INTERNATIONAL RELATIONS AND SOVEREIGN WEALTH FUNDS' POLITICAL VALUE: EVIDENCE FROM A QUASI-NATURAL EXPERIMENT

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INTRODUCTION

Since 1977, governments around the world have raised approximately $4 trillion by successfully selling state-owned enterprises ("SOEs") and assets to domestic and international private investors.[1] This impressive number describes perfectly the rise of privatization programs as a core state policy, the strong, positive economic and financial consequences of which have been extensively documented in the literature.[2] Despite the fact that this compelling evidence seems to suggest that states should be reducing their ownership of corporate equity, the question of whether a government might ever act as an objective, profit-oriented global investor managing its nation's wealth as an investment fiduciary remains at least partially unanswered. In fact, recent research on the impact of state ownership on corporate valuation has provided mixed evidence[3] supporting the hypothesis that ownership transfer from state-owned entities to private investors is not alone sufficient to generate sustainable efficiency gains for the privatized firms.[4] Extant literature's inconclusiveness is further exacerbated by the

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1. William L. Megginson, *Privatization Trends and Major Deals in 2014 and Two-Thirds 2015*, PB REPORT, 2014/2015, at 5, 10–11, http://www.feem.it/m/publications_pages/2017130949104PB_Annual_Report_2014-2015.pdf; *see also* William L. Megginson, *Privatization Trends and Major Deals in 2015 and 2016*, PB REPORT, 2015/2016, at 5, 10–11, https://assets.kpmg.com/content/dam/kpmg/it/pdf/2017/01/ThePBReport2015-2016.pdf.

2. *See generally* William L. Megginson, *Privatization, State Capitalism, and State Ownership of Business in the 21st Century*, FOUND. & TRENDS FIN. (forthcoming); William L. Megginson & Jeffry M. Netter, *From State to Market: A Survey of Empirical Studies on Privatization*, 39 J. ECON. LITERATURE 321 (2001); Andrei Shleifer, *State Versus Private Ownership*, 12 J. ECON. PERSP. 133 (1998).

3. Megginson, *supra* note 2, at 49.

4. Stacey R. Kole & J. Harold Mulherin, *The Government as a Shareholder: A Case from the United States*, 40 J.L. & ECON. 1, 17 (1997).

well-documented, simultaneous rise of privatization programs and government purchases of corporate assets and equity.[5] In particular, governments acquired more assets through stock purchases ($1.52 trillion) than they sold through share issue privatizations and direct sales ($1.48 trillion) from 2001 to 2012.[6]

This puzzling trend towards forms of economic socialization should be put in the proper context. The rise of government-owned institutions, known as sovereign wealth funds ("SWFs"), conducting equity purchases as fiduciary investors and acting as passive shareholders attempting to generate long-run financial returns, rather than directly operating businesses as SOEs, represents a paradigm shift in the economic role assumed by governments all over the world.[7]

This historical structural break in governments' economic role has been extensively studied over the last ten years.[8] In particular, researchers and practitioners have noticed that most transactions involving SWFs have taken place across borders,[9] raising severe concerns about the potential social and economic implications of foreign governments' involvement in a target state's economic and political environment.[10] Interestingly, most studies have identified no (or weak) differences between SWFs' investment behaviors and privately-owned funds' asset management strategies.[11] Only a few papers provide support for SWFs being involved in politically motivated transactions. For instance, political relations might actually play a critical role in determining in which countries a given SWF is more likely to invest.[12] In particular, these papers

5. Megginson, *supra* note 2, at 5, 57.

6. William L. Megginson & Veljko Fotak, *Rise of the Fiduciary State: A Survey of Sovereign Wealth Fund Research*, 29 J. ECON. SURV. 733, 734 (2015); *Setting Out the Store*, ECONOMIST (Jan. 11, 2014), http://www.economist.com/news/briefing/21593458-advanced-countries-have-been-slow-sell-or-make-better-use-their-assets-they-are-missing.

7. *See, e.g.*, Megginson & Fotak, *supra* note 6, at 737, 741.

8. *See generally id.*; Veljko Fotak et al., *A Financial Force to be Reckoned With? An Overview of Sovereign Wealth Funds* (European Corp. Governance Inst., Working Paper No. 476/2016, 2016).

9. *See* William L. Megginson et al., *Determinants of Sovereign Wealth Fund Cross-Border Investments*, 48 FIN. REV. 539, 543, 545 (2013).

10. *See, e.g.*, I. Serdar Dinc & Isil Erel, *Economic Nationalism in Mergers and Acquisitions*, 68 J. FIN. 2471, 2471–72 (2013).

11. Megginson et al., *supra* note 9, at 567; *see, e.g.*, Rolando Avendaño & Javier Santiso, *Are Sovereign Wealth Funds' Investments Politically Biased? A Comparison with Mutual Funds* 29 (OECD Dev. Ctr., Working Paper No. 283, 2009); George Andrew Karloyi & Rose C. Liao, *What is Different About Government-Controlled Acquirers in Cross-Border Acquisitions?* 28–29 (Fondazione Eni Enrico Mattei, Working Paper No. 38.2010, 2009).

12. Sofia A. Johan et al., *Determinants of Sovereign Wealth Fund Investment in Private Equity versus Public Equity*, 44 J. INT'L BUS. STUD. 155, 165–66 (2013); April M. Knill et al., *Sovereign Wealth Fund Investment and the*

provide evidence of SWFs being more likely to invest in countries in which local governments have weaker political relations with the SWFs.[13] This ambiguous empirical evidence creates a tension further exacerbated by findings reported by others[14] who identify evidence consistent with the existence of a SWF discount in the equity market,[15] which might be associated with SWFs having political goals, but the causes have not yet been fully identified.[16]

These contrasting results have ignited an intense political discussion about whether SWFs should be subjected to stricter regulation than other domestic (and foreign) privately owned investment vehicles.[17] SWFs received wide coverage for the first time in 2007, when China Investment Corp. ("CIC") purchased a $3 billion, nonvoting equity stake in Blackstone Group LP immediately after its IPO.[18] After this first transaction, several other economically sizable investments took place, with SWFs collectively investing more new capital into global financial institutions than any other single entity during the financial crisis, except for the entire United States government.[19] These large investments raised political concerns,[20] mainly driven by the possibility that SWFs' capital could be used to further political purposes and to acquire stakes in strategic industries while hiding behind their extremely low level of transparency.[21] Furthermore, the enormous average transaction size and the observed shift of a state's resources from treasury bonds towards international equity markets is perceived as a potential threat to market stability, which might trigger new equity price bubbles and periods of high volatility in financial markets.[22] Finally, SWFs are state-owned entities and therefore

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Return-to-Risk Performance of Target Firms, 21 J. FIN. INTERMEDIATION 315, 318 (2012).

13. *See* Johan et al., *supra* note 12, at 165–66; Knill, et al., *supra* note 12, at 318.

14. *See generally* Bernardo Bortolotti et al., *The Sovereign Wealth Fund Discount: Evidence from Public Equity Investments*, 28 REV. FIN. STUD. 2993 (2015).

15. *Id.* at 2995.

16. *Id.* at 3000.

17. *See, e.g.*, Megginson & Fotak, *supra* note 6, at 746–49.

18. *Id.* at 741.

19. *Id.*

20. *See* Krishna Guha, *Warning over Sovereign Wealth Funds*, FIN. TIMES (June 22, 2007), https://www.ft.com/content/7963f2f2-2021-11dc-9eb1-000b5df10621?mhq5j=e1; Lawrence Summers, *Sovereign Wealth Funds Shake the Logic of Capitalism*, FIN. TIMES (July 30, 2007), https://www.ft.com/content/8c9dea94-3e30-11dc-8f6a-0000779fd2ac?mhq5j=e1; Steven R. Weisman, *Concern About 'Sovereign Wealth Funds' Spreads to Washington*, N.Y. TIMES (Aug. 20, 2007), http://www.nytimes.com/2007/08/20/business/worldbusiness/20iht-wealth.4.7186699.html.

