

Board of Governors of the Federal Reserve System

International Finance Discussion Papers
Number 945

September 2008

Escape from New York: The market impact of SEC Rule 12h-6

Nuno Fernandes, Ugur Lel, and Darius P. Miller

NOTE: International Finance Discussion Papers are preliminary materials circulated to stimulate discussion and critical comment. References in publications to International Finance Discussion Papers (other than an acknowledgement that the writer has had access to unpublished material) should be cleared with the author or authors. Recent IFDPs are available on the Web at www.federalreserve.gov/pubs/ifdp/. This paper can be downloaded without charge from Social Science Research Network electronic library at <http://www.ssrn.com/>.

Escape from New York: The market impact of SEC Rule 12h-6

Nuno Fernandes^{*}, Ugur Lelel^{**} and Darius P. Miller^{***}

^{*}Universidade Católica Portuguesa
Palma de Cima
1649-023 Lisbon, Portugal
nfernandes@fcee.ucp.pt

^{**}Division of International Finance
Federal Reserve Board
Washington, DC 20551
(202) 452-3168
Ugur.lelel@frb.gov

^{***}Edwin L. Cox School of Business
Southern Methodist University
Dallas TX, 75275-0333
(214) 768-4182
dpmiller@cox.smu.edu

Abstract

We examine the stock market impact of SEC Rule 12h-6 which eased the ability of foreign firms to deregister with the SEC and as a result terminate their U.S. disclosure obligations under the 1934 Securities Exchange Act. We document that the market reacted negatively to the ability of firms from weak disclosure and governance countries to more easily opt out of the stringent U.S. reporting and legal environment. Our findings suggest that shareholders of non-U.S. firms place significant value on U.S. securities regulations, especially when the home country investor protections are weak.

JEL Classification: G14, G15, G38

Keywords: International Finance, Deregulation, international cross-listing.

We especially thank Chester Spatt for alerting us to the existence of Rule 12h-6. We also thank Amy Edwards, Jennifer Marietta-Westberg of the SEC, Hemang Desai, Karl Lins and seminar participants at the European Finance Association (2008) conference, Queens University and the U.S. Securities Exchange Commission. The views in this paper are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or any other person associated with the Federal Reserve System.

Escape from New York: The market impact of SEC Rule 12h-6

By adopting these rule amendments today, we are remedying a problem that has been festering for decades. Our former deregistration rules, which required a nose-count of U.S. investors to determine if registration was required, was so beloved by our foreign brethren that it gave rise to such kindly monikers as "hotel California," or the "roach motel" or—one of my own creations—the "Venus flytrap." Surely none of us at the SEC want to perpetuate such ill-famed requirements.

-SEC Commissioner Paul S. Atkins, March 21st 2007

While SEC registration and the corresponding disclosure requirements are a defining feature of U.S. capital markets, the economic impact of these laws are currently under debate both theoretically and empirically.¹ Perhaps nowhere is this more evident than in the controversy surrounding the effects of SEC registration and enforcement on foreign companies cross-listed on U.S. stock exchanges, since once becoming subject to U.S. regulations, these laws make it difficult, if not impossible, for firms to deregister and therefore terminate their U.S. disclosure obligations. This disagreement has led both academics and policy makers alike to debate whether the recent decrease in U.S. cross-listings is evidence that the costs of U.S. regulations, which include the 2002 Sarbanes-Oxley (SOX) Act, outweigh the benefits and consequently have rendered U.S. capital markets uncompetitive.²

In response to this debate, the SEC commissioner Paul S. Atkins announced on March 21st, 2007 the approval of Rule 12h-6. The new rule considerably eases the ability of foreign firms to deregister with the SEC and as a result terminate their U.S. disclosure

¹ See Coffee (1984) and Healy and Palepu (2001) for reviews of this literature. More recent evidence is found in Bushee and Leuz (2005) and Greenstone, Oyer and Vissing-Jorgensen (2006).

² See Berger, Li, and Wong (2005), Doidge, Karolyi and Stulz (2007a), Chaplinsky and Ramchand (2007), Hostak, Lys, and Yang (2006), Li (2006), Litvak (2007), Leuz, Triantis and Wang (2008), Piotroski and Srinivasan (2007), Smith (2006), and Woo (2006), Zingales (2007).

obligations. Therefore, it represents the first significant *deregulation* of U.S. disclosure requirements since the passage of the 1933/1934 Exchange and Securities Acts.³

In this paper, we add to the debate on the economic consequences of SEC registration and disclosure requirements by analyzing the market reaction to SEC Rule 12h-6. Examining the market reaction to Rule 12h-6 provides a unique setting to test the economic consequences of U.S registration for foreign firms. We are able to exploit this market-wide shock in mandatory disclosure regulations to test how shareholders value U.S. registration of foreign firms. Our evidence provides a complement to previous empirical cross-listing research that employs the voluntary listing and delisting decisions of firms, where self-selection and joint hypothesis difficulties are well-known and often lead to debate on their interpretation (see, e.g., Doidge, Karolyi, and Stulz 2007a). Further, because of the difficulty of deregistering before Rule 12h-6, prior research on voluntary deregistration was forced to study the relatively few atypical firms that not only self-selected to deregister, but could actually meet the stringent deregistering requirement.

As our experiment design also enables us to measure the economic consequences of SEC registration cross-sectionally, we are able to analyze specific factors argued in the literature to influence both costs (e.g., compliance costs) and benefits (e.g., improved investor protections). Further, since not all cross-listed firms are currently registered with the SEC (e.g., OTC and Rule 144a ADRs), our setting allows us to examine how a hold-out sample of non-registered firms reacts to deregulation and therefore control for any confounding effects of contemporaneous unobserved firm shocks.

³ Mandatory increases in disclosure regulations have also been extremely rare since the passage of the 1933/1934 Exchange and Securities Acts (e.g., the 1964 Amendments, the OTC Eligibility Rule of 1999 and the Sarbanes-Oxley Act of 2002).

We begin our analysis by testing the market reaction to the disclosure deregulation announcement. Our event study results document that the market reacted negatively to the ability of firms from weak investor protection regimes to easily opt out of the stringent U.S. reporting and legal environment. For example, we find that the market reaction is negative for firms located in countries with poor disclosure environments as well as for firms from countries with Civil law legal origin and with low levels of judicial efficiency. The results are economically significant, with the mean (median) firm losing 0.57% (0.91%) of market value (\$112 million (\$32 million) respectively) on the announcement that they now have the option to revert to their less stringent home country disclosure requirements.

In contrast, we find that the market reaction was insignificant for firms located in countries with strong investor protections. Therefore, our results suggest that shareholders place the highest value on U.S. disclosure requirements when the levels of disclosure and investor protection are poor in the home country. In contrast to the country level disclosure and investor protection results, we find much weaker evidence that proxies for compliance costs or financing needs explain the market reaction. Finally, we also find that the negative abnormal returns are concentrated in firms that are currently complying with SEC disclosure requirements (e.g., level II or III ADRs), rather than cross-listed firms exempted from registration requirements (OTC and 144a ADRs). This suggests the economic impact of the rule is concentrated in firms currently subject to SEC registration. Overall, the results support the hypothesis that U.S. disclosure and investor protection laws have significant economic benefits, especially for cross-listed firms from poor investor protection regimes.

We next examine the effect of Rule 12h-6 on the behavior of foreign firms. Consistent with prior research, we find that prior to 12h-6, deregistrations by non-U.S. firms were relatively rare events. However, in the 8 months since the rule took effect, 80 firms have announced their intention to deregister from U.S. exchanges, the largest yearly total in history. Further, while one of the stated rationales of the new rule was to increase the attractiveness of U.S. capital markets, we find that the period since the rule took effect is the first time in history that the number of deregistrations is larger than the number of new registrations. Therefore, our results suggest that not only did 12h-6 have significant economic consequences, it also materially affected the deregistration and listing behavior of foreign firms.

We also subject our analysis to a battery of robustness tests. We find our results are robust when we exclude Canadian firms, the country that contains the largest portion of our sample. We also exclude penny stocks and find that their potential microstructure effects do not drive our results. Further, we verify that our event window was not anticipated by examining alternative announcement dates as well as potential confounding announcements surrounding the event. Also, our findings are robust to firm level governance controls. Finally, our results are consistent across SUR, OLS and Sefcik and Thompson (1986) estimation methods.

