	
Kazakhstan	8	32	20.0%	\$1,297	\$570	69.4%	Kazakhstan	20	154	11.5%	\$2,238	\$8,366	21.1%	
Kuwait	44	106	29.3%	\$11,218	\$6,995	61.6%	Indonesia	69	974	6.6%	\$6,018	\$30,035	16.7%	
Estonia	5	20	20.0%	\$84	\$94	47.1%	Egypt	26	194	11.8%	\$3,702	\$21,062	14.9%	
Colombia	3	43	6.5%	\$876	\$1,254	41.1%	Hungary	65	840	7.2%	\$3,179	\$23,651	11.8%	
Singapore	203	2,415	7.8%	\$27,834	\$55,405	33.4%	Singapore	49	1,649	2.9%	\$6,533	\$50,488	11.5%	
Liechtenstein	4	32	11.1%	\$470	\$1,185	28.4%	Austria	58	1,233	4.5%	\$4,577	\$35,982	11.3%	
Norway	254	1,521	14.3%	\$17,634	\$50,530	25.9%	Argentina	38	1,409	2.6%	\$7,582	\$64,150	10.6%	
Portugal	34	396	7.9%	\$6,283	\$24,131	20.7%	Norway	79	1,732	4.4%	\$10,125	\$86,076	10.5%	
Malaysia	66	1,566	4.0%	\$9,654	\$42,888	18.4%	Russian Fed	52	1,303	3.8%	\$6,727	\$65,789	9.3%	
Finland	233	1,647	12.4%	\$12,433	\$67,592	15.5%	Australia	187	5,283	3.4%	\$24,124	\$236,021	9.3%	
Chile	6	130	4.4%	\$643	\$4,089	13.6%	Italy	153	3,388	4.3%	\$22,956	\$269,566	7.8%	
Sweden	195	4,075	4.6%	\$21,366	\$149,214	12.5%	Mexico	23	1,549	1.5%	\$5,797	\$79,148	6.8%	
Thailand	15	227	6.2%	\$531	\$3,719	12.5%	Bermuda	6	167	3.5%	\$2,832	\$40,112	6.6%	
France	691	7,571	8.4%	\$81,067	\$736,125	9.9%	India	64	2,472	2.5%	\$3,931	\$57,114	6.4%	
Austria	126	1,266	9.1%	\$3,480	\$32,635	9.6%	Portugal	28	748	3.6%	\$1,534	\$22,413	6.4%	
Poland	18	146	11.0%	\$275	\$2,696	9.3%	Ireland Rep	25	1,064	2.3%	\$2,603	\$38,535	6.3%	
Slovenia	12	42	22.2%	\$45	\$460	8.8%	South Africa	32	1,290	2.4%	\$3,329	\$50,002	6.2%	
Italy	115	2,574	4.3%	\$19,017	\$224,177	7.8%	Denmark	80	1,598	4.8%	\$3,258	\$54,055	5.7%	
Qatar	12	28	30.0%	\$564	\$7,214	7.3%	Netherlands	106	3,371	3.0%	\$21,744	\$375,262	5.5%	
India	47	1,202	3.8%	\$2,230	\$28,966	7.1%	Thailand	37	1,023	3.5%	\$932	\$16,396	5.4%	
Taiwan	16	537	2.9%	\$992	\$13,906	6.7%	Czech Republic	45	1,123	3.9%	\$1,164	\$22,161	5.0%	
Brazil	33	280	10.5%	\$3,462	\$57,227	5.7%	Sweden	174	2,838	5.8%	\$9,775	\$187,105	5.0%	
New Zealand	26	524	4.7%	\$751	\$12,744	5.6%	Spain	125	3,390	3.6%	\$11,089	\$214,682	4.9%	
Croatia	1	29	3.3%	\$21	\$374	5.3%	Colombia	8	391	2.0%	\$1,024	\$20,542	4.7%	
Denmark	22	1,894	1.1%	\$2,084	\$49,474	4.0%	South Korea	22	966	2.2%	\$2,686	\$56,632	4.5%	
Japan	36	4,866	0.7%	\$8,711	\$224,285	3.7%	Brazil	52	2,240	2.3%	\$6,090	\$145,447	4.0%	
Russian Federation	115	454	20.2%	\$1,807	\$49,317	3.5%	Greece	10	327	3.0%	\$937	\$23,630	3.8%	
Others	850	88,542	1.0%	\$50,135	\$6,563,194	0.8%	Others	1,812	74,715	2.4%	\$178,206	\$6,013,545	2.9%	
World	4,026	123,027	3.2%	\$434,549	\$8,447,883	4.9%	World	4,026	123,027	3.2%	\$434,549	\$8,447,883	4.9%	