21. Megginson & Fotak, *supra* note 6, at 741; *see, e.g.*, Fotak et al., *supra* note 8, at 8.

22. Megginson & Fotak, *supra* note 6, at 741.

might have detrimental effects on firms' corporate governance or even trigger impulsive political reactions, such as new forms of financial protectionism.[23]

Despite the fact that these concerns have been mitigated by SWFs acting as passive and non-confrontational shareholders,[24] the political debate remains open and characterized by a strong, partially ideologically based hostility towards SWFs' cross-border investments.[25] This political opposition is exemplified by a famous article published by the *Financial Times* in which Lawrence Summers expressed his concerns about the possibility of foreign governments directly influencing the U.S. economic and political systems through direct investments realized through their SWFs.[26] In particular, Summers argued that there

> are . . . particular risks associated with ownership by government-controlled entities, particularly where the ownership stake is taken through direct investments. The logic of the capitalist system depends on shareholders causing companies to act so as to maximise the value of their shares. It is far from obvious that this will over time be the only motivation of governments as shareholders. They may want to see their national companies compete effectively, or to extract technology or to achieve influence.[27]

An extensive legal literature has developed around these concerns, complementing the economic research and providing different opinions about whether or not and to what extent SWFs should be regulated.[28] However, it appears impossible to provide conclusive evidence in support of any specific hypothesis absent a proper empirical identification of the economic consequences of SWFs' foreign investments. In this sense, *Sovereign Wealth Fund Investments and the US Political Process* represents a particularly interesting attempt to study SWFs' political value. The authors exploit the Supreme Court's ruling in *Citizens United v. Federal Election Commission*[29] as an exogenous shock to corporate campaign finance activities to identify within a quasi-causal framework

23. Dinc & Erel, *supra* note 10, at 2473.

24. *See* Megginson et al., *supra* note 9, at 541.

25. Dinc & Erel, *supra* note 10, at 2473. Most governments actively court SWFs' investments, with the United Kingdom being the most successful solicitor by far. Megginson & Fotak, *supra* note 6, at 742.

26. Summers, *supra* note 20.

27. *Id.*

28. *See generally* Avendaño & Santiso, *supra* note 11; Richard A. Epstein & Amanda M. Rose, *The Regulation of Sovereign Wealth Funds: The Virtues of Going Slow*, 76 U. CHI. L. REV. 111 (2009); Adam Gutin, *Regulating Sovereign Wealth Funds in the U.S.: A Primer on SWFs and CFIUS*, 5 FLA. INT'L U. L. REV. 745 (2010).

29. 558 U.S. 310 (2010).

whether this form of political connection is valuable to SWFs.[30] In particular, this ruling permits unrestricted individual and corporate contributions to independent, expenditure-only political committees, often called "Super PACs."[31] The liberalization of individual and corporate political contributions implicitly allowed foreign investors to potentially obtain representation in the American political process through the acquisition of U.S.-based firms.[32] SWFs are attracted to firms engaged in campaign finance and target firms' political contributions increase after a SWF's investment.[33] Furthermore, SWFs' attraction to campaign finance firms increased following *Citizens United*.[34] Despite the fact that endogeneity in SWFs' ownership is pervasive and extremely difficult to fully address,[35] these results provide some support for the hypothesis that their investment behaviors are at least partially based on political motivations and that these funds might actually be affecting the structure and outcomes of the U.S. political system.[36]

In this Article, we attempt to test for the existence of SWFs' political value[37] from a different perspective: if governments exploit SWFs as investment vehicles aimed at pursuing political goals, then international relations will have a strong impact on both (1) SWFs' investment behavior[38] and (2) the level of regulatory scrutiny received from foreign regulators. The latter might directly affect firms' strategies and investment policies, imposing deviations from a firm's value-maximizing equilibrium and therefore resulting in a lower market valuation.[39] Thus, if we can identify an exogenous shock to international political relations, it would be possible to employ an event study methodology to identify the economic consequences of SWFs' political value. We argue that the recent election of Donald J. Trump as President of the United States represents the ideal setting in which to identify whether foreign

30. Paul Calluzzo et al., *Sovereign Wealth Fund Investments and the US Political Process*, 48 J. INT'L BUS. STUD. 222, 223 (2017).

31. *Citizens United*, 558 U.S. at 365–66; Calluzzo et al., *supra* note 30, at 222.

32. *Citizens United*, 558 U.S. at 362; Calluzzo et al., *supra* note 30, at 222.

33. Calluzzo et al., *supra* note 30, at 224.

34. *Id.*

35. Megginson & Fotak, *supra* note 6; *See* Fotak et al., *supra* note 8;

36. *See* Bortolotti et al., *supra* note 14; Calluzzo et al., *supra* note 30 (providing extensive survey of literature studying whether SWFs act as political entities); Megginson & Fotak, *supra* note 6; Avendaño & Santiso, *supra* note 11.

37. In this Article, we define an SWF's "political value" as any economic consequence of an SWF's political objectives caused by or associated with its ownership in a target firm. This definition has not been formalized in extant literature but is consistent with those implicitly used in previous studies on government ownership and political connection. For a survey of extant literature, see generally sources cited *supra* note 2.

38. *See* Knill et al., *supra* note 12.

39. Note, this would be consistent with the SWF discount observed by Bortolotti et al., *supra* note 14, at 2995, 3000.

SWFs' American-based targets are characterized by a higher sensitivity to international political relations, *ceteris paribus*. In particular, our identification strategy is based on the hypothesis that if SWFs are political vehicles used by foreign governments to affect the U.S. political system, then we should observe a strong heterogeneity in firms' reactions to this unexpected electoral outcome, conditional on which SWF owns them. That is, firms owned by SWFs from countries that were heavily attacked by then-candidate Trump during his presidential campaign (directly or indirectly) should react more negatively than those owned by "non-attacked" SWFs (countries).

We test this hypothesis by studying fifty-two public, U.S.-based firms partially owned by SWFs, and we identify weak support for international political relations being priced in the market. While concerns related to endogeneity in SWFs' investments are attenuated by the use of a quasi-natural experiment, the small sample size and self-selection in information disclosure[40] should be carefully taken into account when interpreting these results. Nonetheless, visual inspection of the differential in the cumulative abnormal returns experienced by firms partially owned by Middle Eastern SWFs versus other firms in our sample provides additional evidence[41] (or at least a new anecdote) calling for further research aimed at identifying, within a causal framework, whether or not SWFs are political entities.

The remainder of the Article is organized as follows. Part I discusses the validity of the 2016 presidential elections as a quasi-natural experiment to study the effect of an exogenous shock to international relations on the economic consequences of SWFs' investments. Part II presents the data used and methodology employed. We discuss results in Part III. The Article concludes by offering political and regulatory considerations.

I. THE 2016 PRESIDENTIAL ELECTION AS A QUASI-NATURAL EXPERIMENT

After an extremely long and tortuous campaign, Trump won the U.S. presidential election on November 8, 2016.[42] It was a close election, one in which Democrat Hillary Clinton received the

40. *See infra* text accompanying notes 62–68.

41. *See generally* JOHN Y. CAMPBELL ET AL., THE ECONOMETRICS OF FINANCIAL MARKETS (1997), for a detailed overview of the main issues and methodologies applied in event studies.

42. For a timeline of the election, see *Timeline: Pivotal Moments in Trump's Presidential Campaign*, REUTERS, https://www.reuters.com/article/us-usa-election-timeline-factbox/timeline-pivotal-moments-in-trumps-presidential-campaign-idUSKBN1341FJ (last visited Oct. 29, 2017).

majority of the popular vote but could not reach the required majority in the Electoral College.[43]

This electoral outcome was absolutely unexpected, the popular press having heavily speculated about an easy win for the Democratic candidate until the very morning of Election Day.[44] According to the *New York Times*, Trump had less than a twenty-percent probability of defeating Clinton as of the morning of the election.[45]

This unexpected result occurred after a long campaign during which Trump heavily attacked the Obama administration's foreign policy, committing to impose a radical shift towards forms of economic protectionism and nationalism.[46] In particular, Trump ran his campaign on a platform based on policies aimed to intensify border protection, exemplified by his proposal to build a wall at the Mexican border to limit illegal immigration as well as his promise to implement a temporary immigration ban against Muslims.[47] Furthermore, Trump committed to imposing a political shift towards economic protectionism, arguing for the necessity of reviewing international trade agreements such as the North American Free Trade Agreement, entered into with Mexico and Canada during the Clinton administration, and the Trans-Pacific Partnership, signed by President Barack Obama.[48] This strong movement towards bilateral trade was heavily criticized by the international

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43. For details concerning the election's results, see *Presidential Results*, CNN, http://edition.cnn.com/election/results/president (last visited Oct. 29, 2017).