Our study makes several contributions to the literature. First, we provide, to the best of knowledge, the first empirical evidence, foreign or domestic, on the economic impact of disclosure *deregulation*. Previous research on the economic impact of U.S. disclosure regulation includes studies on the effects of the imposition of the 1933 Securities act (e.g, Stigler 1964, Friend and Herman 1964, Robbins and Werner 1964, Benston 1969 and

1973, and Jarrell 1981). However, interpreting the results contained in these early studies is heavily debated (Coffee 1984). More recent work by Greenstone et al. (2006) finds increases in disclosure mandated by the 1964 Securities Act amendments increased firm value. Bushee and Leuz (2005) study the 1999 “eligibility rule” which required domestic firms trading on the Over-The-Counter Bulletin Board to comply with the 1934 Act. Our results add to this literature by providing evidence on how U.S. disclosure deregulation impacts foreign firms. In this way, we contribute to the empirical research on the costs and benefits of disclosure regulation in general, a literature that Healy and Palepu (2001) note is surprisingly sparse.⁴

We also contribute to the literature that examines the impact of U.S. laws and regulations on cross-listed firms. While a large number of studies find significant economic benefits for cross-listed firms, a more recent literature is debating whether the costs of U.S. regulations, including the 2002 SOX Act, outweigh the benefits.⁵ For example, Marosi and Massoud (2008) find that deregisterings prior to Rule 12h-6 were motivated by post-SOX compliance costs rather than governance benefits of U.S. registration. However, this evidence is based on the atypical firms that could meet the stringent pre 12h-6 deregistering requirements, which are very small and poorly performing firms predominately owned by insiders.⁶ In contrast, our experiment design

⁴ In contrast, there is a large literature that examines the impact of mandated accounting standards changes (see Bushee and Leuz 2005 and citations contained therein).

⁵ Karolyi (1998, 2006) and Benos and Weisbach (2004) provide comprehensive surveys of the earlier studies.

⁶ The average deregistering firm in Marosi and Massoud (2008) is less than 1% the size of the average registered foreign firm (based on total assets). While they do not model the stock price reaction cross-sectionally or consider the role of disclosure, they find the 148 deregistering announcements over 1990 to 2006 are accompanied by a negative market reaction which decreases post-SOX. In contrast, Hostak, Lys and Yang (2006) argue there were even fewer deregistrations (only 75) during the pre 12h-6 period and find that governance related factors, rather than compliance costs, play an role in the deregistering decision for these small, poorly performing, low trading volume firms.

abstracts from the voluntary registering or deregistering decisions of firms and allows us to draw (often different) inferences about the economic consequences of U.S. registering from the population of cross-listed firms, and therefore we are able to avoid many of the sample selection and endogeneity limitations inherent in the pre-Rule 12h-6 time period. Our paper provides evidence on how the market values a reduction in mandated disclosure, and therefore we are able to gain insights into the economic consequences of one of the most important aspects of international cross-listing.⁷

The remainder of the paper proceeds as follows. Section I reviews the Rule 12h-6. Section II describes the data. Section III presents the event study methodology and results on the market reaction to the announcement of Rule 12h-6. Section IV presents multivariate regression results. Section V presents robustness tests. Section VI presents firms' delisting and deregistration frequency around the new Rule. Section VII concludes.

I. A Primer on Rule 12h-6

On March 21st, 2007, the SEC approved its new rules for deregistration by foreign private issuers, taking effect June 4th, 2007. These rules amend the existing regulations that govern when a foreign private issuer (FPI) may terminate the registration of a class of its equity or debt securities and the corresponding obligation to file reports as required by the U.S. Securities and Exchange Act of 1934.

A. Existing Registration and Deregistration Regulations

⁷ See Lang, Lins and Miller (2003, 2004) and Lang, Raedy and Wilson (2006) for reviews on the disclosure implications of cross-listing.

A foreign private issuer becomes subject to SEC registration in at least one of three ways. First, if the issuer lists a class of its equity securities on a major U.S. exchange, it is required to register the securities under section 12(b) of the 1934 Exchange Act. Second, if a class of the issuer's securities is held by either (i) more than 500 security holders worldwide and more than 300 security holders in the U.S. or (ii) more than 300 U.S. security holders and its assets exceed \$10 million USD, it must register with the SEC that class of equity securities under 12(g) of the Exchange Act. Finally, if the FPI issues new public equity or debt securities, they must be registered under the Securities Act of 1933 and the FPI is required to file reports under section 15(d) of the Exchange Act.

With the globalization of capital markets around the world, delisting from U.S. stock exchanges has become a relatively straightforward process. In contrast, *deregistering* with the SEC is a considerably more difficult, if not an impossible proposition. It is important to note that it is deregistration, not delisting, that is required to avoid ongoing SEC reporting obligations including the provisions of the SOX that apply. Under the existing rules, an FPI can only deregister a class of its securities if the class is held by fewer than 300 U.S. residents (record holders), or fewer than 500 U.S. record holders for FPIs with less than \$10 million USD in assets. A particularly onerous part of this rule is the counting method, which requires the FPI to “look through” the accounts of brokers, banks and other nominees on a worldwide basis and count the number of separate accounts of U.S. customers to determine the number of U.S. resident holders.⁸ Moreover, even if the FPI meets all the conditions, it only may suspend, rather than terminate, its

⁸ The head count criteria is different for U.S. firms. When a U.S. firm wants to deregister with the SEC, it can count each institutional investor as one investor whereas a foreign firm will have to look through the accounts of each institutional investor to determine the exact number of U.S. investors holding its securities.

reporting obligations and, as a result, must determine each year if it meets the reporting exemption criteria.

B. The New Deregistration Amendment

The new Rule 12h-6 has three main provisions. First, Rule 12h-6 permits a simplified termination based on U.S. investor interest in the FPI's securities, rather than their ownership record. This new rule establishes a non-record holder benchmark: Average Daily Trading Volume (ADTV). The FPI may, regardless of the number of U.S. securities holders or its asset size, terminate its registration and reporting obligations if the U.S. ADTV has been no greater than 5% of the worldwide ADTV of that same class of securities during the previous 12-month period.⁹ In order to deregister under the ADTV benchmark, an FPI must (i) meet the ADTV standard at the time of delisting from the U.S. stock exchange prior (or termination of its sponsored ADR program) or (ii) wait 12 months after delisting or ADR termination in order to calculate the ADTV benchmark.¹⁰

Second, Rule 12h-6 allows, for the first time, an FPI to terminate rather than just suspend its registration of a class of its equity securities and the resulting reporting obligations. This covers equity securities under 12(b) of the Exchange Act as well as equity or debt securities under 15(d) of the Exchange Act resulting from issuing securities under the Securities Act. Finally, Rule 12h-6 allows an alternative to the ADTV benchmark by allowing the FPI to terminate its Exchange Act reporting obligations if the class of securities has less than 300 U.S. record holders. Further, the FPI will no longer have to "look through" the worldwide banker, broker, and other

⁹ Equity linked securities, such as warrants, puts, options or other convertible securities are not included in the calculation.

¹⁰ Form 15F is used to notify the SEC of the FPI decision to terminate its registration under rule 12h-6.

nominee accounts to determine the head count. Rather, the new rule allows a revised counting method in which the FPI can limit its search to accounts located in the U.S. and the issuer's country of incorporation.¹¹

In order to take advantage of the new Rule 12h-6, an FPI must meet three additional conditions designed to make sure U.S. investors are given appropriate information regarding the FPI's securities. The *Prior Exchange Act Reporting Condition* requires that the FPI must have been an Exchange Act reporting company for at least one year, filed or submitted all Exchange Act reports required for this period, and have filed at least one annual report. The *One Year Dormancy Condition* requires that the FPI must not have sold securities in the U.S. in a registered offering during the 12 months prior to its termination from the Exchange Act.¹² Finally, to insure the FPI is subject to non-U.S. regulation, the *Foreign Listing Condition* requires that for the 12 months prior to the filing of its Form 15F, the FPI must have maintained a listing for at least one year in a foreign jurisdiction with constitutes its primary trading market.

C. Implications of the New Rules

Before Rule 12h-6, it often could be difficult to meet the security holder minimums given the difficulty in finding all the U.S. security holders and getting the final few to sell their securities, prompting the monikers "roach motel" and "hotel California" and "Venus flytrap".¹³ Under Rule 12h-6, the ADTV benchmark makes firms that meet the benchmark immediately eligible to deregister. Perhaps more importantly, given U.S.

¹¹ This would also be the provision that the FPI with registered debt securities would terminate SEC registration.

¹² Exceptions include offerings to the FPI's employees, non-underwritten offerings, offerings due to the exercise of rights granted pro rata to all existing security holders, dividend or reinvestment plan offerings or offerings due to conversion of outstanding convertible securities or warrants.

¹³ These were echoed in Commissioner Paul Atkins' speech given March 21st, 2007 on the final deregistration rules. See <http://www.sec.gov/news/speech/2007/spch032107psa.htm>.

trading volume will go to zero when the firm delists its securities from the U.S. exchange, the new rule effectively makes all FPIs eligible within one year of voluntarily delisting.