#### Table 3. Cross-Country Determinants of Cross-Border Acquisition Activity Led by Government-Controlled Acquirers.

This table presents panel regressions of country-level determinants on the total number (or deal value in constant 2000 US\$ millions) of cross-border block acquisition deals led by governmentcontrolled or corporate acquirers from country *i* in a target corporation in country *j* announced each year over the period from 1990 to 2008. The dependent variable is the deal ratio of the number (or value) of deals between country *i* and *j* in year *t* divided by the total number (value) of all deals involving targets in country *j* in year *t*, denoted  $A_{ijt}$ . An observation for a deal ratio in a given year is dropped when there is no government or corporate cross-border deals between country *i* and *j*. See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Model 1 includes only corporate acquirers,  $A^{C}_{ijt}$ , and Model 2, only government-controlled acquirers,  $A^{G}_{ijt}$ . The dependent variable in Models 3 to 14 is the *excess* ratio of the fraction of deals led by government-controlled acquirers from country *i* targeting country *j* in year *t* less the fraction of deals involving corporate acquirers from country *i* in year *t*, denoted *Excess*  $A^{G}_{ijt}$ . Model 11 measures activity by the total constant-dollar deal activity instead of counts, Model 12 considers only those deal counts involving minority stakes between 5% and 50% block purchases in targets. Model 13 excludes from total deal counts corporate acquisitions involving acquirers that are former state-owned enterprises (SOEs) that have been privatized. Model 14 excludes deal counts that were withdrawn. See Table A1 for details on variable construction and Table A2 for summary statistics. \*\*\*\*, \*\*\*, and \* denote statistical significance at the 1%, 5% and 10% levels using year fixed effects and robust standard errors clustered by target country and associated *t*-statistics are in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Corporate	Government	E	Excess of Go	vernment-0	Controlled I	Deal Ratio I	Less Corpor	ate Deal Ra	tio	By Total	Minority	Former	Withdrawn
	Deal Ratio	Deal Ratio			(	$(ExcessA^{G}_{ijt})$	$=A^{G}_{ijt}-A^{C}_{ijt}$	ijt)			Value of	Deals	SOEs	Deals
	$(A^{C}_{ijt})$	$(A^G_{ijt})$			В	y Total Nu	nber of De	als			Deals	Only	Excluded	Excluded
Annual Exchange Rate Return Differences	0.020	0.043***	0.031***	$0.028^{**}$	$0.049^{***}$	0.039***	$0.048^{***}$	$0.024^{**}$	0.017	0.031***	0.005	0.035**	0.038***	$0.027^{*}$
	(1.59)	(4.30)	(3.02)	(2.64)	(4.11)	(3.25)	(3.56)	(2.60)	(1.57)	(2.97)	(0.23)	(2.45)	(2.83)	(2.00)
Annual Real Stock Market Return Differences	-0.006	0.004	0.009	0.006	0.009	0.006	0.006	-0.007	0.004	-0.015***	-0.009	-0.008	-0.016	-0.023***
	(-1.54)	(0.60)	(1.53)	(0.85)	(1.35)	(0.80)	(0.83)	(-1.26)	(0.64)	(-2.13)	(-0.73)	(-1.09)	(-1.69)	(-2.92)
Log GDP Per Capita Differences	0.014	0.003	-0.010	-0.011	-0.010	-0.014	-0.011	-0.006**	-0.016	-0.011	-0.006*	-0.010	-0.012	-0.014
	(5.98)	(1.15)	(-3.36)	(-3.57)	(-3.44)	(-4.12)	(-3.58)	(-2.10)	(-4.06)	(-3.41)	(-1.76)	(-3.23)	(-3.14)	(-4.20)
GDP Growth Differences	-0.034	0.063	0.048	0.036	-0.165	-0.028	-0.210	-0.014	0.124	-0.085	0.010	-0.107	-0.159	-0.061
	(-0.73)	(1.06)	(0.70)	(0.59)	(-2.26)	(-0.33)	(-2.35)	(-0.24)	(1.57)	(-1.40)	(0.13)	(-1.98)	(-2.03)	(-0.75)
Geographic Proximity	0.003	0.006	0.003	0.003	0.003	0.003	0.003	0.000	0.001	-0.001	0.001	-0.000	-0.001	-0.001
	(2.56)	(4.93)	(1.82)	(1.84)	(1.86)	(1.89)	(1.84)	(0.15)	(0.68)	(-0.31)	(0.89)	(-0.21)	(-0.69)	(-0.79)
Market Correlation	0.101	0.059	-0.057	-0.058	-0.053	-0.058	-0.049	-0.016	-0.104	-0.048	-0.052	-0.046	-0.066	-0.036
	(4.96)	(3.02)	(-2.94)	(-2.94)	(-2.57)	(-2.60)	(-2.23)	(-0.89)	(-4.12)	(-1.96)	(-1./6)	(-1.89)	(-2.20)	(-1.36)
Anti-Self Dealing Index Differences	0.026	-0.026	-0.049	-0.048	-0.079	-0.050	-0.081	-0.028	-0.034	-0.034	-0.024	-0.020	-0.047	-0.034
Assounting Standards Differences	(3.54)	(-2.22)	(-4.46)	(-3.87)	(-0.17)	(-4.46)	(-3.09)	(-3.02)	(-2.80)	(-3.13)	(-1.64)	(-2.11)	(-3.59)	(-2.99)
Accounting Standards Differences	(2.05)	(2.00)	(1, 20)	0.033	(1.55)	(0.020)	(2.06)	(1.65)	(0.001)	(0.027)	(0.012)	(0.12)	(0.66)	(0.029)
European Union Dummy	-0.023**	0.025**	(1.29)	(0.85)	(1.55)	(0.72)	(2.00)	(1.03)	0.049***	(0.81)	(0.32)	(0.12)	(0.00)	(0.84)
European Onion Dunning	(-2.65)	(2.06)	(4,73)	(4.25)	(3.89)	(3.77)	(3.42)	(2.44)	(4, 41)	(1.89)	(0.012)	(2.48)	(2.45)	(1.80)
Tax Haven Dummy (Acquirer)	-0.040***	-0.014**	$0.024^{***}$	(4.23)	-0.003	-0.003	(3.42)	(2.44) 0.018 <sup>**</sup>	(4.41) 0 104 <sup>***</sup>	0.039**	0.057**	(2.40) 0.045 <sup>***</sup>	0.058***	0.043**
Tax Haven Dunniy (Requirer)	(-5.76)	(-2.14)	(3.67)	(3.18)	(-0.38)	(-0.35)	(-1.70)	(2, 62)	(8 25)	(2.46)	(2.48)	(3.28)	(3.06)	(2.48)
Industry Dissimilarity	(-3.70)	(-2.14)	(3.07)	0.860***	(-0.30)	(-0.33)	(-1.70)	(2.02)	(0.23)	0 327	0.131	0.175	(3.00)	0.306
industry Dissimilarity				(3.66)						(1.61)	(0.47)	(0.75)	(0.99)	(1.51)
PolityIV Democracy Differences				(5100)	-0.008***					-0.004*	-0.006**	-0.006**	-0.006**	-0.004
					(-4.74)					(-1.85)	(-2.35)	(-2.46)	(-2.11)	(-1.54)
Current Account Differences						$0.002^{***}$				0.001*	0.001	0.001	0.001	0.001**
						(5.22)				(1.80)	(1.27)	(1.29)	(1.45)	(2.27)
Total Reserves Per GDP Differences						. ,	$0.120^{***}$			-0.027	-0.031	-0.053	-0.051	-0.034
							(3.83)			(-0.80)	(-0.71)	(-1.51)	(-1.21)	(-0.84)
Government Domestic Acquisitions (Acquirer)								$1.432^{***}$		1.330***	1.252***	1.271***	1.568***	1.411***
								(8.62)		(7.80)	(5.92)	(7.53)	(7.24)	(8.01)
Government Expenditures % of GDP (Acquirer)									$0.008^{***}$	$0.006^{***}$	$0.005^{***}$	$0.005^{***}$	$0.008^{***}$	$0.007^{***}$
									(7.75)	(5.46)	(3.85)	(5.64)	(6.13)	(6.24)
Observations	9,588	8,464	8,464	7,840	7,899	7,398	7,638	7,840	7,472	6,930	5,282	6,125	6,129	6,353
Adjusted R <sup>2</sup>	0.14	0.05	0.03	0.04	0.04	0.04	0.05	0.12	0.06	0.15	0.08	0.11	0.17	0.15
Adjusted $R^2$ (without year fixed effects)	0.13	0.04	0.03	0.03	0.04	0.04	0.05	0.12	0.06	0.14	0.07	0.11	0.17	0.14
Adjusted R <sup>2</sup> (with year and country fixed effects)	0.54	0.15	0.24	0.25	0.24	0.24	0.24	0.26	0.24	0.26	0.15	0.19	0.30	0.25

#### Table 4. Logistic Regression Analysis of Probability of Firm Targeted by Government-Controlled Acquirer.

This table presents logistic regressions of the probability that a firm is targeted by a government-controlled acquirer in a given year. The dependent variable equals one if the firm is targeted by a government-controlled acquirer in any given year between 1990 and 2008 and zero, if it is targeted by a corporation. Financials and utilities as target firms are excluded as are firms with total assets smaller than US\$1 million (in 2000 constant dollars) and with negative book values of equity. See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Models 1 to 5 present results for minority stake acquisitions (above 5% but below 50% of target firm's shares acquired) and Models 6 to 10, for majority control transactions (above 50% of target firm's shares acquired). Firm variables include a dummy variable indicating whether target and acquirer firms are in the same industry ("Related Deal Dummy"), three proxies for firm financial constraints ("Zero-dividend Dummy," "High Whited and Wu Index," "High Hadlock and Pierce Index"), a proxy for high levels of closely-held share by insiders ("High Closely-held Share Dummy"), log of total assets ("Total Assets"), market-to-book ratio ("Market-to-book"), profitability ("Return on Assets"), leverage ("Long-term Debt to Assets"), a dummy variable for withdrawn deals ("Withdrawn Deals Dummy") and trailing one-year sales growth ("Sales Growth"). For majority-stake acquisitions, two deal-level variables are included: a dummy variable for deals paid entirely in cash ("All Cash Payment Dummy") and percentage of shares owned by acquirer ("Percentage of Shares Acquired"). See Table A1 for details on variable construction and Table A2 for summary statistics. Coefficients are reported as marginal effects. \*\*\*\*, \*\*\*, and \* denote statistical significance at the 1%, 5% and 10% levels using robust standard errors that allow country and year fixed effects as indicated and associated *t*-statistics are in parentheses below the coefficients.

		Minc	ority Stake D	eals			Major	rity Stake D	eals	
Related Deal Dummy	(1) -0.002 (-0.32)	(2) -0.003 (-0.56)	(3) -0.004 (-0.70)	(4) 0.005 (1.20)	(5) 0.004 (1.34)	(6) -0.005 (-0.84)	(7) -0.003 (-0.51)	(8) -0.004 (-0.67)	(9) -0.007 (-1.24)	(10) -0.004 (-1.39)
Withdrawn Deals Dummy	$0.012^{**}$	$0.011^{**}$	$0.012^{**}$	-0.002	-0.000 (-0.15)	0.000	-0.007	-0.001 (-0.08)	0.030	0.021
Zero-dividend Dummy	0.015**	(2.10)	(2.20)	( 0.54)	( 0.15)	(0.01)	(1.00)	( 0.00)	(0.0))	(0.07)
High Whited and Wu Index	(2.27)	$0.020^{***}$		0.005	0.003	0.014	0.008	0.012	0.013	0.007
High Hadlock and Pierce Index		(2.70)	0.010	(0.87)	(0.90)	(1.51)	(0.88)	(1.47)	(1.50)	(1.43)
All Cash Payment Dummy			(0.91)				$0.010^{*}$			
Percent of Shares Acquired							(11,1)	-0.001 <sup>*</sup> (-1.90)		
High Closely-held Shares Dummy	-0.007	-0.007	-0.008	-0.007	$-0.005^{*}$	0.002	0.002	0.002	0.005	0.002
Total Assets (log)	0.008***	0.007***	0.007***	0.001	0.001*	0.000	0.000	0.000	-0.001	-0.001
Market-to-book	(4.48) $0.003^{**}$ (2.30)	(4.50) $0.002^{**}$ (2.17)	(4.14) $0.002^{**}$ (2.23)	(1.19) $0.002^{**}$ (2.57)	(1.69) $0.002^{***}$ (2.86)	(0.14) -0.003 (1.28)	(0.07) -0.001 (0.47)	(0.28) -0.003 (1.26)	(-0.88) $-0.005^{**}$ (-2.01)	(-1.09) -0.002 (-1.57)
Return on Assets	(2.30) -0.003 (-0.35)	-0.006	(2.23) -0.005 (-0.58)	(2.57) 0.001 (0.17)	(2.80) 0.002 (0.46)	(-1.23) -0.009 (-1.43)	(-0.47) -0.005 (-0.59)	(-1.20) -0.009 (-1.49)	$(-2.01)^{-0.012^{**}}$	(-1.37) $(-0.004^*)$
Long-term Debt to Assets	-0.010	-0.009	-0.015	-0.009	-0.008	(-0.36)	-0.024	(-0.42)	(2.41) 0.002 (0.11)	(1.7) 0.001 (0.12)
Sales Growth	0.001	0.001	0.002	0.000	-0.002	-0.001	0.001	-0.001	0.000	0.001
Annual Exchange Rate Return (Target)	(0.2))	(0.40)	(0.74)	(0.20) 0.009 (0.28)	(0.011)	(-0.41)	(0.10)	(-0.45)	(0.04) -0.022 (-0.73)	(0.93) -0.022 (-1.51)
Annual Real Stock Market Return (Target)				-0.000	(0.03) 0.001 (0.18)				(0.75) (0.012) (0.90)	(-0.002)
Log GDP Per Capita (Target)				(0.01) (0.38)	(0.10) (0.001) (0.54)				(0.90) (0.000) (0.04)	(0.90)
Anti-Self-Dealing Index (Target)				(0.003) (0.30)	(0.01) (0.006) (0.92)				-0.001	(0.000) (0.04)
Accounting Standard (Target)				(0.000) (0.73)	(0.02) (0.000) (0.06)				(0.000)	(0.000) (0.15)
Industry Dissimilarity				(0172)	(0.019) (0.22)				(0.03)	-0.063
Polity IV Democracy (Acquirer)					-0.000					(0.000)
Current Account (Acquirer)					(0.17) (0.000) (0.88)					$(0.00)^{*}$ (1.82)
Government Domestic Acquisitions (Acquirer)					(0.00) $0.212^{***}$ (3.26)					$(1.02)^{*}$ $(0.085^{*})^{*}$
Government Expenditures % of GDP (Acquirer)					0.000					(0.49)
Year Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects?	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No
Observations	2,095	2,259	2,259	2,040	1,665	1,090	766	1,090	1,118	1,100
Pseudo- $R^2$	0.174	0.174	0.162	0.089	0.263	0.254	0.262	0.266	0.132	0.311
Unconditional Probability of Event	0.064	0.070	0.062	N.A. 0.014	N.A. 0.007	0.086	0.085	0.119	N.A. 0.009	N.A. 0.004