44. *See, e.g.*, Josh Katz, *Who will be President?*, N.Y. TIMES: THE UPSHOT (Nov. 8, 2016, 10:20 PM), https://www.nytimes.com/interactive/2016/upshot/presidential-polls-forecast.html.

45. Maurice Tamman, *Clinton Has 90 Percent Chance of Winning: Reuters/Ipsos States of the Nation*, REUTERS (Nov. 7, 2016), https://www.reuters.com/article/us-usa-election-poll/clinton-has-90-percent-chance-of-winning-reuters-ipsos-states-of-the-nation-idUSKBN1322J1.

46. Sonam Sheth, *7 Presidential Actions Trump Blasted Obama for and Then Did Himself*, BUS. INSIDER (Apr. 17, 2017), http://www.businessinsider.com/trump-obama-criticisms-tweets-golf-executive-orders-syria-2017-4/#after-a-chemical-attack-killed-hundreds-in-the-suburbs-of-damascus-in-august-2013-trump-continued-to-ridicule-the-obama-white-houses-debate-over-whether-to-militarily-engage-syria-9.

47. *See, e.g.*, Nick Corasaniti, *Donald Trump Releases Plan to Combat Illegal Immigration*, N.Y. TIMES (Aug. 16, 2015), https://www.nytimes.com/2015/08/17/us/politics/trump-releases-plan-to-combat-illegal-immigration.html?rref=collection%2Fnewseventcollection%2Felection-2016; Maggie Haberman, *Donald Trump Calls for Surveillance of 'Certain Mosques' and a Syrian Refugee Database*, N.Y. TIMES (Nov. 21, 2015), https://www.nytimes.com/2015/11/22/us/politics/donald-trump-syrian-muslims-surveillance.html?rref=collection%2Fnewseventcollection%2Felection-2016.

48. *See, e.g.*, Nick Corasaniti et al., *Donald Trump Vows to Rip Up Trade Deals and Confront China*, N.Y. TIMES (June 28, 2016), https://www.nytimes.com/2016/06/29/us/politics/donald-trump-trade-speech.html?rref=collection%2Fnewseventcollection%2Felection-2016.

community and caused a deterioration in President Trump's international political relations.[49]

Therefore, to the extent that the election outcome was unexpected[50] and caused a sudden and discrete change in the expected quality of future international relations between the United States of America and several foreign countries,[51] it would be possible to claim that the 2016 U.S. presidential election does represent a valid quasi-natural experiment that we can exploit to identify the extent to which international political relations are priced in the American equity market through SWFs' investments.

II. DATA SELECTION AND IDENTIFICATION STRATEGY

There is no consensus on what constitutes a SWF,[52] but the literature seems to be converging towards the selection criteria discussed in several recent papers.[53] According to these papers, SWFs are classified as: (1) wealth funds, rather than pension funds, (2) wholly owned by a sovereign government but organized separately from the central bank or the finance department, (3) that invest both domestically and internationally in risky assets (equity, real estate, etc.) to (4) achieve long term financial returns.[54] Table 1 summarizes those SWFs that fulfill the imposed selection criteria, including their inception dates, their sources of funding, and estimates of their value of assets under management.[55]

TABLE 1: SOVEREIGN WEALTH FUNDS[56]

Country	Fund Name	Inception Year	Source of Fund	Total Assets
Australia	Future Fund	2006	Various Commodities	95.0
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	1999	Oil	37.3

49. *See, e.g.*, Max Fisher, *Uncertainty Over Donald Trump's Foreign Policy Risks Global Instability*, N.Y. TIMES (Nov. 9, 2016), https://www.nytimes.com/2016/11/10/world/americas/donald-trump-foreign-policy.html?rref=collection%2Fnewseventcollection%2Felection-2016&_r=0.

50. Historical forecasts suggest this was the case. *See, e.g.*, Tamman, *supra* note 45.

51. *See, e.g.*, Fisher, *supra* note 49.

52. *See, e.g.*, Bortolotti et al, *supra* note 14; Megginson & Fotak, *supra* note 6.

53. *See, e.g.*, Megginson et al., *supra* note 9, at 543.

54. *See, e.g.*, Bortolotti, *supra* note 14, at 3001.

55. Fotak et al., *supra* note 8.

56. *See* Megginson & Fotak, *supra* note 6. Table 1 lists eighteen SWFs (sponsored by fifteen countries) that meet the imposed selection criteria. In particular, it reports each fund's country of origin, name, year of inception, principal source of funding, and estimated value of assets under management. Monetary values are in billions of U.S. dollars.

Brunei	Brunei Inv. Agency	1983	Oil	40.0
China	China Inv. Corp.	2007	Trade Surplus	746.7
Ireland	National Pensions Reserve Fund	2001	Fiscal Surpluses	23.5
Korea	Korea Inv. Corp.	2005	Gov't-Linked Cos.	91.8
Kuwait	Kuwait Inv. Auth.	1953	Oil	592.0
Libya	Libyan Inv. Auth.	2006	Oil	66.0
Malaysia	Khazanah Nasional	1993	Gov't-Linked Cos.	41.6
New Zealand	Superannuation Fund	2001	Fiscal Surpluses	20.2
Norway	Gov't Pension Fund Global	1990	Oil	824.9
Oman	State General Reserve Fund	2006	Oil and Gas	6.0
Qatar	Qatar Inv. Auth.	2003	Oil and Gas	256.0
Singapore	Temasek Holdings	1974	Gov't-Linked Cos.	193.6
Singapore	Gov't of Singapore Inv. Corp.	1981	Trade Surplus	220.0
UAE	Mubadala Dev. Co.	1993	Oil	66.3
UAE	Istithmar World	2003	Gov't-Linked Cos.	11.5
UAE	Abu Dhabi Inv. Auth. and Council	2007	Oil	773.0

Unlike in other studies, we need to identify SWFs' ownership at a specific point of time (November 8, 2016) and, therefore, we cannot simply rely on historical transactions reported on SDC Platinum to populate our sample. Consequently, we build our dataset by following a three-step approach. First, we collect observations for all U.S.-based equity issues and M&A transactions involving SWFs occurring after January 1, 2000, from SDC Platinum. Second, we check the identified firms' ownership structure as at the end of the fourth quarter of 2016, as reported by Bloomberg. We then integrate these observations with information about SWFs' investments directly reported by Bloomberg. Third, we match the collected data with the Center for Research in Security Prices and Compustat to obtain relevant market and accounting data. This selection process allows us to identify fifty-two public U.S. firms partially owned by four different SWFs. In particular, we are able to identify a set of equity participations in American, publicly-traded

firms owned by Qatar Investment Authority,[57] Temasek Holdings (Singapore),[58] Mubdala Development Company (UAE),[59] and Norwegian Government Pension Fund Global.[60] Table 2 provides summary statistics.

TABLE 2: SUMMARY STATISTICS[61]

Panel A: Full Sample			
Variable	***N***	**Mean**	**Standard Deviation**
Qatar Inv. Auth. (ME)	4		
Temasek Singapore (Non-ME)	9		
Norwegian Gov't Pension Fund Global (Non-ME)	38		
Mubadala Dev. Co. (ME)	1		
Ln Asset	52	9.219	2.252
Mkt to Book	52	3.553	10.67
Leverage	52	0.656	0.326
ROA	52	–0.044	0.288
Dividend Ratio	52	0.013	0.019
Panel B: Middle Eastern Funds vs. Other Funds			
Variable	**Mean_ME**	**Mean_non-ME**	***T*-Stat (Mean_ME – Mean_non-ME)**
Ln Asset	8.293	9.337	1.070
Mkt to Book	1.351	3.834	0.531
Leverage	0.607	0.662	0.388
ROA	–0.233	–0.047	–0.188
Dividend Ratio	0.017	0.013	–0.478

57. *See* QATAR INV. AUTHORITY, http://www.qia.qa/ (last visited Oct. 29, 2017).