D. Dating the Announcement

The announcement on March 21st, 2007 that the SEC approved Rule 12h-6 resolved two years of uncertainty regarding if the SEC would revise its deregistration rules for FPIs. First indication that the SEC was considering the rule change was in a speech on January 25, 2005 by then-SEC Chairman William Donaldson, but he declined to say what options the SEC was considering or when it would propose any new rules. Nearly a year later on December 14th, 2005, the SEC announced a proposal to significantly ease FPI deregistration rules, but only for a subset of very large foreign firms called well-known seasonal issuers (WKSI).¹⁴ A year later on December 13th, 2006, a new “re-proposal” was drafted that eliminated the WKSI limitation. This re-proposal’s future was also in question, as it would be voted on only after a public commenting period which would end in late February 2007 after which, it could be accepted, rejected or modified again.

While our empirical analysis focuses on the March 21st, 2007 date, in later robustness tests we show the market did not view the information released in these earlier dates as significantly resolving the uncertainty regarding the proposal. We focus on a three day window centered on March 22nd, 2007 since the first day of newspaper coverage was on March 22nd and most domestic exchanges where overseas firms in our sample were traded were closed at the time of SEC’s approval on March 21st.

¹⁴ A well-known seasoned issuer is defined in Securities Act Rule 405 (17 CFR 230.405). Such an issuer must have a worldwide market value of its outstanding voting and non-voting common equity held by non-affiliates of \$700 million or more, and must satisfy the other requirements of the definition in Securities Act Rule 405.

II. Data and Summary Statistics

We obtain a list of all foreign firms with equity shares registered and reporting with the SEC from the SEC's website.¹⁵ We augment this list with data on non-registered cross-listed firms from the depositary banks (Bank of New York and Citibank). We use the Thomson Financial Datastream database to calculate daily returns in the local market (in USD) for these firms for the three-day window surrounding the announcement date of March 22nd 2007. We also employ the Datastream database to compute U.S. trading volume relative to worldwide trading volume for each stock. We gather firm-specific financial information from the Worldscope database.

The sample, detailed in Table 1, consists of 638 firms from 36 countries. Panel A shows that Canada has the largest number of firms (260). In later robustness tests we exclude Canadian firms from the sample. Panel B reports 536 of the firms are traded on major U.S. exchanges (AMEX, NASDAQ, and NYSE) and therefore are subject to SEC registration and reporting requirements, while 102 are traded on the OTC market and therefore are exempt from most SEC requirements.

Panel C reports summary statistics for the firm and country level variables used to proxy for the costs and benefits of SEC registration. At the firm level, we use *Total Assets* to proxy for the relative size of compliance costs, since it is often noted that SEC registration, including the costs of filing U.S. GAAP accounting statements, are relatively high for small firms. We also control for the need for external finance, as the benefits of a U.S. listing could be larger for firms that need access to U.S. capital (see, e.g. Reese and Weisbach (2002), Lins, Strickland, and Zenner (2003)). We proxy for capital needs using the previous year's sales growth rate as well as firms' *Leverage* ratio (long term debt

¹⁵ Available at <http://www.sec.gov/divisions/corpfin/internatl/foreignalpha2006.pdf>

divided by total assets) and profitability (*ROA*). Since the governance benefits of U.S. registration may be lower for more internationalized firms (e.g., through joint ventures in other countries as in Siegel (2007)), we employ a proxy for the degree of internationalization using the percentage of the firm's sales that are outside its home country (*Foreign Sales Ratio*). Likewise, the benefits of U.S. disclosure standards may be less when the firm voluntarily adopts International Financial Reporting Standards (IFRS) rather than their home country standards. We compute the variable *IFRS Adoption* that equals one if the firm has adopted IFRS from Worldscope.

We also gather firm-level ownership data, since the benefits of U.S. registration may be lower for better governed firms. We examine both the percentage of shares held by financial institutions as well as the percentage of shares held by company insiders (gathered from 13f filings and the *Worldscope* database).¹⁶ We also examine two variables directly related to the implementation of the rule: First is a variable that notes if the firm filed a comment with the SEC during the commenting period before the rule was voted on. *Comment* equals one for firms that commented on any of the SEC's FPI deregistration proposals, obtained from the SEC's website, zero otherwise. This variable may capture firms with expected net benefits from passage of the new rule. We also compute a variable, *Eligible*, that is equal to one for firms for which the U.S. stock market accounts for at most 5 percent of their worldwide trading volume, zero otherwise. ADR ratios are taken into account when calculating the relative trading volume, as ADRs often represent claims on the underlying ordinary shares in a ratio different from one-to-one (Baruch, Karolyi, and Lemmon, 2008). However, since firms can shrink their U.S.

¹⁶ In later robustness tests we also employ firm level governance indicators from the Institutional Shareholder Services database.

trading volume to zero by delisting, it is not clear ex ante how important this aspect of the rule will be.

The country level variables consist of various disclosure and legal environment proxies to test the hypothesis that the value of U.S. registration is highest when investor protections are weakest. The first transparency measure, *Disclosure Requirements*, is an index that ranks prospectus disclosures including compensation, shareholders, inside ownership, contracts irregular, and transactions. It is obtained from La Porta et al—LLS—(2006). The second measure, *Disclosure*, obtained from Bushman et al (2004), is an index based on the disclosures of R&D, capital expenditure, subsidiaries, segment-product, segment-geographic, and accounting policy. *World Bank Disclosure* is an index based on disclosures of seven items including ownership, voting agreements between shareholders, and audit committees. It is obtained from the World Bank's Cost of Doing Business survey in 2005. *Disclosure in Periodic Filings* is an index of disclosures required in periodic reports and is obtained from Djankov et al. (2008). Higher values of these disclosure indexes represent better transparency. Finally, *Earnings Management* is an aggregate earnings management score based on earnings smoothing and discretion measures, and is obtained from Leuz et al (2003). Higher values of this index refer to higher levels of earnings management.

We also partition firms by civil and common law, since legal origin has been shown to be closely associated with overall investor protection in a country (La Porta et al—LLSV—1998). We further examine the market reaction based on the efficiency of the firm's home country legal system (from LLSV (1998)), since one of the most often cited advantages of U.S. registration is that now the firm is subject to U.S. laws and U.S. courts

(Coffee 1999, 2002). Finally, we include a measure of overall economic development, *Stock Market Cap/GDP*, defined as the domestic stock market capitalization divided by GDP, and is obtained from the World Development Indicators database.

III. Market Reaction to the Announcement of Rule 12h-6

A. Event Study Methodology

Firms in our sample are subject to the same event date, which leads to a clustering of events in calendar time. It is well known that in such cases error terms across firms from the market model are likely to be correlated, and this contemporaneous cross-correlation violates the independent error terms assumption across firms (MacKinlay, 1997). Thus, we cannot use the standard event study methodology in testing for the impact of announcements related to the SEC's FPI deregistration rule on stock returns.¹⁷

Instead, we use a methodology developed by Schipper and Thompson (1983) to measure the stock market reaction of individual firms to the SEC's FPI deregistration rule. This method involves estimating a seemingly unrelated regression (SUR) that explicitly accounts for the cross-correlation of error terms across equations. In this approach, all sample firms are put into a system of equations and the following regression system is estimated simultaneously in a SUR framework:

$$R_i = \alpha_i + \beta_i R_m^{Local} + \lambda_i R_m^{US} + \gamma_i D + \varepsilon_i \quad (1)$$

where:

¹⁷ For surveys on regression-based event studies, see Thompson (1985), Binder (1998) and Kothari and Warner (2006).

- R_i = return series on the individual firm i , $i = 1, 2, \dots, N$ and N is the total number of firms,
 R_m^{Local} = return series on the domestic market index,
 R_m^{US} = return series on the U.S. market index,
 D = a dummy variable that equals one for the three-day window surrounding March 22nd, 2007 and zero otherwise, and
 ε_i = error terms that are allowed to be contemporaneously correlated across firms.

The daily stock returns are measured in local currency between June 1, 2004 and June 1, 2007 (782 observations per firm), and are obtained from the DataStream database to estimate equation (1).¹⁸ The event parameter γ varies across firms and measures the impact of the SEC's FPI deregistration rule approval on individual firms' stock returns. In all tables, we multiply this coefficient by three hundred to present results as the three day cumulative abnormal return in percent.

The main advantage of the Schipper and Thompson (1983) methodology is that it allows us to measure the overall stock market reaction to the regulatory event for each firm while taking into account any potential contemporaneous correlation. Another advantage is that it allows testing joint hypotheses on regression coefficients where

¹⁸ While a SUR system accommodates the contemporaneous cross-correlation of error terms across individual firms' return equations, it has the constraint that the covariance matrix ($N \times N$) must be inverted to calculate test statistics. In the case the number of periods (T) is smaller than the number of firms (N), the inverted covariance matrix follows a Wishart distribution that has undesirable properties. Therefore, we run the system in (1) separately for 536 exchange-traded ADRs and 102 OTC-traded ADRs. Another reason for us to run the SUR system separately is that only exchange-traded ADRs are required to comply with the SEC's periodical reporting requirements. We choose June 2004 as the starting point because the first event related to the SEC's FPI deregistration rule took place in January 2005, making $T = 782$. See the appendix for events (other than the final approval) related to the SEC's FPI deregistration rule.

appropriate. We analyze the distribution of event parameter estimates, $\hat{\gamma}_i$, as well as test whether all the event parameter coefficients are jointly equal to zero.