#### Table 5. Logistic Regression Analysis of Probability of Firm Targeted by Sovereign Wealth Fund or State-Controlled Fund as Acquirer.

This table presents logistic regressions of the probability that a firm is targeted by a sovereign wealth fund (SWF) or any other type of state-controlled fund in a given year. The dependent variable equals one if the firm is targeted by a SWF or state-controlled fund with at least a 5% stake in any given year between 1990 and 2008, and zero if it is targeted by any other type of government-controlled acquirer. Firms with total assets less than US\$1 million (in 2000 constant dollars) and with negative book values of equity are excluded. See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Models 1 to 3 present results with financial services and utilities firms included and Models 4 to 13, those in which they are excluded. We only include acquisitions by government-controlled firms that involve minority stake acquisitions (above 5% but below 50% of target firm's shares acquired). A SWF is identified as a financial acquirer in Securities Data Corporation under ACQUIROR\_TYPE data item and matched by name (SDC data item AN) to a list of SWFs at the SWF Institute website, <a href="http://www.swfinstitute.org/funds.php">http://www.swfinstitute.org/funds.php</a>). State-controlled or public investment funds are defined by a primary Standard Industrial Classification (SIC) code in the 999A-G, 9000 range and/or government acquirers with any of the following SIC codes related to investment offices, pension, health and welfare funds, trusts, or holding companies: 6019, 6371, 6722, 6726, 6798, 6799. See Table A1 for details on variable construction and Table A2 for summary statistics. Coefficients are reported as marginal effects. \*\*\*, \*\*\*, and \* denote statistical significance at the 1%, 5% and 10% levels using robust standard errors that allow country and year fixed effects as indicated and associated *t*-statistics are in parentheses. "Predicted Y" denotes the unconditional likelihood of an acquisition by a SWF or state-controlled fund.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Related deals dummy	<u>Financi</u> -0.442***	als, Utilities -0.442***	-0.446***				<u>Fi</u>	nancials, Ut	ilities Exch	<u>ided</u>			
Withdrawn deals dummy	(-8.85) $-0.106^*$ (-1.78)	(-8.89) $-0.131^{**}$ (-2.14)	(-9.03) $-0.128^{**}$ (-2.10)	$-0.169^{**}$	$-0.196^{**}$	$-0.182^{**}$	$-0.135^{**}$	$-0.129^{**}$	$-0.141^{**}$	$-0.167^{***}$	$-0.127^{*}$	$-0.136^{**}$	-0.119 <sup>*</sup>
Zero-dividend dummy	-0.031 (-0.49)	(2.14)	(2.10)	-0.083 (-1.03)	(2.47)	(2.55)	(2.17)	(2.05)	(2.10)	(2.04)	(1.00)	(2.00)	(1.70)
High Whited and Wu index	(,	-0.075 (-1.22)		( 1000)	-0.214 <sup>****</sup> (-2.97)		-0.029 (-0.43)	-0.059 (-0.88)	-0.036 (-0.51)	-0.072 (-1.06)	-0.044 (-0.62)	-0.019 (-0.27)	-0.082 (-1.18)
High Hadlock-Pierce index		. ,	-0.049 (-0.56)		. ,	-0.036 (-0.31)	. ,	. ,	. ,	. ,	. ,	. ,	
High closely-held share dummy	-0.002 (-0.03)	-0.007 (-0.10)	-0.004 (-0.06)	-0.185 <sup>**</sup> (-2.55)	-0.190 <sup>***</sup> (-2.61)	-0.195 <sup>***</sup> (-2.66)	-0.139 <sup>**</sup> (-2.18)	-0.091 (-1.19)	-0.030 (-0.32)	-0.091 (-1.21)	-0.084 (-1.07)	-0.039 (-0.41)	-0.064 (-0.81)
Total assets (log)	0.026 (1.62)	0.028 <sup>*</sup> (1.83)	0.026 (1.49)	-0.008 (-0.37)	-0.002 (-0.11)	-0.004 (-0.18)	-0.021 (-1.20)	-0.021 (-1.14)	-0.032 (-1.63)	-0.015 (-0.83)	-0.022 (-1.12)	-0.031 (-1.57)	-0.022 (-1.07)
Market-to-book	-0.029 (-1.35)	-0.030 (-1.39)	-0.034 (-1.57)	-0.016 (-0.78)	-0.010 (-0.47)	-0.022 (-1.00)	0.006 (0.36)	0.005 (0.32)	0.001 (0.03)	0.001 (0.05)	-0.010 (-0.45)	-0.002 (-0.09)	0.004 (0.23)
Return on assets	-0.032 (-0.27)	0.003 (0.03)	-0.007 (-0.06)	0.162 (0.88)	0.210 (1.09)	0.236 (1.21)	0.226 (1.38)	0.081 (0.49)	0.022 (0.13)	0.018 (0.11)	0.063 (0.36)	0.045 (0.26)	0.016 (0.10)
Long-term debt/assets	0.113 (0.70)	0.204 (1.25)	0.218 (1.33)	0.291 (1.21)	0.235 (1.03)	0.297 (1.24)	0.623*** (3.29)	0.497** (2.57)	0.519** (2.53)	0.518*** (2.60)	0.524 <sup>**</sup> (2.51)	0.510** (2.55)	0.663*** (2.94)
Sales growth	0.012 (0.59)	0.011 (0.53)	0.012 (0.58)	0.013 (0.43)	0.010 (0.32)	0.008 (0.27)	-0.018 (-0.57)	-0.011 (-0.35)	0.013 (0.36)	-0.010 (-0.35)	0.007 (0.23)	0.015 (0.44)	0.007 (0.21)
Annual Exchange Rate Return (Target)							-0.658 (-1.59)	-0.290 (-0.66)	0.075 (0.16)	-0.396 (-0.93)	0.018 (0.04)	0.036 (0.08)	-0.584 (-1.32)
Annual Real Stock Market Return (Target)							(0.047)	0.021 (0.11)	0.011 (0.05)	-0.074 (-0.39)	-0.142 (-0.68)	0.052 (0.25)	-0.060 (-0.32)
Log GDP Per Capita (Target)								-0.088 (-2.81)	-0.108 (-3.33)	-0.112 (-3.36)	-0.084 (-2.50)	-0.096 (-2.89)	-0.076 (-2.27)
Industry Dissimilarity									-6.136 (-2.79)	0.01c***			
Current Account (Acquirer)										-0.016 (-3.39)	0.016***		
Covernment Domestic Acquisitions (Acquirer)											(3.41)	0.258	
Government Expenditures % of GDP (Acquirer)												(-1.04)	-0.052***
Year/Country Fixed Effects?	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	(-5.59) Yes/No
Observations Predicted Y Pseudo $R^2$ Pseudo $R^2$ (without country fixed effects)	369 0.222 0.345 0.285	387 0.236 0.355 0.283	387 0.235 0.353 0.285	243 0.284 0.228 0.107	253 0.288 0.255 0.11	253 0.294 0.231 0.107	248 0.240 0.139 N A	241 0.234 0.170 N A	220 0.226 0.221 N A	241 0.222 0.213 N A	227 0.221 0.252 N A	221 0.234 0.191 N A	224 0.191 0.355 N A

# Table 6. Cumulative Market-Adjusted Returns (CMARs) and Bidder Premiums around Announcements of Cross-Border Acquisitions Led by Government-Controlled Acquirers and Corporate Acquirers.