58. *See* TEMASEK, http://www.temasek.com.sg/ (last visited Oct. 29, 2017).

59. *See* MUBADALA, http://www.mubadala.com/en (last visited Oct. 29, 2017).

60. *See* NORGES BANK INV. MGMT., https://www.nbim.no/ (last visited Oct. 29, 2017).

61. Panel A reports summary statistics for accounting variables for the full sample. The variables Qatar Inv. Auth., Temasek Singapore, Norwegian Gov't Pension Fund Global, and Mubadala Dev. Co. report the number of observations available for each SWF (*N*). Panel B compares each accounting variable conditional on whether or not the SWF owning the firm is located in the Middle East (ME vs. non-ME).

It is important to acknowledge that this hand-collected sample might suffer from a potential selection bias. Data availability is conditional on SWFs' voluntary disclosure[62] and, at the same time, their investment decisions might be affected by exchange- or country-specific transparency requirements.[63] Dealing with this selection bias is consequently extremely complicated since it is based on two simultaneous decisions. What is the probability that a given SWF would invest in a hypothetical firm, conditional on the specific transparency requirements imposed by regulators? What is the probability of a SWF disclosing additional, unrequired information, conditional on having invested in a firm working in an ex ante known regulatory environment? Employing a two stage Heckman selection model might help to deal with this endogeneity.[64] Unfortunately, aside from the well-known limitations of this model,[65] identifying a proper instrument appears to be particularly challenging since it is extremely difficult to properly model SWFs' investment decisions and voluntary disclosure behaviors.[66]

In this sense, exploiting an exogenous shock to international political connections helps to mitigate concerns related to this selection issue.[67] Furthermore, the fact that we could not identify major deals involving SWFs right before or after the election strengthens our results' validity. Finally, as long as a SWF's high level of opaqueness is chosen by a foreign government in order to hide its attempts to affect the U.S. political system, any bias resulting from self-selection would drive us towards finding no results.[68]

Since the analyzed shock affects the whole market, we study firms' reaction to the election outcome by employing cumulative abnormal returns ("CARs") computed over different time windows around the event.[69] In particular, we employ a simple market model to compute each firm's daily abnormal returns, which are then cumulated over the studied event periods.[70] For robustness, we also

62. For an extensive discussion on data availability, see, for example, Bortolotti et al, *supra* note 14; Megginson & Fotak, *supra* note 6.

63. Megginson et al., *supra* note 9, at 543.

64. James J. Heckman, *Sample Selection Bias as a Specification Error*, 47 ECONOMETRICA 153, 160 (1979).

65. *See, e.g.*, Shawn Bushway et al., *Is The Magic Still There? The Use of the Heckman Two-Step Correction for Selection Bias in Criminology*, 23 J. QUANTITATIVE CRIMINOLOGY 151, 153 (2007).

66. Megginson & Fotak, *supra* note 6, at 737; *see, e.g.*, Fotak et al., *supra* note 8, at 18.

67. *See* Michael R. Roberts & Toni M. Whited, *Endogeneity in Empirical Corporate Finance* 1, 41 (Simon Sch., Working Paper No. FR 11-29, 2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1748604.

68. For a detailed discussion on sample selection issues, see generally *id.*

69. For a discussion on event studies, see generally CAMPBELL ET AL., *supra* note 41.

70. *Id.*

use standardized cumulative abnormal returns ("SCARs"), computed by weighting each firm's CARs by its abnormal returns' volatility over the estimation period.[71]

As previously mentioned, our hypothesis is tested by analyzing whether or not heterogeneity in firms' reactions to the electoral outcome exists, conditional on SWFs' ownership status. Therefore, we employ cross-sectional models presenting the following structure:[72]

$$Ret_{i,g} = a_g + \sum_{j=1} \sum_{i=1} \beta_{i,j} d_{i,j} + \gamma X_i + e_i$$

Where $Ret_{i,g}$ are firm i's CARs (SCARs) over a selected event window; a_g are industry-fixed effects; d_i are indicators for the ownership percentage of SWF j in firm i; X_i is a matrix of firm specific control variables; finally, e_i, are error terms.[73] White's standard errors are employed to deal with potential size dependent heteroscedasticity in the error terms.[74] Note that as long as SWFs did not adjust their investments in anticipation of the election outcome, the model should lead to an unbiased and consistent estimate of the average treatment effect, conditional on the available sample ("Conditional Average Treatment Effect").[75]

As an alternative identification strategy, we estimate each treated firms' abnormal returns by applying the synthetic control methodology.[76] In particular, for each treated unit we use all U.S. firms (1) operating in the same four-digit Standard Industrial Classification ("SIC") industry of the studied firm (2) for which none of the SWFs in our sample is a shareholder and (3) for which stock returns are available on CRSP for the period (–250; +50) to construct a replicating portfolio mimicking the treated firms' raw returns over the estimation period (–250; –20).[77] Abnormal returns are computed as the difference between each firm's returns and its synthetic counterfactual's returns.[78] To test for the statistical significance of the computed abnormal returns around the event

71. The market model is estimated over the period (–250; –20). *See id.*

72. For an extensive review of the related empirical literature, see, for example, Megginson & Fotak, *supra* note 6, at 747–49.

73. *Id.*

74. *See generally* Halbert A. White, *Heteroskedasticity Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity*, 48 ECONOMETRICA 817 (1980).

75. *See generally* CAMPBELL ET AL., *supra* note 41.

76. Alberto Abadie & Javier Gardeazabal, *The Economic Costs of Conflict: A Case Study of the Basque Country*, 93 AM. ECON. REV. 113, 116–21 (2003) (as modified in Daron Acemoglu et al., *The Value of Connections in Turbulent Times: Evidence from the United States*, 121 J. FIN. ECON. 368, 380–81 (2016)).

77. *See id.*

78. *See id.*

date, we employ a simple *t*-test to verify whether the synthetic controls' predictive power (measured as a root mean squared percentage error ("RMSPE")) significantly decreases over the window (+2; –2) with respect to the estimation period.[79] As long as the correlation between each firm's returns and the market portfolio's returns is not affected by Trump's election, this methodology should yield an unbiased and internally valid estimate of the Conditional Average Treatment Effect.

III. MAIN RESULTS

Univariate results are generally insufficient to provide strong evidence in support of (or against) the tested hypothesis.[80] However, Panel B in Table 2 shows that firms owned by Middle Eastern SWFs are not systematically different from those owned by other SWFs in our sample.[81] Therefore, in this case a simple comparison of unconditional means might be useful to test for the existence of SWFs' political value.[82] Moving in this direction, Table 3 compares CARs and buy-and-hold abnormal returns ("BHARs") for these two subsamples.[83]

79. *See id.*
80. *See* Roberts & Whited, *supra* note 67.
81. *See supra* Table 2.
82. *See* Roberts & Whited, *supra* note 67.
83. *See generally* CAMPBELL ET AL., *supra* note 41.