B. The Market Reaction

Panel A of Table 2 presents the average market reaction announcement of Rule 12h-6 across several proxies for the level of home country disclosure and legal standards to test if the investors' view of the regulation is related to the new level of investor protections that firms would be subject to upon deregistering. We find that that the market reacted negatively to announcement of Rule 12h-6 for firms that will be subject to weak disclosure environments upon deregistering. For example, the (-1, +1) event window mean (median) reaction in the *Low Disclosure Requirements* sample is -0.56 percent (-0.92 percent). In the *low Disclosure* sample, the (-1, +1) event window mean (median) reaction is -0.57 percent (-0.91 percent). In the *Low Disclosure in Periodic Filings*, the (-1, +1) event window mean (median) reaction is -0.49 percent (-0.58 percent). Similar results are obtained for the *Low World Bank Disclosure Index*. When disclosure is measured by earnings opacity (i.e., *Earnings Management*), we also find that the market reacted negatively for firms located in countries where earnings quality is low. In terms of statistical significance, the means and medians in the low disclosure samples are significant at conventional levels. Further, stock price response is larger than the local market bid-ask spread.¹⁹ The results are also economically significant. For example, the -0.576 percent (-0.912 percent) reaction for the *Low Disclosure* sample translates to the average (median) firm's market value being reduced by \$112 million (\$32 million).²⁰

¹⁹ We were able to gather bid-ask data for 442 firms from Datastream. The average bid-ask spread ($2 * (\text{Ask} - \text{Bid}) / (\text{Ask} + \text{Bid})$) across the low disclosure samples is 0.29%. In the Civil law subsample, it is 0.22%.

²⁰ The mean (median) market capitalization from Worldscope is \$19,459 (\$3,499) million.

In contrast to firms located in countries with weak disclosure, we find that for firms domiciled in strong disclosure environments, the market did not react significantly to the announcement of rule 12h-6. For example, the (-1, +1) event window mean and median reaction in the High *Disclosure Requirements* sample are an economically small -0.02 percent and -0.18 percent, respectively, both of which are not statistically significant. Similar results are obtained for all the proxies for home country disclosure standards. Overall, these results are consistent with the hypothesis that SEC registration and the resulting disclosure and reporting requirements are valued by the market, especially for firms located in countries with weak home country disclosure.

Panel A of Table 2 also partitions our sample firms by the level of home country legal protections. We find for firms domiciled in civil law countries, the three-day market mean (median) reaction to rule 12h-6 was negative and significant -0.39 percent (-0.59 percent). In contrast, for firms domiciled in countries classified as common law, the market did not react significantly. We also examine the market reaction based on the efficiency of the firm's home country's legal system from LLSV (1998) since one of the most often cited advantages of U.S. registration is that now the firm is subject to U.S. laws and U.S. courts (Coffee 1999, 2002). We find that for firms located in countries with low judicial efficiency, the mean (median) market reaction was negative and significant -0.43 percent (-0.82 percent), while the reaction for firms from high judicial efficiency countries was not significantly different from zero.

Overall, the results in Panel A of Table 2 suggest that for firms located in countries with the weakest disclosure and investor protections, the market reacted negatively to their ability to easily terminate U.S. registration. However, for firms located in countries

with strong investor protections, the market did not view the option of easier deregistration as a negative event.

Panel B of Table 2 partitions our sample by various firm level characteristics in order to test if compliance costs and access to capital might explain the market reaction to Rule 12h-6. We find that the market reaction was not significantly different from zero for small firms, which suggests that investors do not view small firms' costs of compliance as outweighing the benefits of a U.S. listing. Further, we do not find evidence that our proxies for capital needs, *Leverage* and *Sales Growth*, are related to the market reaction. However, consistent with the corporate governance benefits hypothesis, we find that in these univariate results that firms that are immediately eligible as defined by their U.S. trading volume as well have high inside ownership, have negative stock price reactions.

Panel C of Table 2 presents results for the entire sample of exchange-traded firms. The overall reaction is economically small given that we are pooling firms from various governance regimes, which we found important in Panel A. Consistent with this finding that the market reaction varies between groups of firms, Panel C reports that the joint test that the market reaction is equal across firms is rejected at the 1% critical level.

Panel D of Table 2 presents results for our hold out sample of firms trading in the U.S., but not subject to U.S. registration. For these OTC-traded firms, the announcement of the new rule did not significantly affect their market value. Further, the joint test fails to reject that all coefficients are equal to zero, suggesting little significant cross-sectional variation in the reaction. Therefore, the negative market reaction to Rule 12h-6 documented earlier was not found in the non-U.S. registered cross-listed firms. This

suggests that the disclosure and legal protection of U.S. registration are key drivers of our results, rather than unobserved factors related to cross-listed firms in general.

Taken together, the univariate results in Table 2 suggest that the market values the increased disclosure and investor protections that result from SEC registration positively, in particular for firms located in countries with weak home country regulations that would be in force when the firm is allowed to more easily deregister under rule 12h-6.

IV. Multivariate Analysis

A. Empirical Approach

In order to examine how firm and country characteristics influence investors' valuation of the SEC's FPI deregistration rule, we associate individual cumulative abnormal returns ($\hat{\gamma}_i$) obtained from the SUR estimation to their firms' cross-sectional determinants as in Brook, Hendershott, and Lee (1998). This analysis allows us to measure the economic significance of firm and country characteristics on the stock market reaction of firms to the SEC's FPI deregistration rule. We focus on exchange-traded cross-listed firms hereafter because only these were significantly affected by the SEC's new rule.²¹ Our regression model is of the form:

$$\begin{aligned} \hat{\gamma}_i = & \alpha + \beta(\text{Investor protection}_i) + \lambda(\text{Firm characteristics}_i) \\ & + \delta(\text{Capital market development}_i) + \varepsilon_i \end{aligned} \tag{2}$$

The dependent variable is $\hat{\gamma}_i$, the event parameter estimate obtained from the SUR estimation in equation (1). It corresponds to the average abnormal return experienced by

²¹ We also conducted cross-sectional tests on OTC firms that confirmed the joint hypothesis tests conclusion of little cross-sectional variation in these firms.

firm i in our sample in the (-1, 1) event window surrounding the final approval of the SEC's FPI deregistration rule on March 22nd, 2007.

We use six country-level governance variables that are explained in Section II to measure the strength of disclosure standards and investor protection in the home country. The firm-specific continuous variables are averaged over the period between 2004 and 2006. We also use the ratio of domestic stock market capitalization to GDP as a control for the potential effect of the degree of capital market development on the market reaction. In addition, we include industry dummies and correct standard errors for possible clustering across countries using Rogers method.

B. Multivariate Results

Table 3 presents the multivariate OLS analysis of the market reaction to Rule 12h-6 using equation (2). Models 1 - 5 report the results of the relation between home country disclosure standards and the market reaction to Rule 12h-6, including both firm and country level controls. Model 1 reports that the coefficient on *Disclosure Requirements* is positive and significant (1.80, t-statistic =2.31), which is consistent with the univariate results that the Rule 12h-6 market reaction was negatively related to the quality of the home country disclosure environment. Models 2 – 5 show that the coefficient on *Disclosure*, *World Bank Disclosure*, *Earnings Management* and *Disclosure in Periodic Filings* are 0.02 (t-statistic =3.03), 0.34 (t-statistic =2.56), -0.08 (t-statistic =-5.05) and 0.89 (t-statistic =1.91), respectively. Across all five proxies, we find support for the hypothesis that the market reaction is negatively related to the strength of the home country disclosure environment that the firm will be subject to upon deregistration.