This table reports the cumulative market adjusted buy-and-hold returns (CMARs) and bid premiums in percentage around the announcement dates of cross-border acquisitions led by government-controlled and corporate acquirers. Buy-and-hold returns are cumulated over three different returns horizons around the announcement date (*t*=0), including from days *t*=-10 to *t*=+10 ("CMARs(-1,+10)"), days *t*=-5 to *t*=+5 ("CMARs(-5,+5)"), and days *t*=-1 to *t*=+1 ("CMARs(-1,+1)"). Bid premium is the bid price measured relative to the closing stock price of the target four weeks prior to the announcement date, expressed as a percentage (defined using SDC codes ((HOSTPR – HOSTC4WK) / HOSTC4WK × 100). A similar premium bid defined relative to the closing stock price of target one week prior (-1w, 0) and one day prior (-1d, 0). In Panels A and C, results are reported separately for acquisitions that involve a minority stake in the target firm (more than 5% but less than 50% of shares) and a majority stake (greater than 50% of shares). See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Financial services and utilities target firms are excluded. In Panels B and D, differences in means and medians in CMARs and bid premium are reported between government-led acquisitions that involve sovereign wealth funds (SWF) or state-controlled funds as acquirers and those involving sovereign-controlled firms. A SWF is identified as a financial acquirer in Securities Data Corporation under ACQUIROR\_TYPE data item and matched by name (SDC data item AN) to a list of SWFs at the SWF Institute website, http://www.swfinstitute.org/funds.php). State-controlled or public investment funds are defined by a primary Standard Industrial Classification (SIC) code in the 999A-G, 9000 range and/or government acquirers with any of the following SIC codes related to investment offices, pension, health and welfare funds, trusts, or holding companies: 6019, 6371, 6722, 6726, 6798, 6799. Mean and median values are

## Panel A: Government-Controlled versus Corporate Cross-border Acquisitions

		No. of	CMARs	CMARs	CMARs
		Announcements	(-10, +10)	(-5, +5)	(-1, +1)
Differences in Means					
Majority Stakes	Corporate acquirer Government acquirer Diff (p-value)	2,897 69	26.43%** 22.21%** (0.52)	$19.83\%^{**}$ 20.88% <sup>**</sup> (0.81)	15.35% <sup>**</sup> 13.72% <sup>**</sup> (0.60)
Minority Stakes	Corporate acquirer Government acquirer Diff (p-value)	5,510 268	12.93% <sup>**</sup> 10.99% <sup>**</sup> (0.57)	8.84% *** 8.98% *** (0.95)	5.39%*** 7.43%*** (0.22)
Differences in Medians					
Majority Stakes	Corporate acquirer Government acquirer Diff (p-value)	2,897 69	13.50%** 10.58%** (0.99)	10.51% <sup>**</sup> 9.39% <sup>***</sup> (0.75)	6.99%**** 3.11%**** (0.63)
Minority Stakes	Corporate acquirer Government acquirer Diff (p-value)	5,510 268	3.96% *** 3.32% *** (0.73)	3.37% *** 1.98% *** (0.33)	1.51%*** 1.04%*** (0.29)

#### Panel B: Sovereign Wealth Funds (SWF) and State-Controlled Funds versus Other Government-Controlled Acquirers

		No. of Announcements	CMARs (-10, +10)	CMARs (-5, +5)	CMARs (-1, +1)
Differences in Means					
Financial Services and	Other Government-Controlled acquirers	337	13.40%**	$11.54\%^{**}$	$8.78\%^{***}$
Itilities Firms Excluded	Sovereign Wealth & State-Controlled Funds only	153	$4.97\%^{**}$	4.45%**	3.27%**
Oundes Fillins Excluded	Diff (p-value)		(<0.01)	(0.01)	(<0.01)
Einensiel Comiese and	Other Government-Controlled acquirers	667	8.61%****	7.77%****	6.06% ****
Itilitias Eirms Included	Sovereign Wealth & State-Controlled Funds only	287	5.92% ***	$4.74\%^{***}$	3.43%***
Othines Fillis Included	Diff (p-value)		(0.19)	(0.08)	(0.03)
Differences in Medians					
Financial Services and	Other Government-Controlled acquirers	337	$4.71\%^{***}$	$2.79\%^{***}$	$1.50\%^{***}$
Itilities Firms Excluded	Sovereign Wealth & State-Controlled Funds only	153	$0.15\%^{**}$	0.43%**	$0.85\%^{**}$
Oundes Fillins Excluded	Diff (p-value)		(<0.01)	(<0.01)	(0.06)
	Other Government-Controlled acquirers	667	2.82%****	2.24%****	1.14%****
Financial Services and	Sovereign Wealth & State-Controlled Funds only	287	$0.66\%^{***}$	$0.98\%^{***}$	$0.84\%^{***}$
Utilities Firms Included	Diff (p-value)		(0.02)	(<0.01)	(0.25)

# Table 6. Cumulative Market-Adjusted Returns (CMARs) and Bidder Premiums around Announcements of Cross-Border Acquisitions Led by Government-Controlled Acquirers and Corporate Acquirers. (continued)

Panel C: Government-Controlled versus Corporate Cross-border Acquisitions

	•	No. of	Bid Premium	Bid Premium	Bid Premium
		Announcements	(-4w,0)	(-1w,0)	(-1d,0)
Differences in Means					
	Corporate acquirer	2,897	$41.98\%^{**}$	37.39%**	32.06%**
Majority Stakes	Government acquirer	69	49.73%**	43.37%**	36.51%**
	Diff (p-value)		(0.22)	(0.24)	(0.42)
			[1634, 36]	[1629, 36]	[1644, 38]
	Corporate acquirer	5,510	24.71%**	22.02%**	$18.60\%^{**}$
Minority Stakes	Government acquirer	268	21.75%**	17.50%**	13.84%**
	Diff (p-value)		(0.66)	(0.46)	(0.43)
			[1430,64]	[1418,62]	[1419,67]
Differences in Medians					
	Corporate acquirer	2,897	34.78%**	31.03%**	25.71%**
Majority Stakes	Government acquirer	69	34.08%**	38.16%**	34.74%**
	Diff (p-value)		(0.21)	(0.12)	(0.25)
			[1634, 36]	[1629, 36]	[1644, 38]
	Corporate acquirer	5,510	14.95%**	12.24%**	9.72% ***
Minority Stakes	Government acquirer	268	$7.91\%^{***}$	$7.70\%^{***}$	3.45%**
-	Diff (p-value)		(0.24)	(0.25)	(0.08)
	· •		[1430,64]	[1418,62]	[1419,67]

## Panel D: Sovereign Wealth Funds (SWF) and State-Controlled Funds versus Other Government-Controlled Acquirers

		No. of	Bid Premium	Bid Premium	Bid Premium
		Announcements	(-4w,0)	(-1w,0)	(-1d,0)
Differences in Means					
	Other Government-Controlled acquirers	337	33.52%**	34.61%**	27.47%**
Financial Services and	Sovereign Wealth & State-Controlled Funds only	153	17.65%**	39.95%**	$42.29\%^{*}$
Othnues Fillins Excluded	Diff (p-value)		(0.13)	(0.80)	(0.53)
			[100, 59]	[98, 58]	[105, 56]
Einangial Services and	Other Government-Controlled acquirers	667	25.79%**	24.29%**	19.93%**
Itilitias Firms Included	Sovereign Wealth & State-Controlled Funds only	287	15.52%**	26.93%**	25.03%**
Othities Films Included	Diff (p-value)		(0.16)	(0.83)	(0.70)
			[171, 107]	[170, 108]	[178, 107]
Differences in Medians					
Einanaial Samiaas and	Other Government-Controlled acquirers	337	23.21%**	19.05%**	11.29%**
Intilitian Eirma Evoluded	Sovereign Wealth & State-Controlled Funds only	153	4.03%**	3.71%**	$7.08\%^{*}$
Othnues Fillins Excluded	Diff (p-value)		(<0.01)	(0.03)	(0.34)
			[100, 59]	[98, 58]	[105, 56]
	Other Government-Controlled acquirers	667	20.00%**	$14.81\%^{**}$	9.10% ***
Financial Services and	Sovereign Wealth & State-Controlled Funds only	287	6.15%**	$4.44\%^{**}$	3.91%**
Utilities Firms Included	Diff (p-value)		(<0.01)	(0.06)	(0.21)
	· ·		[171, 107]	[170, 108]	[178, 107]

#### Table 7. Regression Analysis of Cross-section of Cumulative Market-Adjusted Returns (CMARs) to Announcements of Cross-Border Acquisitions Led by Government-Controlled Acquirers, including Sovereign Wealth Funds, and Corporate Acquirers.