TABLE 3: UNIVARIATE RESULTS[84]

Panel A: Market Model—CARs			
Window	**CAR: Treated Group**	**CAR: Control Group**	***T*-Stat (Treated – Control)**
(0; +1)	–2.38%	0.36%	1.6580
(–1; +1)	–2.37%	0.05%	1.0074
(–2; +2)	–4.41%	2.01%	2.1147**
(0; +10)	–0.65%	2.18%	0.8192
(0; +30)	–0.09%	0.96%	0.1925
Panel B: Market Model—BHARs			
Window	**CAR: Treated Group**	**CAR: Control Group**	***T*-Stat (Treated – Control)**
(0; +1)	–2.39%	0.32%	1.6182
(–1; +1)	–2.45%	0.01%	1.2778
(–2; +2)	–4.54%	2.14%	2.0664**
(0; +10)	–0.81%	2.19%	0.8373
(0; +30)	–0.52%	0.93%	0.2793

While we fail to systematically reject the null hypothesis of no difference in the returns experienced by firms partially controlled by Middle Eastern SWFs with respect to those partially owned by the other SWFs in our sample, the observed between-groups variation is provocatively large,[85] which suggests that the lack of statistical power is mainly driven by the small sample size.[86] The time window (–2; +2) seems to incorporate most of the event-specific returns volatility,[87] reporting both economically and statistically strong evidence in support of the hypothesis that SWFs might be acting as politically driven investors.[88] However, it is worth noting that the effect dissipates in the long term (thirty-day window).[89] This convergence should be carefully interpreted, since it is consistent with both market overreaction to Trump's election and uncertainty

84. Panel A reports univariate tests for difference in CARs between firms partially owned by Middle Eastern SWFs and firms partially owned by non-Middle Eastern SWFs. Panel B replicates the same analysis with BHARs. Abnormal returns are computed based on a market model estimated from –250 days from the event to –20 days from the event. ** indicates that the difference is significant at 5%.

85. *See supra* Table 3.

86. *See* Roberts & Whited, *supra* note 67.

87. *See supra* Table 3.

88. For a review of the related literature, see, for example, Megginson & Fotak, *supra* note 6, at 747–49.

89. *See supra* Table 3.

resolution or new information shocks heterogeneously affecting firms owned by SWFs.[90]

Since the treatment and control group are unmatched, observable and unobservable differences might be driving these univariate results.[91] Therefore, we proceed with multivariate tests to provide further support for the proposed hypothesis.

First, we regress firms' CARs computed around the event date, November 8, 2016, on a matrix of control variables and on indicators for each SWFs' level of percentage ownership in the firm.[92] Table 4 reports our findings.

90. For a discussion on the issue, see generally CAMPBELL ET AL., *supra* note 41.

91. *See* Roberts & Whited, *supra* note 67.

92. *See infra* Table 4.

TABLE 4: OWNERSHIP LEVEL—CARS[93]

Variables	1	2	3	4	6
	(0; +1)	**(–1; +1)**	**(–2; +2)**	**(0; +10)**	**(0; +30)**
Qatar Inv. Auth.	–0.000948	–0.00141	–0.00302*	–0.00452***	–0.00595***
	(0.000677)	(0.000874)	(0.00158)	(0.00136)	(0.00210)
Temasek Singapore	0.000453	–0.00096	–0.000883	–0.00571**	–0.00333
	(0.00071)	(0.000985)	(0.00123)	(0.00233)	(0.00614)
Norwegian Gov't Pension Fund Global	–0.00271	–0.0033	–0.0067	–0.0131*	–0.0166
	(0.00347)	(0.00415)	(0.00623)	(0.00721)	(0.0108)
Mubadala Dev. Co.	–0.00647***	–0.00440***	–0.0174***	–0.00408*	0.00428
	(0.00147)	(0.00154)	(0.0021)	(0.00236)	(0.00319)
Ln Asset	–0.00074	–0.00458	–0.00764	–0.0127*	0.00321
	(0.00324)	(0.00362)	(0.00525)	(0.00635)	(0.00837)
Mkt to Book	–0.00121***	–0.00205***	–0.00312***	–0.00319***	–0.00413***
	(0.0003)	(0.000379)	(0.000568)	(0.000587)	(0.00108)
Leverage	0.0864***	0.105***	0.136***	0.158***	0.0657
	(0.0274)	(0.0379)	(0.0476)	(0.0443)	(0.0773)
ROA	0.105***	0.173***	0.220***	0.170***	0.172
	(0.0307)	(0.0388)	(0.0529)	(0.0566)	(0.125)
Dividend Ratio	–0.349	–0.373	–0.751	–1.124**	–1.298**
	(0.224)	(0.225)	(0.509)	(0.46)	(0.536)
Constant	–0.00765	0.0519*	0.122***	0.161**	0.126*
	(0.0218)	(0.0264)	(0.0432)	(0.0635)	(0.0731)
Observations	52	52	52	52	51
Industry-Fixed Effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.451	0.505	0.522	0.449	0.365

It is possible to identify a clear pattern in returns' sensitivity to Middle Eastern SWFs' ownership.[94] In particular, even if results are not always statistically significant, the observed consistency in sign for both Qatar Investment Authority's and for Mubadala Development Company's ownership levels provides further support

93. Table 4 reports cross-sectional analyses of CARs computed over different time windows. t=0 is set on Election Day. Qatar Inv. Auth., Temasek Singapore, Norwegian Gov't Pension Fund Global, and Mubadala Dev. Co. are four continuous variables representing the ownership level of these funds in each firm in the sample size as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represents the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

94. *See supra* Table 4.

for SWFs' political value being priced in the market.[95] However, we acknowledge that the small sample size does not allow us to eliminate the possibility that these findings might be purely driven by noise or by uncontrolled self-selection.[96]

In order to provide further support for (or against) our initial hypothesis, we run the same model on standardized cumulative abnormal returns. This approach should allow us to control for firms' heterogeneity in returns variance, providing a better framework to study the economic significance of firms' differential reactions to Trump's election, conditional on their SWF's ownership status. Table 5 reports the results obtained.

95. These findings are consistent with Bortolotti et al., *supra* note 14.
96. *See* Roberts & Whited, *supra* note 67.

TABLE 5: OWNERSHIP LEVEL—SCARS[97]

Variables	1	2	3	4	5
	(0; +1)	**(–1; +1)**	**(–2; +2)**	**(0; +10)**	**(0; 30)**
Qatar Inv. Auth.	–0.0554	–0.0752*	–0.110	0.0655	–0.00748
	(0.0438)	(0.0410)	(0.0658)	(0.0836)	(0.00485)
Temasek Singapore	0.0349	0.00690	–0.00793	0.120	–0.00502
	(0.0302)	(0.0296)	(0.0344)	(0.0789)	(0.00494)
Norwegian Gov't Pension Fund Global	–0.0977	–0.147	–0.173	0.353	–0.0183
	(0.212)	(0.171)	(0.247)	(0.329)	(0.0271)
Mubadala Dev. Co.	–0.190**	–0.123**	–0.292***	0.0988	0.0239
	(0.0699)	(0.0547)	(0.0774)	(0.0883)	(0.0183)
Ln Asset	0.0602	–0.0442	–0.0595	0.0531	–0.0134
	(0.202)	(0.155)	(0.230)	(0.132)	(0.0187)
Mkt to Book	–0.0548***	–0.0659***	–0.0791***	0.00263	0.00125
	(0.0184)	(0.0144)	(0.0207)	(0.0126)	(0.00203)
Leverage	3.488**	3.380**	3.698**	–0.450	–0.159
	(1.554)	(1.359)	(1.766)	(1.047)	(0.152)
ROA	4.574**	4.824***	5.336***	–0.160	–0.168
	(1.721)	(1.407)	(1.954)	(1.111)	(0.186)
Dividend Ratio	–20.54	–13.18	–19.63	17.66	–1.760**
	(14.18)	(11.33)	(19.70)	(21.05)	(0.853)
Constant	–0.506	0.726	1.630	–1.272	0.242
	(1.276)	(1.064)	(1.618)	(1.759)	(0.155)
Observations	52	52	52	52	51
Industry-Fixed Effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.391	0.417	0.367	0.092	0.570

Results are consistent with those reported in Table 4 for the three shorter windows.[98] For the periods (0; +10) and (0; +30), the coefficients for the two Middle Eastern funds turn positive and statistically insignificant, consistent with the long run convergence suggested in Table 3.[99]

97. Table 5 reports cross-sectional analyses of SCARs computed over different time windows. t=0 is set on Election Day: Qatar Inv. Auth., Norwegian Gov't Pension Fund Global, and Mubadala Dev. Co. are three continuous variables representing the ownership level of these funds in each firm in the sample size as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

98. *See supra* Table 4.