Models 6 and 7 test how the legal environment is related to the market reaction to Rule 12h-6. Model 6 shows that the coefficient on *Civil Law* is negative and significant (-0.84, t-statistic =-2.87), indicating that investors penalized firms with poor home country judicial efficiency upon the announcement of rule 12h-6. We also find that the coefficient on *Efficiency of the Judicial System* is positive and significant (0.18, t-statistic =1.82), indicating that Rule 12h-6 was not viewed as negatively for firms from better investor protection regimes. Examining the economic significance of Table 3's results, we see that, for example, the coefficient on *Civil Law* suggests that the market penalizes firms from weak investor protection regimes 0.84% compared to those from strong investor protection regimes (i.e., common law countries). The economic significance of the disclosure proxies are of a similar magnitude. For example, the market penalized firms from high *Earnings Management* countries (one standard deviation above the mean), by 1.20% compared to firms from low *Earnings Management* countries (one standard deviation below the mean).²²

Models 1 – 7 of Table 3 also report results for the firm-level variables. We find that after controlling for other firm and country level variables, firm size is not significantly related to the market reaction to Rule 12h-6. This finding is not consistent with compliance costs factoring into the market's view of Rule 12h-6. Further, we do not find any of our other firm-level proxies, such as *Leverage*, *Sales Growth*, or *ROA*, to be significantly related to the market reaction. Therefore, we do not find evidence that growth opportunities or capital needs significantly explain the market impact of Rule 12h-6. Finally, we do not find the *Eligible* dummy variable to be significant, which is

²² The economic significance is calculated as the difference in estimated CARs from equation (2) between the value of one standard deviation above the mean for the variable of interest and the value of one standard deviation below the mean, whereas other RHS variables are evaluated at their means.

consistent with the notion that the market views the Rule as affecting all firms equally since upon delisting, the deregistering process will be relatively straightforward. The relative importance of the country level proxies for investor protections is consistent with the findings of Doidge, Karolyi and Stulz (2007b) that show that country characteristics explain much more of the variation in governance than observable firm level characteristics.

Overall, the results in Table 3 suggest that the disclosure and corporate governance implications of U.S. registration are valued by investors, especially for firms from countries with weak disclosure and investor protection regimes. We do not find support for the hypothesis that compliance costs significantly affect the market reaction.

V. Robustness Tests

In this section, we perform variations of the tests we conduct in Section IV. The purpose of this analysis is to gauge the sensitivity of our results to the exclusion or inclusion of certain observations and to alternative specifications of the tests.

A. Exclusion of Penny Stocks

One concern is that the effects we document may be driven by cross-listed firms with very low stock prices. We therefore repeat our analysis excluding stocks with prices lower than \$1. Table 4 presents results when we omit these observations. We find that all of the disclosure and investor protection variables continue to be positive and significant. Therefore, the microstructure effects of penny stocks do not appear to be driving our results.

B. Exclusion of Canadian Firms

Given that Canada is the country with the greatest number of observations in our sample, an obvious concern is that our results may be driven by observations from this country. Table 5 presents results when we omit these observations. We find that all of the disclosure variables continue to be positive and significant. *Efficiency of the Judicial System* and *Civil Law* also continue to be significant. Thus, even with the loss of power from excluding a significant portion of firms, our results are largely robust.

C. Sefcik and Thompson (1986) Regressions

In addition to the OLS regression tests reported in Table 3,4 and 5, we analyze the cross-sectional determinants of the stock market reaction by using the methodology developed by Sefcik and Thompson (1986). This methodology explicitly takes into account the contemporaneous correlation and cross-sectional heteroscedasticity of residuals across firms, and produces unbiased estimates of both the coefficients and their standard errors. A detailed description of this methodology is provided in Appendix A.

Table 6 reports cross-sectional regressions using the Sefcik and Thompson (1986) methodology. For our disclosure and investor protection tests, we find results largely consistent with the OLS results that the market reacted negatively for firms from countries with poor disclosure environments. For example, Models 1-5 show that 4 of the 5 proxies for local market disclosure quality are correctly signed and significant. One difference from the OLS results is that the *Disclosure in Periodic Filings* is positive but no longer significant. Therefore, using this alternative methodology, we continue to find evidence that the level of home country disclosure is important in explaining the market reaction to Rule 12h-6. Models 6 and 7 of Table 7 report that the *Efficiency of the Judicial System* and *Civil Law* variables continue to be significant (0.39, t-statistic =1.89

and -1.38, t-statistic -2.27, respectively). Models 1 – 7 of Table 6 also report firm level coefficients. Like the OLS results, they are largely insignificant.

Taken together, the results in Tables 4 through 6 confirm our earlier findings that the market reacted negatively to the possibility that firms from weak disclosure and governance regimes could more easily deregister from the U.S. reporting and legal environment. This result provides support for the hypothesis that U.S. disclosure and investor protection laws have significant economic consequences, and that investors view their benefits outweighing their costs.

D. Alternative Announcement Dates

Prior to the rule's acceptance on March 21st 2007, there were three prior announcements by the SEC regarding the deregistration requirements of FPIs. As discussed in Section I-D, the first on January 25, 2006 only mentioned that the SEC was considering a revision and did not provide any details. The second announcement on December 14, 2005 proposed an easing of the deregistration rules based on a relative trading volume test, but only for the FPIs that were well-known seasoned issuers. Finally, a year later on December 13th, 2006 this was modified again to eliminate the well-known seasoned issuer restriction. While there likely existed a large amount of uncertainty regarding what, if any, final rule the SEC would adopt after the comment period, we added to our analysis these additional events when examining a) the overall stock market reaction and b) cross-sectional determinants of the magnitude of this market reaction. In contrast to the final event date we employ in the paper, we find (untabulated) the stock prices of firms in our sample do not appear to have significantly reacted to these events.

Further, there is no cross-sectional firm or country level characteristic that influence individual firms' stock market reaction to these events.

E. Potential Confounding Events

To ensure that other unrelated corporate announcements around our event dates are not influencing our results, we gather 8-K and 6-K forms filed with the SEC for each firm in our sample. 8-K forms are filed by a firm with the SEC when there is an unexpected corporate event such as top manager changes, lawsuits, new product introductions, and M&A announcements. 6-K forms are filed when there is a regularly occurring important corporate event such as quarterly earnings releases. We find 80 firms that either filed an 8-K or 6-K form that contained various announcements within the event window of our three events. After eliminating these firms and re-estimating our regressions, we find that our results are qualitatively similar and therefore do not appear to be driven by any confounding events.

F. Firm Level Governance Effects

In addition to our controls for inside and institutional ownership, we investigated the role of observable firm level governance indicators in explaining the market's assessment of Rule 12h-6. We gathered data from variables from the Institutional Shareholder Services database, with 293 exchange traded firms being matched with firm level governance proxies. We followed Aggarwal, Erel and Stulz (2007) and created a firm level composite governance index based on 44 factors such as if the board of directors is insider or independent director dominated, dual CEO/chairman dummy, staggered board dummy, and whether all directors attend at least 75 percent of the board meetings. Using this measure, we find that firm-level governance variables are not statistically significant

but the country level results continue to hold. As with our previous firm level proxies, the relative importance of the country level proxies for investor protections is consistent with the findings of Doidge, Karolyi and Stulz (2007b) that show that country characteristics explain much more of the variation in governance than observable firm characteristics.

VI. Impact of the Rule on Firm Deregistration

In this section, we analyze the impact of Rule 12h-6 on firms' deregistration decision. To gather the necessary data, we identify all the delistings that from 1990 to 2007. We hand-collect data from several sources, including the stock exchanges, depository institutions and the SEC. Then, we conduct news searches for additional delistings using Lexis-Nexis and also identify all the voluntary delistings, excluding the ones associated with mergers, acquisitions, bankruptcies and involuntary delistings due to exchange requirements. Perhaps most importantly, we verify that the voluntary delistings that occurred prior to the new rule also *deregistered*. Finally, because one of the stated goals of Rule 12h-6 is to encourage new U.S. listings, we gather data on new registrations via listings on major U.S. exchanges to assess how 12h-6 impacted the net effect of foreign firms registration decisions.

Figure 1 presents the total number of yearly registrations, deregistrations and the net effect from 1990 to 2007. Consistent with the notion that deregistration was difficult prior to 12h-6, there were relatively few deregistrations prior to the rule's adoption. For example, from 1990 to 2001, the average number of yearly deregistration was less than two. In the SOX time period (2002 and 2006), the average number rose to 15.

Importantly, before the new Rule 12h-6 was approved, the maximum number of FPI deregistrations from the SEC in any given year was 33 (in 2006). However, in the 8 months from March 22nd to December 31st, the total number of firms that applied for voluntary delisting and deregistration with the SEC under the new rules climbed to an historical high of 80.²³

Figure 1 also plots the annual difference between new registrations and deregistrations. In every year prior Rule 12h-6, including the post-SOX period, the number of new registrations exceeds the number of deregistrations. However, in the period following 12h-6, the number of deregistrations exceeds new registrations for the first time. Overall, the pattern suggests that the Rule did indeed considerably ease foreign firms' ability to deregister from the U.S. disclosure and enforcement regulations. However, we do not find evidence to suggest that the new rule has encouraged, on net, new U.S. registrations.

VII. Conclusion

We examine the stock market impact of Rule 12h-6 which eased the ability of foreign firms to opt out of U.S. disclosure and investor protection regulations. We find that the market reacted negatively to the ability of firms from weak investor protection regimes to easily opt out of the stringent U.S. reporting and legal environment and revert to their less stringent home country disclosure requirements. For example, we find that the market reaction is negative for firms located in countries with poor disclosure environments as

²³ Some of these firms are still in the process of delisting and deregistration, but they clearly announced their intention to do so.

well as for firms from countries with Civil law legal origin and with low levels of judicial efficiency.