This table reports the results for cross-sectional regressions of cumulative market adjusted buy-and-hold returns (CMARs) around the announcement dates of cross-border acquisitions led by government-controlled and corporate acquirers on a variety of firm-specific and country-level variables. See Table 1 for data sources, identification of type of acquirer and exclusions by type of deal. Buy-and-hold returns are cumulated around the announcement date (t=0) for days t=-10 to t=+10 ("CMARs(-10,+10)"). In Panel A, results are reported for acquisitions that involve a minority (more than 5% but less than 50% of shares) of the target firm for acquisitions led by government-controlled and corporate acquirers. Financial services and utilities target firms are excluded. Panel B presents results for only acquisitions (involving minority or majority stakes above 50% in the target) led by government-controlled acquirers, including those of sovereign wealth funds (SWFs) or state-controlled funds, jointly denoted "Government Fund Acquirer Dummy"). See Tables 5 and 6 for identification of SWFs and other government-controlled funds. Table A1 presents details on variable construction and Table A2 for summary statistics. \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5% and 10% levels using robust standard errors that allow year and country fixed effects and associated *t*-statistics are in parentheses below the coefficients.

Panel A: CMARs around A	equisition Announcements of	of All Government	-Controlled and Cor	porate Acquirers
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	(1)	(2)	(3)	(4)
Government Acquirer dummy	0.067	0.080	0.056	0.049
	(1.53)	(1.14)	$(0.74)_{****}$	(0.62)
Withdrawn deals dummy	0.051	0.041	0.066	0.058
Did Dramium (11,1,1)	(3.79)	(2.14)	(3.27)	(2.39)
Bid Pfeinium (-1w,0)	0.002	(1.05)	(1.78)	(0.024)
Related Deal dummy	(1.50)	-0.001	-0.000	-0.005
Related Dear duning		(-0.07)	(-0.01)	(-0.24)
High Whited and Wu index		-0.006	-0.018	-0.027
		(-0.26)	(-0.79)	(-1.02)
High closely-held share dummy		-0.025	-0.007	-0.006
		(-1.17)	(-0.30)	(-0.25)
Total assets (log)		-0.022****	-0.018****	-0.025***
		(-3.54)	(-2.87)	(-3.49)
Market-to-book		-0.016****	-0.012***	-0.018**
		(-2.86)	(-2.14)	(-2.30)
Long-term debt/assets		0.170**	0.095	0.089
		(2.13)	(1.22)	(1.04)
Sales growth		0.009	0.017	0.019
Annual Englisher as Data Datama (Tanat)		(0.79)	(1.55)	(1.45)
Annual Exchange Rate Return (Target)			0.055	(0.127)
Annual Paal Stock Market Poturn (Target)			(0.41)	(0.81)
Annual Real Stock Market Return (Target)			-0.079	-0.115
Log GDP Per Capita (Target)			-0.007	-0.004
			(-0.61)	(-0.27)
Anti-Self-Dealing Index (Target)			-0.036	-0.040
			(-0.78)	(-0.65)
Accounting Standard (Target)			0.003*	$0.004^{*}$
			(1.85)	(1.73)
Industry Dissimilarity				0.789
				(0.89)
Polity IV Democracy (Acquirer)				0.002
				(0.29)
Current Account (Acquirer)				-0.001
				(-0.34)
Government Domestic Acquisitions (Acquirer)				0.468
Government Expenditures % of GDP (Acquirer)				(0.82)
Government Experiatures /0 of OD1 (Acquirer)				(1.22)
Year/Country Fixed Effects?	Yes/Yes	Yes/Yes	Yes/No	Yes/No
Observations	1.439	809	657	506
Adjusted $R^2$	0.12	0.16	0.13	0.13

# Table 7. Regression Analysis of Cross-section of Cumulative Market-Adjusted Returns (CMARs) to Announcements of Cross-Border Acquisitions Led by Government-Controlled Acquirers, including Sovereign Wealth Funds, and Corporate Acquirers. (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Financial	s and Utilities					Finan	cials and U	Itilities				
State-Controlled Fund dummy	-0.079	0.028	$-0.162^{**}$	0.081	0.041	0.054	$-0.322^{**}$	-0.329**	0.009	0.063	0.011	0.002	0.071
Withdrawn deals dummy	(-1.43) $0.105^{*}$ (1.69)	(0.28) 0.058 (0.63)	(-2.08) 0.086 (0.99)	(0.00) 0.038 (0.34)	(0.40) 0.113 (1.11)	(0.91) (0.96)	(-2.21) -0.216 (-1.46)	(-2.28) -0.221 (-1.43)	0.135	(0.59) 0.107 (1.07)	(0.10) 0.115 (0.99)	(0.02) 0.153 (0.91)	(0.58) 0.088 (0.81)
Bid Premium (-1w,0)	0.066 (1.36)	-0.154	(0.022) (0.33)	-0.142 (-1.07)	(0.018)	(0.90) (0.005) (0.02)	(1.40) $(0.360^{*})$ (1.81)	(1.43) (0.343) (1.67)	(0.01) 0.033 (0.14)	-0.022 (-0.10)	-0.024	(0.01) (0.007) (0.03)	-0.029 (-0.12)
Related Deal dummy	(1100)	0.051	(0.000)	0.087	0.057 (0.67)	0.048	0.137	0.130	0.083	0.054 (0.63)	0.038 (0.47)	0.068 (0.69)	0.045
High Whited and Wu index		0.375***		$(0.352^{***})$ (2.72)	$(2.52)^{**}$	$(0.00)^{***}$ (2.69)	(0.070) (0.52)	(0.051) (0.39)	$(0.170)^{*}$ $(0.251^{*})$ (1.97)	$(0.303^{**})$ (2.64)	$(2.24)^{**}$	$(0.252^{*})$	$(0.01)^{**}$ (2.65)
High closely-held share dummy		0.104 (0.64)		0.150 (0.63)	(1.04)	0.190	(0.017) (0.12)	0.046 (0.33)	0.203 (0.89)	0.187	(0.211) (0.94)	0.206 (0.89)	(0.180) (0.87)
Total assets (log)		-0.116****		-0.076 <sup>**</sup> (-2.13)	-0.078** (-2.14)	0.028	(0.025) (0.84)	$-0.092^{**}$ (0.84)	-0.078 <sup>**</sup> (-2.20)	$-0.078^{**}$ (-2.19)	-0.081** (-2.12)	-0.078**	-0.022
Market-to-book		-0.051****		-0.043** (-2.88)	$-0.043^{**}$ (-2.59)	(-2.54)	-0.002 (0.01)	$-0.042^{**}$	$-0.043^{**}$ (-2.39)	$-0.040^{**}$ (-2.51)	-0.040** (-2.31)	-0.044** (-2.31)	0.004
Long-term debt/assets		$0.830^{*}$ (1.84)		(0.511)	0.548	0.549	-0.123	-0.104	0.677	0.543	0.605	0.606	0.545
Sales growth		-0.133****		-0.083** (-2.30)	$-0.086^{**}$	-0.001	-0.003	$-0.117^{**}$	$-0.087^{**}$	$-0.115^{**}$	$-0.116^{**}$	-0.083 <sup>*</sup> (-2.08)	0.663***
Annual Exchange Rate Return (Target)		(=)		(2100)	1.075 (1.63)	0.969	$1.045^{*}$ (1.82)	$(2.06)^{*}$	0.830	0.989	(1.43)	1.037	0.974
Annual Real Stock Market Return (Target)					(0.265) (0.79)	0.298	0.796 (1.70)	$(1.76)^{*}$	0.236	0.359	0.383	(0.63)	0.363
Log GDP Per Capita (Target)					(0177)	0.046 (1.08)	(1,0) (0,00)	-0.010	(0.034)	(1.16) (0.051) (1.18)	(0.036)	(0.023) (0.48)	(0.041)
Anti-Self-Dealing Index (Target)						(1100)	(0.096) (0.43)	( 0.17)	(0101)	(1110)	(0100)	(0110)	(0120)
Accounting Standard (Target)							(0110)	0.002 (0.31)					
Industry Dissimilarity								(010-1)	3.262 (0.83)				
Polity IV Democracy (Acquirer)									(0.00)	0.005 (0.84)			
Current Account (Acquirer)										(0101)	-0.003		
Government Domestic Acquisitions (Acquirer)											(0.55)	-0.016	
Government Expenditures % of GDP (Acquirer)												( 0.04)	0.008
Year/Country Fixed Effects? Observations Adjusted R <sup>2</sup>	Yes/Yes 267 0.21	Yes/Yes 104 0.59	Yes/Yes 153 0.29	Yes/Yes 88 0.59	Yes/No 79 0.55	Yes/No 79 0.55	Yes/No 43 0.75	Yes/No 43 0.75	Yes/No 68 0.57	Yes/No 79 0.56	Yes/No 75 0.56	Yes/No 68 0.56	Yes/No 77 0.55

Panel B: CMARs around Acquisition Announcements of Only Government-Controlled Acquirers, including SWFs and Other State-Controlled Funds

#### Figure 1. Number of and Total Deal Value of All Cross-Border Acquisitions Led by Government-Controlled Acquirers by Year.