99. *See supra* Table 3.

Since measurement errors in ownership levels might introduce an attenuation bias in our baseline models, we re-run all the specifications described in Table 4 and Table 5 by substituting SWFs' ownership levels with fund-specific dummies that are set equal to 1 if a given SWF owns an equity participation in the firm.[100] These alternative specifications are reported in Table 6 and Table 7. Again, we find weak support for SWFs being political entities.[101] All signs are consistent with previous results, and, despite lacking statistical power,[102] they clearly indicate an economically interesting trend.[103] We must pay particular attention in interpreting the coefficient for Mubadala Development Company. Since we have only one observation for this SWF, the intercept will necessarily pick up most of the variation in the data, driving the group-specific residuals to zero.[104] Therefore, results based on ownership level are statistically more reliable.[105]

100. *See* Roberts & Whited, *supra* note 67.
101. *See infra* Tables 6, 7.
102. *See* Roberts & Whited, *supra* note 67.
103. *See infra* Tables 6, 7.
104. *See* Roberts & Whited, *supra* note 67.
105. *See id.*

TABLE 6: OWNERSHIP DUMMY—SCARS[106]

Variables	1	2	3	4	5
	(0; +1)	**(–1; +1)**	**(–2; +2)**	**(0; +10)**	**(0; 30)**
Qatar Inv. Auth.	–0.0141	–0.00884	–0.0303	–0.00489	–0.0289
	(0.0167)	(0.0218)	(0.0413)	(0.0434)	(0.088)
Norwegian Gov't Pension Fund Global	–0.0114	0.00242	–0.00868	0.0347	0.0363
	(0.0149)	(0.0180)	(0.0297)	(0.0500)	(0.106)
Mubadala Dev. Co.	–0.102***	–0.0532*	–0.249***	0.0318	0.169
	(0.0248)	(0.0303)	(0.0415)	(0.0548)	(0.118)
Ln Asset	–0.000687	–0.00491	–0.00634	–0.00838	0.00370
	(0.00342)	(0.00354)	(0.00581)	(0.00763)	(0.010)
Mkt to Book	–0.00125***	–0.00190***	–0.00294***	–0.00215**	–0.00302
	(0.000335)	(0.000314)	(0.000532)	(0.00093)	(0.001)
Leverage	0.0868***	0.0997***	0.122***	0.0966*	0.0130
	(0.0265)	(0.0314)	(0.0418)	(0.0515)	(0.106)
ROA	0.103***	0.165***	0.208***	0.129*	0.119
	(0.0321)	(0.0346)	(0.0494)	(0.0683)	(0.152)
Dividend Ratio	–0.335	–0.387*	–0.653	–0.919**	–1.251**
	(0.228)	(0.215)	(0.473)	(0.429)	(0.579)
Constant	–0.00471	0.0484**	0.108**	0.0889	0.0785
	(0.0207)	(0.0222)	(0.0419)	(0.0796)	(0.104)
Observations	52	52	52	52	51
Industry-Fixed Effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.431	0.486	0.499	0.341	0.340

106. Table 6 reports cross-sectional analyses of SCARs computed over different time windows. t=0 is set on Election Day: Qatar Inv. Authority, Norwegian Gov't Pension Fund Global, and Mubadala Dev. Co. are three dummy variables indicating whether or not the indicated SWF is a shareholder of a given firm, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

TABLE 7: OWNERSHIP DUMMY—CARS[107]

Variables	1	2	3	4	5
	(0; +1)	(−1; +1)	(−2; +2)	(0; +10)	(0; 30)
Qatar Inv. Auth.	−1.263	−0.988	−1.404	−1.028*	−0.0926
	(0.903)	(0.944)	(1.462)	(0.607)	(0.0758)
Norwegian Gov't Pension Fund Global	−1.042	−0.359	−0.439	−1.255	0.00310
	(0.667)	(0.645)	(0.908)	(1.222)	(0.0853)
Mubadala Dev. Co.	−3.697***	−1.736	−4.279***	−1.270	0.446*
	(1.213)	(1.049)	(1.432)	(1.378)	(0.250)
Ln Asset	0.0812	−0.0412	−0.0351	−0.00115	−0.00847
	(0.213)	(0.166)	(0.251)	(0.126)	(0.0175)
Mkt to Book	−0.0639***	−0.0648***	−0.0778***	−0.0285	0.00211
	(0.0191)	(0.0146)	(0.0211)	(0.0237)	(0.00170)
Leverage	3.717**	3.263**	3.488*	1.054	−0.224*
	(1.555)	(1.295)	(1.746)	(1.032)	(0.125)
ROA	4.710**	4.606***	5.127**	1.115	−0.214
	(1.796)	(1.446)	(2.028)	(1.141)	(0.162)
Dividend Ratio	−17.78	−11.86	−16.49	17.71	−1.348
	(14.53)	(10.93)	(19.10)	(21.73)	(0.832)
Constant	−0.182	0.712	1.441	0.356	0.178
	(1.211)	(0.989)	(1.578)	(0.958)	(0.112)
Observations	52	52	52	52	51
Industry-Fixed Effects	Yes	Yes	Yes	Yes	Yes
R-squared	0.380	0.383	0.340	0.049	0.562

All in all, it is important to recall that self-selection is likely to bias the estimated coefficients towards no results.[108] Thus, the consistency in sign observed in most specifications for the Middle Eastern SWFs' ownership levels are at least suggestive that the hypothesis that SWFs are absolutely not involved in the U.S. political system is likely to be rejected.[109]

107. Table 7 reports cross-sectional analyses of CARs computed over different time windows. t=0 is set on the Election Day: Qatar Inv. Auth., Norwegian Gov't Pension Fund Global and Mubadala Dev. Co. are three dummy variables indicating whether or not the indicated SWF is a shareholder of a given firm, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

108. *See* discussion *infra* text accompanying notes 62–68.

109. *See supra* results from Tables 3–7.

These results, in combination with those described in *Sovereign Wealth Fund Investments and the US Political Process*,[110] suggest that foreign governments might be exploiting SWFs to influence the U.S. political system and that their political actions might strengthen as bilateral international relations deteriorate.[111] Furthermore, these findings provide support for an agency costs-based argument to explain the SWF discount identified in *The Sovereign Wealth Fund Discount: Evidence from Public Equity Investments*.[112]

As previously mentioned, these results are far from conclusive. In order to obtain statistical power we sacrifice some degrees of heterogeneity in our sample by clustering all the SWFs' ownership dummies in two groups conditional on whether or not the considered fund is located in the Middle East.[113] This alternative identification strategy is based on the differential attitude adopted by Trump during his presidential campaign towards Middle Eastern countries (and the Muslim population in general) with respect to other countries and ethnic-religious groups.[114] These behaviors led to a strong deterioration of President Trump's relations with Middle Eastern countries,[115] validating our approach. These alternative model specifications are reported in Table 8 and Table 9.

110. Calluzzo et al., *supra* note 30.

111. *Id.* at 239.

112. Bortolotti et al., *supra* note 14, at 3030.

113. *See infra* Table 8, 9.

114. *See, e.g.*, Haberman, *supra* note 47.

115. *See, e.g.*, Ahiza Garcia, *Donald Trump Won't Be 'Welcome' in Muslim Countries, Qatar Exec Warns,* CNN (Dec. 10, 2015, 7:25 PM), http://money.cnn.com/2015/12/10/news/companies/donald-trump-qatar-airways-ceo/.