In contrast, we find that the market reaction was insignificant for firms located in countries with strong investor protections. Therefore, our results suggest that shareholders place the highest value on U.S. disclosure requirements when the levels of disclosure and investor protection are poor in the home country. In contrast to the country level disclosure and investor protection results, we find much weaker evidence that proxies for compliance costs or financing needs explain the market reaction. Finally, we also find that the negative abnormal returns are concentrated in firms that are currently complying with SEC disclosure requirements (e.g., level II or III ADRs), rather than cross-listed firms exempted from registration requirements (OTC and 144a ADRs). This suggests the economic impact of the rule is concentrated in firms currently subject to SEC registration. Overall, the results support the hypothesis that U.S. disclosure and investor protection laws have significant economic benefits, especially for cross-listed firms from poor investor protection regimes.

References

- Aggarwal, R., I. Erel, and R. Stulz, 2007, Differences in governance practice between U.S. and foreign firms: measurement, causes, and consequences, forthcoming, *Review of Financial Studies*.
- Angel, J., J. Harris, V. Panchapagesan, and I. Werner, 2004, From pink slips to Pink Sheets: Market quality around delisting from Nasdaq, Ohio State working paper.
- Baruch, S., A. Karolyi, and M. Lemmon, 2008, Multi-market trading and liquidity: theory and empirical evidence, *Journal of Finance* 62, 2169-2200.
- Benos, E. and M. Weisbach, 2004, Private benefits and cross-listings in the United States, *Emerging Markets Review* 5, 217-240.
- Benston, G., 1969, The value of the SEC's accounting disclosure requirements. *The Accounting Review* 54, 515-532.
- Benston, G., 1973, Required disclosure and the stock market: An evaluation of the Securities Exchange act of 1934, *American Economic Review* 63, 132-155.
- Berger, Philip G., Feng Li, and M. H. Franco Wong, 2005, The impact of Sarbanes-Oxley on cross-listed companies, University of Chicago working paper.
- Binder, J., 1998, The event study methodology since 1969, *Review of Quantitative Finance and Accounting* 11, 111-137.
- Brook, Yaron, R. Hendershott and D. Lee, 1998, The gains from takeover deregulation: Evidence from the end of interstate banking restrictions, *Journal of Finance* 53, 2185-2204.
- Bushee, B. J., and C. Leuz, 2005, Economic consequences of SEC disclosure regulation: Evidence from the OTC bulletin board, *Journal of Accounting and Economics* 39, 233-264.
- Bushman, R., J. Piotroski, and A. Smith, 2004, What determines corporate transparency?, *Journal of Accounting Research* 42, 207-252.
- Chaplinsky, S., and L. Ramchand, 2007, From listing to delisting: foreign firms' entry and exit from the U.S., University of Virginia working paper.
- Coffee, J. C., 1984, Market Failure and the Economic Case for a Mandatory Disclosure System, *Virginia Law Review* 70, 717-753.
- Coffee, J. C., 1999, The future as history: The prospects for global convergence in corporate governance and its implications, *Northwestern University Law Review* 93, 641-708.

Coffee, J. C. 2002, Racing Towards the Top? the impact of cross-listings and stock market competition on international corporate governance, Columbia University working paper.

Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, 2008, The law and economics of self-dealing, *Journal of Financial Economics* 88, 430-465.

Doidge, Craig, G. Andrew Karolyi, and René Stulz, 2007a, Has New York become less competitive in global markets? Evaluating foreign listing choices over time?, Ohio State University working paper.

Doidge, Craig, G. Andrew Karolyi, and René Stulz, 2007b, Why do countries matter so much for corporate governance?, *Journal of Financial Economics* 86, 1-39.

Friend, I., Herman, E., 1964. The SEC through a glass darkly, *Journal of Business* 37, 382–401.

Greenstone, M., Oyer, P., and A. Vissing-Jorgensen, 2006, Mandated disclosure, stock returns, and the 1964 Securities Act amendments, *The Quarterly Journal of Economics* 121, 399-460.

Healy, P., Palepu, K., 2001, Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature. *Journal of Accounting and Economics* 31, 105-331.

Hostak, Peter, Thomas Lys, and Yong Yang, 2006, Is the Sarbanes-Oxley Act scaring away lemons or oranges? An examination of the impact of the Sarbanes-Oxley Act on the attractiveness of U.S. capital markets to foreign firms, working paper, Northwestern University.

Jarrell, G., 1981. The economic effect of federal regulation of the market for new security issues. *Journal of Law and Economics* 24, 613–675.

Karolyi, A. G., 1998, Why do companies list their shares abroad? A survey of the evidence and its managerial implications, Salomon Brothers Monograph Series 7 (1), New York University.

Karolyi, A. G., 2006, The world of cross-listings and cross-listings of the world: Challenging conventional wisdom, *Review of Finance* 10, 99-152.

Kothari, S., Warner, J., 2006, Econometrics of Event Studies, in Espen Eckbo, Ed., *Handbook of Empirical Corporate Finance*, Elsevier-North-Holland.

La Porta, Rafael, Florencio Lopez-De-Silanes, and Andrei Shleifer, 2006, What works in securities laws? *Journal of Finance* 61, 1-32.

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert Vishny, 1998, Law and finance, *Journal of Political Economy* 106, 1113–55.

Lang, Mark, Jana Smith Raedy, and Wendy Wilson, 2006, Earnings management and cross listing: Are reconciled earnings comparable to U.S. earnings? *Journal of Accounting and Economics* 42, 255-283.

Lang, Mark, Karl Lins, and Darius Miller, 2003, ADRs, analysts, and accuracy: Does cross listing in the United States improve a firm's information environment and increase market value? *Journal of Accounting Research* 41, 317-345.

Lang, Mark, Karl Lins, and Darius Miller, 2004, Concentrated control, analyst following, and valuation: Do analysts matter most when investors are protected least? *Journal of Accounting Research* 42, 589-623.

Leuz, C., D. Nanda, and P. D. Wysocki, 2003, Earnings management and investor protection: an international comparison, *Journal of Financial Economics* 69, 505-527.

Leuz, C., A. Triantis, and T. Y. Wang, 2008, Why do firms go dark? Causes and Economic Consequences of Voluntary SEC Deregistrations, *Journal of Accounting & Economics* 45, 181-208.

Li, Xi, 2006, The Sarbanes-Oxley Act and cross-listed foreign private issuers, University of Miami working paper.

Lins, Karl, D. Strickland and M. Zenner, 2003, Do non-U.S. firms issue equity on U.S. stock exchanges to relax capital constraints? *Journal of Financial and Quantitative Analysis* 40, 109-133.

Litvak, Kate, 2007, The effect of the Sarbanes-Oxley Act on non-U.S. companies cross-listed in the U.S., *Journal of Corporate Finance* 13, 195-228.

MacKinlay, A. C., 1997, Event studies in economics and finance, *Journal of Economic Literature* 35, 13-39.

Marosi, A. and N. Massoud, 2008, “You can enter but you cannot leave...” – U.S. securities markets and foreign Firms, *Journal of Finance*, forthcoming.

Piotroski, Joseph D., and Suraj Srinivasan, 2007, The Sarbanes-Oxley Act and the flow of international listings, University of Chicago working paper.

Robbins, Sidney, and Walter Werner, 1964, Professor Stigler revisited, *Journal of Business* 37, 406–413.

Reese, W. A. and M. Weisbach, 2002. Protection of minority shareholder interests, cross-listings in the United States, and subsequent equity offerings, *Journal of Financial Economics* 66, 65-104.

Schipper, K., and R. Thompson, 1983, The impact of merger-related regulations on the shareholders of acquiring firms, *Journal of Accounting Research* 21, 184-221.

Sefcik. S., and R. Thompson, 1986, An approach to statistical inference in cross-sectional models with security abnormal returns as the dependent variable, *Journal of Accounting Research* 24, 316-334.

Siegel, J., 2007, Is there a better commitment mechanism than cross-listings for emerging economy firms? Evidence from Mexico, Harvard Business School working paper

Smith, Geoffrey, 2006, Why do firms cross-list? A look at the impact of U.S. regulation on cross-listed firms, Arizona State University working paper.

Stigler, G., 1964, Public regulation of the securities markets, *Journal of Business* 37, 117-142.

Thompson, R., 1985, Conditioning the Return Generating Process on Firm Specific Events: A Discussion of Event Study Methods, *Journal of Financial and Quantitative Analysis* 20, 151-164

Woo, Christopher, 2006, The effects of the Sarbanes-Oxley Act on foreign private issuers, Harvard Law School thesis.