This figure exhibits the number of and total deal value (in 2000 Constant US\$ millions) of cross-border block acquisitions led by government-controlled involving at least a 5% stake in the target corporation announced over the period from 1990 to 2008. The data are obtained from Thomson Reuter's Security Data Corporation's (SDC) Platinum Mergers and Corporate Transactions database. We exclude leveraged buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases and privatizations and deals in which acquirers are domiciled in overseas territories of the U.K. (Bahamas, British Virgin Islands, Cayman Islands, Guernsey, Isle of Man) and the Netherlands (Netherland Antilles) and we exclude direct investments by sovereign wealth funds and other government-sponsored investment funds. We further exclude countries in which there are fewer than 50 cross-border acquisitions, whether led by government-controlled or corporate acquirers, over the period from 1990 to 2008. The acquirer's ultimate parent public status is used to identify government controlled acquirers, which is defined as at least 50% cash flow ownership.



## Figure 2. Total Deal Value of All Acquisitions Led by Government-Controlled Acquirers by Country of Acquirer and of Target Firms.

This figure exhibits the total deal value (in 2000 Constant US\$ millions) of cross-border block acquisitions led by government-controlled and corporate acquirers involving at least a 5% stake in the target corporation announced over the period from 1990 to 2008. The data are obtained from Thomson Reuter's Security Data Corporation's (SDC) Platinum Mergers and Corporate Transactions database. We exclude leveraged buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases and privatizations and deals in which acquirers are domiciled in overseas territories of the U.K. (Bahamas, British Virgin Islands, Cayman Islands, Guernsey, Isle of Man) and the Netherlands (Netherland Antilles) and we further exclude countries in which there are fewer than 50 cross-border acquisitions, whether led by government-controlled or corporate acquirers, over the 1990-2008 period. The acquirer's ultimate parent public status is used to identify government controlled acquirers, which is defined as at least 50% cash flow ownership. The results are reported by country in order of total deal value by government-led acquirers comprise for leading acquirer countries and their target country regions (Panel A) and for the leading target countries and the home country region of their acquirers (Panel B).





\$- \$20,000.00 \$40,000.00 \$60,000.00 \$80,000.00 \$100,000.00\$120,000.00

# Figure 2. Total Deal Value of All Acquisitions Led by Government-Controlled Acquirers by Country of Acquirer and of Target Firms. (continued)

Panel B: By Country of Domicile of Target Firms of Government-Led Acquirers and Home Country Regions of Acquirers



# Table A1. Variable Definitions.

Variable	Definition
Government-controlled (corporate) acquirer deal ratio between target country <i>i</i> and acquirer country <i>j</i>	The ratio of the number of deals in which the target is from country <i>i</i> and the acquirer is a government-controlled corporation (non- government-controlled corporation) from country <i>j</i> (where $i \neq j$ ) relative to the total number of cross-border deals with government- controlled (non-government-controlled) acquirers from country <i>j</i> . Minority block acquisitions are defined by at least a 5% but no higher than a 50% stake in the target and majority control acquisitions involve at least a 50% stake in the target. The ratio is computed in some instances using the total value of the deals (in Constant 2000 U.S. dollars) instead of the number of deals, but this obtains only for the subset of deals for which deal value is reported. (Source: SDC Mergers and Corporate Transactions database).
Excess government-controlled acquirer deal ratio between target country <i>i</i> and acquirer country <i>j</i>	The difference between the government-controlled acquirer deal ratio involving target country <i>i</i> and acquirer country <i>j</i> in a given year and the corporate acquirer deal ratio between countries <i>i</i> and <i>j</i> in that year. (Source: SDC Mergers and Corporate Transactions database).
Annual Exchange Rate Return Levels and Differences	Levels of and differences between the annual real bilateral U.S. dollar exchange rate return of the acquirer and target country. We use national exchange rates from Datastream from WM/Reuters (WMR). WMR quotes are based on 4:00pm London (Greenwich Mean Time).We obtain National Exchange Rates for the U.K. Pound Sterling and manually convert these currency quotes to get the quotes for the U.S. dollar. These indices are then deflated using the 2000 constant dollar Consumer Price Index (CPI) in each country to calculate real exchange rate returns (in U.S. dollars).
Annual Real Stock Market Return Levels and Differences	Levels of and differences between the annual local real stock market return of the acquirer and target country. We obtain Datastream total return indices in local currency for each country (Datastream code: RI) and deflate these indices using the 2000 Consumer Price Index (CPI) in each country to calculate real stock returns. (Source: Datastream)
Log GDP per capita Levels and Differences	Levels of and differences between target and acquirer firm's country of domicile in the average logarithm of Gross Domestic Product (GDP, in U.S. dollars) divided by the population (Source: World Bank Development Indicators)
GDP Growth Levels and Differences	Levels of and differences between target and acquirer firm's country of domicile in the annual real growth rate of the Gross Domestic Product (Source: World Bank Development Indicators)
Geographic Proximity	The negative of the great circle distance between the capitals of countries <i>i</i> and <i>j</i> . We obtain latitude and longitude of capital cities of each country. We then apply the standard formula: $3963.0^{*} \arccos [\sin(lat1)^{*} \sin(lat2) + \cos(lat1)^{*} \cos(lat2)^{*} \cos(lon2 - lon1)]$ , where <i>lon</i> and <i>lat</i> are the longitudes and latitudes of the acquirer ("1" suffix) and the target country ("2" suffix) locations, respectively. (Source: <u>http://www.mapsofworld.com/utilities/world-latitude-longitude-htm</u> )
Market Correlation	The correlation coefficient using monthly country-level stock index returns denominated in US dollars (Datastream code: RI) computed annually. (Source: Datastream)
Anti-Self Dealing Index Levels and Differences	Levels of and differences between acquirer and target firm's country of domicile in the Anti-Self Dealing Index, a survey-based measure of legal protection of minority shareholders against expropriation by corporate insiders. (Source: Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008)).
Accounting Standards Index Levels and Differences	Levels of and differences between acquirer and target firm's country of domicile in the index created by the Center for International Financial Analysis and Research to rate the quality of 1990 annual reports on their disclosure of accounting information (Source: LaPorta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998)).

# Table A1. Variable Definitions. (continued)

Definition
Equals 1 if both target and acquirer firm's country of domicile belongs to the European Union, and equals zero, otherwise. (Source: The World Factbook)
Equals 1 if the target (acquirer) country is classified as an "offshore financial center" (OFC) by International Monetary Fund's definition, and equals zero, otherwise. (Source: IMF Background Paper, Monetary and Exchange Affairs Department, June 23, 2000, List of Countries, Territories and Jurisdictions with OFCs at <u>http://www.imf.org/external/np/mae/oshore/2000/eng/back.htm#table1</u> )
The difference in the industrial composition between the acquirer and target country of domicile is computed as the square root of an equally-weighted sum of squared differences in the relative weights of each industry in each country in each year. The industry weights are measured as the fraction of the total market capitalization comprised by the publicly-listed stocks in that industry in that country in that year. An industry is defined as one of 48 different categories according to Fama and French (1997) which are governed mostly by the first two or three digits of a Standard Industrial Classification (SIC) code. (Source: Datastream and Professor Kenneth French's website at Dartmouth University, <a href="http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/index.html">http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/index.html</a> )
Levels of and differences between acquirer and target country of domicile in the measure of regime democracy and/or autocracy, ranging from -10 (high autocracy) and +10 (high democracy). The PolityIV Project is led by Monty Marshall (George Mason University) and Keith Jaggers (Colorado State) and was founded originally by Ted Robert Gurr (University of Maryland). We use the Polity IV Data Series Version 2009 with annual time-series for up to 163 countries from 1800 through 2009. (Source: http://www.systemicpeace.org/polity/polity4.htm).
Level of and differences between acquirer and target country of domicile in the measure of Current Account of the Balance of Payments as a percentage of GDP. The Current Account is defined as the difference between a nation's total exports of goods, services and transfers, and its total imports of them. (Source: World Bank Development Indicators)
Level of and differences between acquirer and target country of domicile in the measure of total reserves as percentage of GDP (includes gold, defined in current U.S. dollars) (Source: World Bank Development Indicators)
For an acquirer, the country's government expenditure as percentage of GDP (Source: World Bank Development Indicators)
For an acquirer, a measure of a government's presence in the domestic economy calculated as the ratio of the number of domestic acquisitions led by government-controlled corporations and funds to that of acquisitions by all domestic corporations in the previous year five years including the year under consideration. We use all domestic acquisitions (excluding spinoff, LBO, recap, self-tender, exchange offers, repurchases, similar to what we did for cross-border sample) including both minority block purchase and majority acquisitions between 1986 and 2009. (Source: SDC Mergers and Corporate Transactions database). Equals 1 if acquirer's ultimate parent is defined as a government and 0 otherwise. We exclude all transactions if the acquirer is a state fund as defined below (see "State-Controlled Fund Dummy"). (Source: SDC Mergers and Corporate Transactions database).
Equals 1 if the target firm's Standard Industrial Classification (SIC) code equals that of the acquirer at three-digit level (Source: SDC Mergers and Corporate Transactions database).