TABLE 8: MIDDLE EASTERN SWFS VS. OTHER SWFS—CARS[116]

Variables	**1**	**2**	**3**	**4**
	(–2; +2)	**(–2; +2)**	**(–2; +2)**	**(–2; +2)**
ME SWF	–0.0242*	–0.0263**	–0.0229	–0.0207
	(0.0130)	(0.0113)	(0.0143)	(0.0140)
Ln Asset			0.00558*	–0.00460
			(0.00293)	(0.00301)
Mkt to Book			–0.000714**	–0.00189***
			(0.000294)	(0.000295)
Leverage				0.0947***
				(0.0294)
ROA				0.161***
				(0.0328)
Dividend Ratio				–0.348*
				(0.187)
Constant	0.000489	0.0121	–0.0214	0.0495**
	(0.00594)	(0.0197)	(0.0300)	(0.0212)
Observations				
	52	52	52	52
Industry-Fixed Effects	No	Yes	Yes	Yes
R-squared	0.033	0.080	0.170	0.471

116. Table 8 reports cross-sectional analyses of CARs computed over the time windows (–2; +2). t=0 is set on Election Day. ME SWF is a dummy variable that is equal to 1 if the firm is partially owned by the Qatar Investment Authority or by the Mubadala Development Company, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

TABLE 9: MIDDLE EASTERN SWFS VS. OTHER SWFS—SCARS[117]

Variables	1	2	3	4
	(–2; +2)	(–2; +2)	(–2; +2)	(–2; +2)
ME SWF	–1.168**	–1.346***	–1.147*	–0.949
	–0.462	–0.491	–0.615	–0.69
Ln Asset			0.297**	0.00793
			–0.146	–0.193
Mkt to Book			–0.0231***	–0.0505***
			–0.00764	–0.0178
Leverage				3.359**
				–1.573
ROA				4.137**
				–1.848
Dividend Ratio				–22.03*
				–12.56
Constant	0.0979	0.392	–1.571	–0.142
	(0.276)	(0.603)	(0.981)	(1.190)
Observations				
	52	52	52	52
Industry-Fixed Effects	No	Yes	Yes	Yes
R-squared	0.036	0.107	0.202	0.343

Since the number of treated units is extremely small, we focus exclusively on the five-day window and we analyze different model specifications to observe whether or not interpolation might be driving our results.[118] These findings provide further support for SWFs being political entities.[119] The sign of the coefficient is systematically negative for both the regression based on cumulative abnormal returns and standardized cumulative abnormal returns.[120] Interestingly, industry-fixed effects do not capture much of the

117. Table 9 reports cross-sectional analyses of SCARs computed over the time window (–2; +2). t=0 is set on Election Day. ME SWF is a dummy variable which is equal to 1 if the firm is partially owned by the Qatar Investment Authority or by the Mubadala Development Company, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

118. *See* Roberts & Whited, *supra* note 67.

119. *See supra* Tables 8, 9.

120. *Id.*

between-firms heterogeneity, reducing concerns related to our results being driven by interpolation.[121]

A further concern is related to the possibility that results might be driven by the use of the market model to compute each firm's abnormal returns.[122] In order to address this issue we re-run all the model specifications reported in Table 7 using as dependent variables CARs (Table 10) and buy-and-hold returns ("BHRs") (Table 11) based on the Fama-French Three-Factor Model.[123] All cross-sectional results hold, which supports reported findings not being dependent on the selection of a specific asset pricing model.[124]

121. *See* Todd A. Gormley & David A. Matsa, *Common Errors: How to (and not to) Control for Unobserved Heterogeneity,* 27 REV. FIN. STUD. 617, 635 (2013).

122. *See generally* CAMPBELL ET AL., *supra* note 41.

123. Eugene F. Fama & Kenneth, R. French, *Common Risk Factors in the Returns of Stocks and Bonds*, 33 J. FIN. ECON. 3, 51 (1993).

124. *See infra* Tables 10, 11.

TABLE 10: MIDDLE EASTERN SWFS VS. OTHER SWFS—FAMA-FRENCH THREE-FACTOR MODEL, CARS[125]

Variables	**1**	**2**	**3**	**4**
	(–2; +2)	**(–2; +2)**	**(–2; +2)**	**(–2; +2)**
ME SWF	–0.0273***	–0.0323**	–0.0288*	–0.0236
	(0.00912)	(0.0141)	(0.0161)	(0.0208)
Ln Asset			0.00535**	–0.00124
			(0.00237)	(0.00279)
Mkt to Book			–0.000463***	–0.00106***
			(0.000164)	(0.000239)
Leverage				0.0829***
				(0.0227)
ROA				0.0905***
				(0.0272)
Dividend Ratio				–0.530**
				(0.198)
Constant	0.0126**	0.0144	–0.0204	0.00581
	(0.00618)	(0.0113)	(0.0216)	(0.0184)
Observations	52	52	52	52
Industry-Fixed Effects	No	Yes	Yes	Yes
R-squared	0.036	0.107	0.202	0.343

125. Table 10 reports cross-sectional analyses of CARs computed over the time window (–2; +2). t=0 is set on Election Day. ME SWF is a dummy variable which is equal to 1 if the firm is partially owned by the Qatar Investment Authority or by the Mubadala Development Company, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

TABLE 11: MIDDLE EASTERN SWFS VS. OTHER SWFS—FAMA-FRENCH THREE-FACTOR MODEL, BHRS[126]

Variables	1	2	3	4
	(–2; +2)	(–2; +2)	(–2; +2)	(–2; +2)
ME SWF	–0.0270***	–0.0323**	–0.0287*	–0.0235
	(0.00913)	(0.0141)	(0.0162)	(0.0209)
Ln Asset			0.00543**	–0.00150
			(0.00240)	(0.00282)
Mkt to Book			–0.000451**	–0.00109***
			(0.000172)	(0.000240)
Leverage				0.0872***
				(0.0226)
ROA				0.0955***
				(0.0270)
Dividend Ratio				–0.526**
				(0.200)
Constant	0.0123*	0.0131	–0.0225	0.00490
	(0.00622)	(0.0123)	(0.0227)	(0.0185)
Observations	52	52	52	52
Industry-Fixed Effects	No	Yes	Yes	Yes
R-squared	0.036	0.107	0.202	0.343

Given the statistical weakness of these results, we provide additional (anecdotal) support for the hypothesis that SWFs might be political entities by mapping CARs for firms owned by Middle Eastern SWFs against those experienced by the remaining firms in our sample.[127] Figure 1 shows that a heterogeneous reaction to Trump's election conditional on a firm's SWFs' ownership status might actually exist,[128] which would imply that international political relations are priced in the market through SWFs' investments.[129]

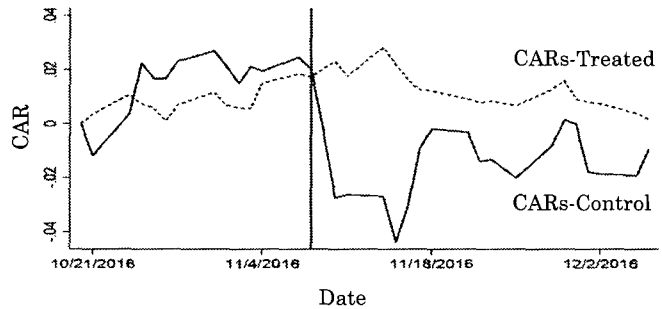
126. Table 11 reports cross-sectional analyses of BHRs computed over the time window (–2; +2). t=0 is set on Election Day. ME SWF is a dummy variable which is equal to 1 if the firm is partially owned by the Qatar Investment Authority or by the Mubadala Development Company, as reported at the end of the fourth quarter of 2016. Ln Asset is the natural logarithm; Mkt to Book represent the market to book value of equity; Leverage is the ratio of total debt over total assets; ROA is a firm's return on asset; Dividend Ratio is computed as the ratio of total dividends over total assets. All regressions include industry-fixed effects (one-digit SIC). Robust standard errors are reported in parentheses. *** indicates a p-value<0.01; ** indicates a p-value<0.05; * indicates a p-value<0.1.

127. *See infra* Figure 1.

128. *See id.*

129. *See id.*

FIGURE 1: CARS FOR FIRMS OWNED BY MIDDLE EASTERN SWFS VS. OTHER FIRMS[130]



Finally, we re-compute abnormal returns for all the treated units by applying the synthetic control methodology.[131] In particular we construct five synthetic portfolios replicating each treated firm's raw returns over the period (–250; –20) by weighting each non-treated firm so that the resulting RMSPE is minimized.[132] Panel A of Table 12 reports summary statistics for these five replicating portfolios.