Zingales, Luigi, 2007, Is the U.S. capital market losing its competitive edge?, *Journal of Economic Perspectives*, forthcoming.

Table 1. Summary Statistics

This table presents descriptive statistics for the sample and variables used in the analysis. Panel A describes the number of observations and number of firms across countries. Panel B presents the distribution of the sample by cross-listing status. Panel C presents the summary statistics for the sample used in the regression analysis. Disclosure Requirements is an index that includes disclosure on prospectus, compensation, shareholders, inside ownership, contracts irregular, and transactions. It is obtained from LLS (2006). Disclosure is based on the average ranking of the answers to the following questions: R&D, capital expenditure, subsidiaries, segment-product, segment-geographic, and accounting policy. It is obtained from Bushman et al (2004). The World Bank Disclosure is an index based on disclosure on information on seven items including ownership, voting agreements between shareholders, and audit committees that review and certify financial data. It is obtained from the World Bank's Cost of Doing Business survey in 2005. Disclosure in Periodic Filings is an index of disclosures required in periodic reports and is obtained from Djankov et al (2008). Higher values of these disclosure indexes represent better transparency. Earnings Management is an aggregate earnings management score based on earnings smoothing and discretion measures, and is obtained from Leuz et al (2003). Higher values of this index refer to higher levels of earnings management. Efficiency of the Judicial System is an assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms" produced by the country risk rating agency International Country Risk. Higher scores of this index refer to higher efficiency levels. Common (civil) Law refers to firms located in countries with an English (non-English) legal origin (LLS, 2006). Total Assets is total firm assets measured in million \$US. Leverage is long term debt divided by Total Assets. Sales Growth is the one-year growth in firm sales. ROA is the earnings before interest and taxes divided by Total Assets. Institutional Ownership % is the percentage of shares held by financial institutions as reported in 13F filings. Inside Ownership % is the percentage of shares held by company insiders, and is obtained from *Worldscope*. IFRS Adoption is a dummy variable that equals one if the firm prepares its annual reports in compliance with the IFRS, zero otherwise. It is obtained from *Worldscope*. Eligible is one for firms for which the U.S. stock markets account for at most 5 percent of their worldwide trading volume, zero otherwise. ADR ratios are taken into account when calculating the relative trading volume. Comment equals one for firms that commented on any of the SEC's FPI deregistration proposals, obtained from the SEC's website, zero otherwise. Stock Market Cap/GDP is the domestic stock market capitalization divided by GDP, and is obtained from the World Development Indicators database. All the continuous firm-specific variables are averaged over the period between 2004 and 2006.

Panel A. Country Distribution

Country	# Firms	Country	# Firms
Argentina	12	Japan	26
Australia	24	Mexico	12
Austria	1	Netherlands	21
Belgium	2	New Zealand	1
Brasil	27	Norway	5
Canada	260	Peru	2
Chile	14	Philippines	1
Colombia	1	Portugal	2
Denmark	1	Singapore	7
Finland	4	South Africa	8
France	25	South Korea	10
Germany	18	Spain	5
Greece	3	Sweden	6
Hong Kong	12	Switzerland	13
India	9	Taiwan	7
Ireland	7	Turkey	1
Israel	42	United Kingdom	39
Italy	9	Venezuela	1
Total	638		

Panel B. Cross-listing Type

Cross-Listing Type	# Firms
Exchange-traded	536
AMEX	66
NASDAQ	154
NYSE	316
OTC-traded	102
Total	638

Panel C. Firm and Country Characteristics

Variable	# Firms	Mean	Median	Std. Dev.	5th percentile	95th percentile
Total Assets	638	48,188	2,070	198,307	11.140	220,435
ROA	638	-0.059	0.026	0.296	-0.621	0.139
Leverage	638	0.186	0.176	0.150	0	0.449
Sales Growth	638	0.241	0.084	0.882	-0.182	0.954
Foreign Sales Ratio	638	0.384	0.287	0.386	0	1
Comment	638	0.030	0	0.170	0	0
Eligible	638	0.227	0	0.419	0	1
Institutional Ownership %	638	0.265	0.079	0.343	0	0.998
Inside Ownership %	638	0.192	0.109	0.238	0	0.698
IFRS Adoption	638	0.252	0	0.435	0	1
Disclosure Requirements	638	0.758	0.833	0.192	0.333	0.916
Disclosure	638	93.951	100	13.398	57.25	100
World Bank Disclosure	638	6.260	7	0.927	5	7
Earnings Management	525	10.248	5.3	7.119	5.1	22.5
Disclosure in Periodic Filings	638	0.836	1	0.261	0.2	1
Civil Law	638	0.359	0	0.480	0	1
Efficiency of the Judicial System	638	8.863	9.250	1.352	6	10
Stock Market Cap/GDP	638	1.208	1.33	0.747	0.34	2.36

Table 2. The Market Reaction to the Announcement of the SEC’s FPI Deregistration Rule

This table presents summary statistics and joint test results for coefficient estimates for exchange-traded and OTC-traded ADRs separately on the event parameter ($\hat{\gamma}_i$) obtained from the following SUR system:

$$R_{it} = \alpha_i + \beta_i R_{mt}^{Local} + \lambda_i R_{mt}^{US} + \gamma_i D + \varepsilon_{it} \quad i = 1, 2, \dots, N$$

where R_{it} is the daily return on an individual firm i in its local market on day t , D takes on the value of one for three-day window surrounding the approval of FPI rule on three days surrounding March 22, 2007 by the SEC and zero otherwise, R_{mt}^{Local} is the daily return on the domestic market index and R_{mt}^{US} is the daily return on the U.S. market index, and N is the number of firms in the sample. Daily stock returns are measured between June 1, 2004 and June 1, 2007 for 536 exchange-traded and 102 OTC-traded ADRs. The event parameter estimate $\hat{\gamma}_i$ corresponds to the average abnormal return for firm i in the (-1, +1) event window, and is multiplied by 3 to reflect the CAR over the three-day period. Panel A reports results based on different measures of the degree of legal protection for exchange-traded ADRs. The sample medians from the original studies are used to group firms into high vs. low legal protection regimes. Panel B reports results based on different firm characteristics for exchange-traded ADRs. The sample medians are used to group firms into high vs. low respective firm financial characteristic. Panel C reports results for all the 536 exchange-traded ADRs, and panel D displays results for all the 102 OTC-traded ADRs. Variable definitions are reported in Table 1. Standard errors take into account the contemporaneous correlation of residuals. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Panel A. Subsamples Based on Disclosure and Legal Protection

Weak	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)	Strong	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)
Low Disclosure Requirements	112	-0.558**	-0.924***	High Disclosure Requirements	424	-0.027	-0.183
Low Disclosure	127	-0.576***	-0.912***	High Disclosure	409	-0.0015	-0.156
Low Disclosure in Periodic Filings	210	-0.492***	-0.585***	High Disclosure in Periodic Filings	326	0.099	-0.165
Low World Bank Disclosure	151	-0.522***	-0.828***	High World Bank Disclosure	385	0.021	-0.165
High Earnings Management	280	-0.459***	-0.405***	Low Earnings Management	132	-0.111	-0.177
Civil Law	211	-0.396***	-0.594***	Common Law	325	0.039	-0.153
Low Judicial Efficiency	141	-0.432**	-0.822***	High Judicial Efficiency	395	-0.027	-0.156

Panel B. Subsamples Based on Firm Characteristics

Bottom Half of the Sample	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)	Top Half of the Sample	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)
Small Firm	268	0.051	-0.342	Large Firm	268	-0.297**	-0.213**
Low Leverage	268	-0.081	-0.207	High Leverage	268	-0.165	-0.300*
Low Sales Growth	268	-0.162	-0.456**	High Sales Growth	268	-0.102	-0.171
Non-Eligible ADR	410	-0.084	-0.294*	Eligible ADR	126	-0.294*	-0.243*
Low Foreign Sales Ratio	268	0.063	-0.126	High Foreign Sales Ratio	268	-0.327**	-0.453***
Low ROA	268	-0.093	-0.378*	High ROA	268	-0.162	-0.174*
Low Institutional Ownership	268	-0.099	-0.378**	High Institutional Ownership	268	-0.162	-0.258
Low Inside Ownership	268	0.324	-0.135	High Inside Ownership	268	-0.585***	-0.489***

Panel C. All 536 Exchange-traded ADRs

	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)	χ^2 values for $H_0: \gamma_i = 0 \forall i$
All Exchange-traded ADRs	536	-0.138	-0.294***	2.61***

Panel D. All 102 OTC-traded ADRs

	N	Mean $\hat{\gamma}_i$ (%)	Median $\hat{\gamma}_i$ (%)	χ^2 values for $H_0: \gamma_i = 0 \forall i$
All OTC-traded ADRs	102	-0.039	-0.534	0.69