# Table A1. Variable Definitions. (continued)

Variable	Definition
Withdrawn Deals Dummy	Equals 1 if the deal is announced but not completed, and 0, otherwise. (Source: SDC Mergers and Corporate Transactions database).
Zero-dividend Dummy	Equals 1 if the firm pays no dividends, and 0, otherwise. (Source: Worldscope item WC04551)
High Whited and Wu Index	Equals 1 if the firm's Whited and Wu (WW, 2006) index is in the upper quartile of all Worldscope firms in that calendar year. We calculate for each firm the index value as091 <sup>*</sup> EBITDA (WC18198/WC02999)-0.062 <sup>*</sup> Positive Dividend Dummy (WC04551) +0.02 <sup>*</sup> Long-term debt ratio (WC03251/WC02999)-0.04 <sup>*</sup> log of total assets (WC02999)+0.102 <sup>*</sup> Industry sales growth (WC01001).
High Hadlock-Pierce Index	Equals 1 if the firm's Hadlock and Pierce (2010) size, age, operating cash flows, and leverage index is in the upper quartile of all Worldscope firms in that calendar year. The index is constructed for each firm as Hadlock-Pierce Index = $-0.352^{\circ}$ log of total assets (WC02999)- $0.025^{\circ}$ age (calendar year-WC18273)- $0.584^{\circ}$ EBITDA (WC18198/WC02999) + $1.747^{\circ}$ Long-term debt (WC03251/WC02999) )
Percent of Shares Acquired	The percentage of shares of the target ultimately owned by the acquirer (Source: SDC Mergers and Corporate Transactions database).
All Cash Payment Dummy	Equals 1 if the deal is 100% paid in cash and 0 otherwise; when the payment is unknown, it is set to missing (Source: SDC Mergers and Corporate Transactions database).
High Closely-Held Shares Dummy	Equals 1 if the firm's insider ownership is in the upper quartile of all Worldscope firms (WC08021) in that calendar year.
Total Assets (log)	Book value of total assets in millions of constant 2000 US dollars (Source: Worldscope item WC07230)
Return on Assets	(Net Income before Preferred Dividends + ((Interest Expense on Debt - Interest Capitalized ) * (1-Tax Rate))) / Average of Last Year's and Current Year's (Total Capital + Last Year's Short Term Debt & Current Portion of Long Term Debt) * 100 (Worldscope item WC08376)
Market-to-Book	(Book value of total assets (Worldscope item WC02999)-book value of equity (WC05491 <sup>*</sup> WC05301)+ market value of equity (WC08001))/book value of assets (WC02999)
Long-term Debt/Assets	Ratio of long-term debt to book value of assets (Worldscope items WC03251/WC02999)
Sales Growth	One-year local country CPI inflation-adjusted sales growth (Worldscope item WC01001)
State-Controlled Fund Dummy	Equals 1 if the firm is targeted by a sovereign wealth fund (SWF) or state-controlled funds. A SWF is identified as a financial acquirer in Securities Data Corporation under ACQUIROR_TYPE data item and matched by name (SDC data item AN) to a list of SWFs at the SWF Institute website, <u>http://www.swfinstitute.org/funds.php</u> ). Government-controlled or public investment funds are defined by a primary Standard Industrial Classification (SIC) code in the 999A-G, 9000 range and/or government acquirers (defined for the ultimate parent) with any of the following SIC codes related to investment offices, pension, health and welfare funds, trusts, or holding companies: 6019, 6371, 6722, 6726, 6798, 6799. (Source: SDC Mergers and Corporate Transactions database, SWF Institute).
Minority Block Acquisition Dummy	Equals 1 if the deal is a minority block purchase (less than 50% of target firm's shares) and 0 if the deal is majority control acquisition (Source: SDC Mergers and Corporate Transactions database)

# Table A1. Variable Definitions. (continued)

Variable	Definition
CMARs (-10, +10), CMARs (-5, +5), CMARs (-1, +1)	Market-adjusted cumulative abnormal returns for the $(-10, +10)$ interval are cumulated from 10 days before to up to 10 days after when centered on the date of announcement of an acquisition. (Source: SDC Mergers and Corporate Transactions database and Datastream). Similarly defined for $(-5,+5)$ and $(-1,+1)$ intervals centered on the announcement date.
Premium (-4w, 0), (-1w, 0), (-1d, 0)	Bid premium of the bid price measured relative to the closing stock price of the target four weeks prior to the announcement date, expressed as a percentage (defined using SDC codes (HOSTPR – HOSTC4WK) / HOSTC4WK) * 100). Similar for premium relative to closing stock price of target one week prior (-1w, 0) and one day prior (-1d, 0). (Source: SDC Mergers and Corporate Transactions database)

# Table A2. Summary Statistics on Variables.

Variable	Obs	Mean	StdDev	Min	Max	Variable	Obs	Mean	StdDev	Min	Max
Table 3 (Variables of Interest)						Table 3 (Explanatory Variables)					
Government-controlled acquirer deal ra	atio between countrie	es <i>i</i> and <i>j</i> i	n year t								
(by deal counts)	13,324	0.06	0.18	0.00	1.00	Annual Exchange Rate Return Difference	13,624	0.02	0.16	-1.10	1.10
(by deal value)	9,948	0.05	0.20	0.00	1.00	Annual Real Stock Market Return Differences	13,121	0.00	0.26	-1.45	1.52
(minority stakes only)	11,705	0.05	0.19	0.00	1.00	Log GDP per capita Differences	14,564	0.47	1.54	-4.58	4.69
(majority stakes only)	10,669	0.05	0.18	0.00	1.00	GDP Growth Differences	14,266	0.00	0.04	-0.26	0.35
Corporate acquirer deal ratio between o	countries <i>i</i> and <i>j</i> in ye	ear t									
(by deal counts)	15,911	0.07	0.12	0.00	1.00	Geographic Proximity('000)	15,433	-3.54	2.91	-12.35	-0.03
(by deal value)	15,745	0.07	0.16	0.00	1.00	Market Correlation	13,812	0.39	0.18	-0.18	0.78
(minority stakes only)	15,827	0.07	0.13	0.00	1.00	Industry Dissimilarity	12,706	0.05	0.02	0.01	0.16
(majority stakes only)	15,839	0.07	0.13	0.00	1.00	Anti-Self Dealing Index Differences	11,326	0.00	0.33	-0.86	0.86
Excess government-controlled acquired	r deal ratio between c	countries i	i and <i>j</i> in ye	ar t							
(by deal counts)	13,319	0.00	0.19	-1.00	1.00	Accounting Standards Differences	10,507	0.03	0.13	-0.54	0.59
(by deal value)	9,936	0.00	0.23	-1.00	1.00	PolityIV Democracy Differences	12,904	0.51	4.89	-20.00	20.00
(minority stakes only)	11,685	0.00	0.20	-1.00	1.00	FDI Restrictiveness Acquirer (Target)	6,729	0.17	0.08	0.06	0.39
(majority stakes only)	10,669	0.00	0.20	-1.00	1.00	European Union Dummy	15,916	0.10	0.30	0.00	1.00
						Tax Haven Dummy Target (Acquirer)	15,916	0.09	0.29	0.00	1.00
						Current Account Differences	12,277	0.99	9.77	-240.0	57.00
						Total Reserve % GDP	12,885	-0.01	0.21	-1.02	1.02
						Govt Domestic Acquisition Activity (acquirer)	14,683	0.05	0.09	-0.05	1.34
						Govt Expenditures % GDP (acquirer)	13,423	18.56	4.88	3.00	76.00