130. CARs experienced by firms partially owned by Middle Eastern SWFs vs. CARs experienced by the other firms in our sample. The vertical line is set on November 8, 2016.

131. Abadie & Gardeazabal, *supra* note 76, at 116–20.

132. The donor pool includes all firms in the same four-digit SIC industry of the treated firm of which none of the SWFs in our sample is a shareholder and for which market returns for the period (–250; 50) are available on CRSP. We do not allow for short selling—that is, all the weights are positive.

TABLE 12: SYNTHETIC CONTROL METHOD[133]

Panel A: Summary Statistics			
Portfolio: 4-Digit SIC	**SWF**	**Firms in the Donor Group**	**RMSPE**
3674	Mubadala Dev. Co.	68	3.62%
5944	Qatar Inv. Auth.	3	1.71%
6531	Qatar Inv. Auth.	21	0.95%
6798	Qatar Inv. Auth.	192	1.24%
6798	Qatar Inv. Auth.	192	0.68%
Panel B: Test for Model Accuracy			
Average RMSPE: Est. Period	**Average RMSPE: (+2; –2)**	***t*-test**	***p*-value**
1.51%	3.03%	–1.461	0.1088

All RMSPE are below 2%, indicating that the model is able to generate valid counterfactuals for the five treated units.[134] Absent the shock, no difference in performance between the five stocks and the constructed controls should emerge, and, in particular, the models' predictive power should not significantly change between the estimation period and the treatment period.[135]

Even if the small sample size does not allow us to obtain statistical significance, the average RMSPE during the studied five-day window increases by more than 100% with respect to the one characterizing the estimation period.[136] This result suggests that Trump's election affected firms heterogeneously, conditional on their SWFs' ownership status.[137]

We now study the direction of the effect by reporting the CARs for an equal weighted portfolio built by purchasing the five treated stocks and shorting their synthetic counterfactuals (Figure 2). This portfolio yields large, negative returns, recording a –3.20% raw return on the event date and a –4.20% cumulative raw return over

133. Panel A reports indicators of in-sample model accuracy. Each portfolio is built so that the RMSPE is minimized. Each donor pool includes all firms operating in the same four-digit SIC industry of the treated unit that are not owned by SWFs and for which data is available on CRSP. Panel B reports univariate tests to capture whether the model lose predictive power over the time-window (–2; +2). In particular, simple a simple *t*-test is applied to measure whether the five RSMPE computed over the shorter window are systematically higher than those computed over the estimation period.

134. *See* Abadie & Gardeazabal, *supra* note 76.

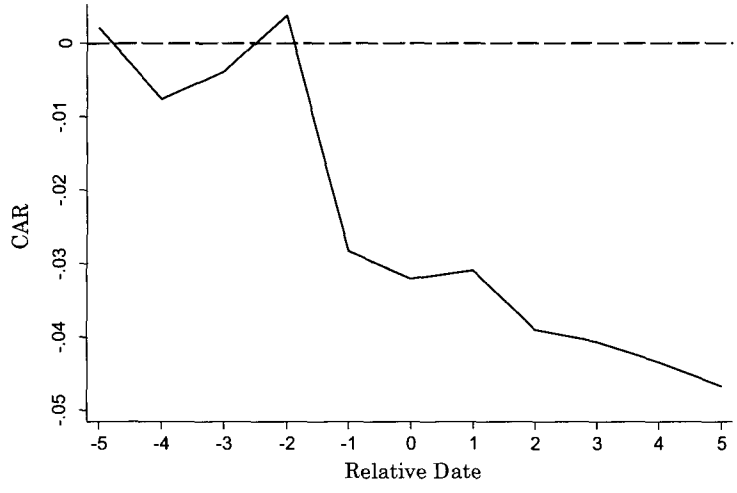
135. *See id.*

136. *See supra* Table 12.

137. *See infra* Figure 2.

the window (–5; +5).[138] These results provide further support for SWFs' political value being priced in the market.[139] However, it is critical to acknowledge that this methodology does not yield externally valid results and, therefore, this exercise should be carefully interpreted as a sample-specific analysis.[140]

FIGURE 2: CARS FOR PORTFOLIO BUILT BY SHORTING SYNTHETIC COUNTERFACTUALS[141]



All in all, these findings do not provide conclusive support for SWFs acting as political entities used by foreign governments to influence the U.S. political system, but they provide at least novel anecdotal evidence that their role might not be as passive as previously thought.[142] In particular, these findings provide support for the hypothesis that international political relations are priced in the market through SWFs' investments, which might cause (at least part of) the unexplained SWF discount identified in *The Sovereign Wealth Fund Discount: Evidence from Public Equity Investments*.[143]

138. Note that these raw returns are equivalent to the average abnormal returns for the five treated units in our sample. *See generally* CAMPBELL ET AL., *supra* note 41.

139. *See infra* Figure 2.

140. *See* Abadie & Gardeazabal, *supra* note 76.

141. CARs for an equal-weighted portfolio built purchasing the five treated firms and shorting their five counterfactuals.

142. For a review of the related literature, see, for example, Fotak et al., *supra* note 8; Megginson & Fotak, *supra* note 6, at 747–49.

143. Bortolotti et al., *supra* note 14, at 3030.

CONCLUSION

This Article exploits a novel shock to international political relations to study whether SWFs are investments vehicles used by foreign governments to directly or indirectly influence the U.S. political system. After discussing whether or not the 2016 U.S. presidential election represents a valid setting to study SWFs' political value, we combined an event study methodology with simple cross-sectional analyses to study firms' reactions to Trump's election. In particular, we identify weak support for the existence of a heterogeneous reaction to the studied shock, conditional on firms' SWF ownership status.[144] These results are consistent with international political relations being priced in the market through SWFs' investments.[145] While self-selection issues and the small sample size do not allow these results to provide conclusive evidence in support of the hypothesis that SWFs act as political entities,[146] they cast further doubts concerning their absolute and unconditional lack of political involvement,[147] calling for further research aimed at identifying whether or not these funds pursue political goals.

It is important to emphasize that identifying SWFs acting as political entities does not necessarily provide support for mandating specific new regulations on SWFs in order to enhance social welfare.[148] In particular, while our results might complement those reported in previous papers to provide support for SWFs being political entities that might negatively impact (1) capital markets' allocative efficiency and (2) firms' corporate governance and, thus, operating and financial efficiency,[149] it is far from obvious that introducing forms of financial protectionism would necessarily enhance social welfare.[150] For instance, SWFs provided invaluable liquidity to both global and domestic capital markets during the financial crisis, heavily investing in the U.S. financial sector and de facto "bailing out" several financial institutions.[151] Therefore, absent strong evidence supporting the existence of a SWF's political activity, the costs of reducing their investment flexibility might be extremely high.[152] In particular, such a regulation might result in SWFs withdrawing their existing investments, draining liquidity

144. See baseline results in *supra* Tables 4, 5.

145. These findings are consistent with Bortolotti et al., *supra* note 14, at 3030.

146. *See* Roberts & Whited, *supra* note 67.

147. For a review of the related literature, see, for example, Fotak et al., *supra* note 8; Megginson & Fotak, *supra* note 6, at 747–49.

148. *See, e.g.*, Megginson & Fotak, *supra* note 6, at 770.

149. Bortolotti et al., *supra* note 14; Johan et al., *supra* note 13.

150. *See, e.g.*, Megginson & Fotak, *supra* note 6, at 770.

151. *Id.* at 741–42.

152. *Id.* at 770.

from the American equity market, and thus further deteriorating the market's overall efficiency.[153]

In conclusion, it is crucial that impulsive political reactions to SWFs' investments be avoided. To date, evidence in support of SWFs' political activities do not appear to be sufficiently strong to justify ad hoc regulations whose costs and consequences would be unpredictable and potentially disruptive.[154] Analogously, regulators should not naively assume SWFs equate to privately owned funds and reject the possibility that political implications might exist.[155] *In medio stat virtus.*

153. *See id.*
154. *See, e.g., id.*
155. *See, e.g.*, Epstein & Rose, *supra* note 28, at 134.