# Table A2. Summary Statistics on Variables. (continued)

Variable	Obs	Mean	StdDev	Min	Max	Variable	Obs	Mean	StdDev	Min	Max
Table 4 (Minority Stake Deals)						Table 4 (Majority Stake Deals)					
Government Acquirer dummy	3,896	0.04	0.20	0.00	1.00	Government Acquirer dummy	1,958	0.03	0.16	0.00	1.00
Related Industry Dummy	3,893	0.47	0.50	0.00	1.00	Related Industry Dummy	1,957	0.63	0.48	0.00	1.00
Withdrawn Deals Dummy	3,896	0.45	0.50	0.00	1.00	WIthdrawn Deals Dummy	1,958	0.02	0.14	0.00	1.00
Zero-dividend dummy	3,054	0.47	0.50	0.00	1.00	High Whited and Wu Index	1,958	0.21	0.40	0.00	1.00
High Whited and Wu Index	3,896	0.21	0.41	0.00	1.00	All Cash Payment Dummy	1,317	0.73	0.44	0.00	1.00
High Hadlock-Pierce Index	3,896	0.20	0.40	0.00	1.00	Percent of Shares Acquired	1,958	0.87	0.18	0.50	1.00
High Closely-Held Shares Dummy	3,896	0.15	0.35	0.00	1.00	High Closely-Held Shares Dummy	1,958	0.24	0.43	0.00	1.00
Total Assets (log)	3,247	5.36	2.06	-1.79	10.09	Total Assets (log)	1,810	5.17	1.71	-1.80	9.75
Market-to-Book	3,110	2.02	2.26	0.40	29.60	Market-to-Book	1,733	1.86	2.09	0.40	29.60
Return on Assets	3,067	-0.02	0.37	-3.40	0.61	Return on Assets	1,755	0.00	0.38	-3.40	0.61
Long-term Debt/Assets	3,246	0.14	0.16	0.00	0.84	Long-term Debt/Assets	1,811	0.12	0.15	0.00	0.83
Sales Growth	2,820	0.31	0.94	-0.77	7.46	Sales Growth	1,720	0.25	0.83	-0.77	7.46
Average Annual Exchange Rate Return (target)	3,706	0.00	0.12	-0.82	0.29	Average Annual Exchange Rate Return (target)	1,868	-0.01	0.11	-0.82	0.29
Annual Real Stock Market Return (target)	3,692	0.12	0.24	-0.49	1.48	Annual Real Stock Market Return (target)	1,860	0.12	0.21	-0.49	1.48
Log GDP per capita (target)	3,680	9.48	1.23	5.75	10.91	Log GDP per capita (target)	1,853	9.67	1.09	5.79	10.66
Anti-Self Dealing Index (target)	3,292	0.60	0.23	0.17	1.00	Anti-Self Dealing Index (target)	1,761	0.59	0.24	0.17	1.00
Accounting Disclosure Index (target)	3,214	68.20	8.09	24.00	83.00	Accounting Disclosure Index (target)	1,731	68.64	7.92	24.00	83.00
Industry Dissimilarity	3,302	0.04	0.02	0.01	0.15	Industry Dissimilarity	1,739	0.04	0.02	0.02	0.16
PolityIV Democracy (acquirer)	3,535	8.76	3.77	-	10.00	PolityIV Democracy (acquirer)	1,824	9.26	2.79	-10.00	10.00
Current Account (acquirer)	3,424	0.61	5.78	-	51.00	Current Account (acquirer)	1,788	0.67	5.08	-16.00	23.00
Govt Domestic Acquisition Activity (acquirer)	3,364	0.04	0.07	0.00	0.86	Govt Domestic Acquisition Activity (acquirer)	1,773	0.03	0.06	0.00	0.80
Govt Expenditures % GDP (acquirer)	3,099	17.64	4.06	3.00	34.00	Govt Expenditures % GDP (acquirer)	1,670	18.58	4.05	7.00	29.00

# Table A2. Summary Statistics on Variables. (continued)

Variable	Obs	Mean	StdDev	Min	Max	Variable	Obs	Mean	StdDev	Min	Max
Table 5 (Financials and Utilities included)						Table 5 (Financials and Utilities excluded)					
State-controlled Fund Dummy	922	0.32	0.47	0.00	1.00	State-controlled Fund Dummy	656	0.31	0.46	0.00	1.00
Withdrawn Deals Dummy	922	0.44	0.50	0.00	1.00	Withdrawn Deals Dummy	656	0.47	0.50	0.00	1.00
Related Industry Dummy	880	0.41	0.49	0.00	1.00	Zero-dividend dummy	378	0.49	0.50	0.00	1.00
Zero-dividend dummy	585	0.40	0.49	0.00	1.00	High Whited and Wu Index	485	0.29	0.45	0.00	1.00
High Whited and Wu Index	751	0.24	0.43	0.00	1.00	High Hadlock-Pierce Index	485	0.17	0.38	0.00	1.00
High Hadlock-Pierce Index	751	0.14	0.35	0.00	1.00	High Closely-Held Shares Dummy	485	0.14	0.35	0.00	1.00
High Closely-Held Shares Dummy	751	0.14	0.35	0.00	1.00	Total Assets (log)	391	6.22	2.26	0.57	11.39
Total Assets (log)	611	6.74	2.40	0.57	11.39	Market-to-Book	352	2.12	2.51	0.50	21.66
Market-to-Book	554	1.87	2.21	0.39	21.66	Return on Assets	354	0.02	0.28	-2.37	0.59
Return on Assets	550	0.02	0.30	-2.67	0.64	Long-term Debt/Assets	391	0.18	0.18	0.00	0.89
Long-term Debt/Assets	611	0.17	0.18	0.00	0.89	Sales Growth	324	0.39	1.09	-0.77	7.46
Sales Growth	512	0.42	1.19	-0.77	7.46	Average Annual Exchange Rate Return (target)	535	0.00	0.10	-0.41	0.29
						Annual Real Stock Market Return (target)	530	0.16	0.23	-0.43	1.48
						Log GDP per capita (target)	571	9.53	1.11	5.82	10.63
						Anti-Self Dealing Index (target)	343	0.63	0.24	0.17	1.00
						Accounting Standards Index (target)	338	68.41	7.63	36.00	83.00
						Industry Dissimilarity	455	0.05	0.02	0.02	0.15
						PolityIV Democracy (acquirer)	552	2.10	7.49	-10.00	10.00
						Current Account (acquirer)	494	4.82	17.62	-240.00	39.00
						Govt Domestic Acquisition Activity (acquirer)	510	0.19	0.20	0.00	1.00
						Govt Expenditures % GDP (acquirer)	507	16.79	6.51	6.00	76.00
						-					

# Table A2. Summary Statistics on Variables. (continued)

Variable	Obs	Mean	StdDev	Min	Max	Variable	Obs	Mean	StdDev	Min	Max
Table 7 (Panel A)						Table 7 (Panel B, Financials and Utilities exclu	uded)				
CMAR (-10, +10)	5,056	0.09	0.40	-0.91	10.67	CMAR (-10, +10)	437	0.11	0.33	-0.76	2.64
Withdrawn Deals Dummy	5,787	0.42	0.49	0.00	1.00	Withdrawn Deals Dummy	491	0.40	0.49	0.00	1.00
Related Industry Dummy	5,787	0.33	0.47	0.00	1.00	Related Industry Dummy	491	0.19	0.39	0.00	1.00
Government Acquirer dummy	5,787	0.05	0.21	0.00	1.00	State-controlled Fund Dummy	491	0.31	0.46	0.00	1.00
High Whited and Wu Index	3,851	0.21	0.41	0.00	1.00	High Whited and Wu Index	323	0.30	0.46	0.00	1.00
High Closely-Held Shares Dummy	3,851	0.15	0.36	0.00	1.00	High Closely-Held Shares Dummy	323	0.15	0.36	0.00	1.00
Total Assets (log)	3,289	5.44	2.06	-1.79	10.09	Total Assets (log)	276	5.73	2.23	0.57	10.09
Market-to-Book	3,171	1.97	2.17	0.40	29.60	Market-to-Book	267	2.15	2.96	0.51	29.60
Long-term Debt/Assets	3,288	0.14	0.16	0.00	0.84	Long-term Debt/Assets	276	0.12	0.13	0.00	0.75
Sales Growth	2,860	0.30	0.91	-0.77	7.46	Sales Growth	230	0.36	0.98	-0.77	6.50
Average Annual Exchange Rate Return (target)	5,450	0.00	0.12	-0.87	0.29	Average Annual Exchange Rate Return (target)	398	0.01	0.10	-0.41	0.26
Annual Real Stock Market Return (target)	5,421	0.12	0.23	-0.49	1.48	Annual Real Stock Market Return (target)	398	0.16	0.22	-0.42	1.48
Log GDP per capita (target)	5,493	9.62	1.06	5.55	10.91	Log GDP per capita (target)	426	9.70	0.97	5.97	10.61
Anti-Self Dealing Index (target)	5,022	0.62	0.23	0.09	1.00	Anti-Self Dealing Index (target)	236	0.61	0.23	0.09	1.00
Accounting Standards Index (target)	4,923	69.33	7.51	36.00	83.00	Accounting Standards Index (target)	234	68.90	8.25	40.00	83.00
Industry Dissimilarity	4,647	0.04	0.02	0.01	0.15	Industry Dissimilarity	342	0.05	0.02	0.02	0.13
PolityIV Democracy (acquirer)	5,301	8.86	3.58	-10.00	10.00	PolityIV Democracy (acquirer)	413	1.71	7.74	-10.00	10.00
Current Account (acquirer)	4,702	0.49	5.53	-21.00	51.00	Current Account (acquirer)	372	3.64	19.39	-240.00	39.00
Govt Domestic Acquisition Activity (acquirer)	4,743	0.04	0.07	-0.05	1.00	Govt Domestic Acquisition Activity (acquirer)	383	0.20	0.20	0.00	1.00
Govt Expenditures % GDP (acquirer)	4,366	17.66	4.10	3.00	34.00	Govt Expenditures % GDP (acquirer)	384	17.16	6.58	8.00	76.00
Govt Expenditures % GDP (acquirer)	4,366	17.00	4.10	5.00	54.00	Gove Expenditures % GDP (acquirer)	384	17.16	6.58	8.00	/0.00