Table 3. Cross-Sectional Determinants of Firm-level Responses to the Announcement of the SEC's FPI Deregistration Rule

This table presents the multivariate regression results of the impact of firm and country characteristics on the stock market reaction of individual firms to the SEC's FPI Deregistration Rule approval. Dependent variable is the coefficient estimate on the event parameter ($\hat{\gamma}_i$) multiplied by 300, which corresponds to the cumulative average abnormal return for firm i in the (-1, +1) event window. The sample is restricted to 536 exchange-traded ADRs. Variable definitions are reported in Table 1. Robust standard errors are estimated using the Rogers method of clustering by country. The t-statistics are reported in parentheses below coefficient estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disclosure Requirements	1.800** [2.313]	-	-	-	-	-	-
Disclosure	-	0.027*** [3.035]	-	-	-	-	-
World Bank Disclosure	-	-	0.348** [2.561]	-	-	-	-
Earnings Management	-	-	-	-0.081*** [-3.054]	-	-	-
Disclosure in Periodic Filings	-	-	-	-	0.897* [1.911]	-	-
Civil Law	-	-	-	-	-	-0.840*** [-2.872]	-
Efficiency of the Judicial System	-	-	-	-	-	-	0.180* [1.821]
Log (Total Assets)	0.024 [0.307]	0.024 [0.294]	0.03 [0.389]	0.099 [1.034]	0.024 [0.284]	0.051 [0.594]	0.009 [0.116]
ROA	-0.96 [-0.749]	-0.936 [-0.720]	-0.948 [-0.728]	-0.81 [-0.581]	-0.987 [-0.768]	-1.014 [-0.794]	-1.017 [-0.793]
Leverage	-0.147 [-0.120]	-0.078 [-0.064]	-0.261 [-0.214]	-0.252 [-0.166]	-0.156 [-0.127]	-0.288 [-0.236]	0.0005 [0.001]
Sales Growth	-0.126 [-0.528]	-0.123 [-0.521]	-0.105 [-0.452]	-0.099 [-0.391]	-0.117 [-0.496]	-0.12 [-0.502]	-0.126 [-0.530]
Foreign Sales Ratio	-0.309 [-0.749]	-0.483 [-1.146]	-0.363 [-0.877]	-0.138 [-0.276]	-0.348 [-0.839]	-0.354 [-0.867]	-0.435 [-1.017]
Comment	0.024 [0.044]	-0.12 [-0.232]	-0.111 [-0.202]	0.147 [0.233]	-0.12 [-0.220]	-0.018 [-0.031]	-0.192 [-0.363]
Eligible	-0.09 [-0.344]	-0.129 [-0.495]	-0.012 [-0.047]	0.396 [1.245]	-0.09 [-0.345]	0.114 [0.414]	-0.123 [-0.464]
Institutional Ownership %	-0.369 [-1.048]	-0.3 [-0.869]	-0.339 [-0.970]	-0.651* [-1.700]	-0.279 [-0.788]	-0.282 [-0.816]	-0.21 [-0.606]
Inside Ownership %	-0.783 [-1.283]	-0.747 [-1.277]	-0.822 [-1.366]	-0.825 [-1.088]	-0.924 [-1.572]	-0.777 [-1.289]	-0.843 [-1.449]
IFRS adoption	-0.279 [-0.915]	-0.468 [-1.476]	-0.306 [-0.971]	-0.729** [-2.067]	-0.306 [-0.985]	-0.366 [-1.180]	-0.351 [-1.125]
Stock Market Cap / GDP	-0.198 [1.249]	-0.099 [0.685]	-0.108 [0.712]	-0.126 [0.715]	-0.09 [0.601]	-0.192 [1.218]	-0.132 [0.822]
Constant	-0.549 [0.567]	-1.587* [1.693]	-1.491 [1.448]	1.149 [1.324]	-0.075 [0.090]	0.045 [0.058]	-0.747 [0.762]
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	536	536	531	411	536	536	536
R-Squared	0.048	0.05	0.049	0.08	0.045	0.051	0.045

Table 4. Cross-Sectional Determinants of Firm-level Responses to the Announcement of the SEC's FPI Deregistration Rule: Excluding Penny Stocks

This table presents the multivariate regression results of the impact of firm and country characteristics on the stock market reaction of individual firms to the SEC's FPI Deregistration Rule approval. Dependent variable is the coefficient estimate on the event parameter ($\hat{\gamma}_i$) multiplied by 300, which corresponds to the cumulative average abnormal return for firm i in the (-1, +1) event window. The sample is restricted to 502 exchange-traded ADRs with stock prices greater than \$1. Variable definitions are reported in Table 1. Robust standard errors are estimated using the Rogers method of clustering by country. The t-statistics are reported in parentheses below coefficient estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disclosure Requirements	1.626** [2.181]	-	-	-	-	-	-
Disclosure	-	0.027*** [3.283]	-	-	-	-	-
World Bank Disclosure	-	-	0.324** [2.396]	-	-	-	-
Earnings Management	-	-	-	-0.060*** [-3.607]	-	-	-
Disclosure in Periodic Filings	-	-	-	-	1.017** [2.216]	-	-
Civil Law	-	-	-	-	-	-0.759*** [-2.930]	-
Efficiency of the Judicial System	-	-	-	-	-	-	0.258*** [2.787]
Log (Total Assets)	-0.009 [-0.095]	0.001 [0.013]	0.0005 [0.006]	0.072 [0.719]	-0.0003 [-0.004]	0.015 [0.156]	-0.012 [-0.152]
ROA	-0.966 [-0.684]	-0.927 [-0.650]	-0.954 [-0.669]	-0.885 [-0.575]	-0.981 [-0.694]	-1.023 [-0.727]	-1.005 [-0.712]
Leverage	-0.177 [-0.139]	-0.132 [-0.104]	-0.312 [-0.244]	-0.48 [-0.303]	-0.174 [-0.136]	-0.336 [-0.264]	0.021 [0.016]
Sales Growth	0.021 [0.086]	0.015 [0.069]	0.036 [0.149]	0.06 [0.229]	0.027 [0.114]	0.027 [0.109]	0.015 [0.067]
Foreign Sales Ratio	-0.441 [-1.041]	-0.654 [-1.512]	-0.507 [-1.180]	-0.267 [-0.514]	-0.501 [-1.175]	-0.483 [-1.137]	-0.642 [-1.477]
Comment	0.153 [0.256]	-0.015 [0.026]	0.039 [0.064]	0.345 [0.523]	0.066 [0.113]	0.141 [0.237]	-0.072 [-0.123]
Eligible	-0.126 [-0.484]	-0.216 [-0.836]	-0.042 [-0.160]	0.246 [0.859]	-0.138 [-0.524]	0.06 [0.228]	-0.225 [-0.865]
Institutional Ownership %	-0.399 [-1.117]	-0.372 [-1.058]	-0.384 [-1.086]	-0.711* [-1.874]	-0.357 [-0.998]	-0.324 [-0.912]	-0.288 [-0.822]
Inside Ownership %	-0.81 [-1.302]	-0.678 [-1.120]	-0.858 [-1.374]	-0.897 [-1.239]	-0.885 [-1.443]	-0.81 [-1.320]	-0.729 [-1.209]
IFRS adoption	-0.189 [-0.717]	-0.363 [-1.370]	-0.228 [-0.844]	-0.669** [-2.217]	-0.228 [-0.858]	-0.258 [-0.980]	-0.231 [-0.884]
Stock Market Cap / GDP	-0.156 [-0.869]	-0.105 [-0.607]	-0.072 [-0.405]	-0.087 [-0.397]	-0.06 [-0.354]	-0.144 [-0.818]	-0.165 [-0.916]
Constant	-0.156 [-0.162]	-1.575 [-1.594]	-1.08 [-1.017]	1.221 [1.338]	0.057 [0.065]	0.366 [0.454]	-1.161 [-1.164]
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	502	502	497	386	502	502	502
R-Squared	0.049	0.053	0.051	0.071	0.048	0.051	0.051

Table 5. Cross-Sectional Determinants of Firm-level Responses to Announcement of the SEC's Finalized FPI Deregistration Rule: Excluding Canadian Firms

This table presents the multivariate regression results of the impact of firm and country characteristics on the stock market reaction of individual firms to the SEC's FPI Deregistration Rule approval. Dependent variable is the coefficient estimate on the event parameter ($\hat{\gamma}_i$) multiplied by 300, which corresponds to the cumulative average abnormal return for firm i in the (-1, +1) event window. The sample is restricted to 359 exchange-traded ADRs whose home countries are not Canada. Variable definitions are reported in Table 1. Robust standard errors are estimated using the Rogers method of clustering by country. The t-statistics are reported in parentheses below coefficient estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disclosure Requirements	1.920** [2.164]	-	-	-	-	-	-
Disclosure	-	0.027*** [2.782]	-	-	-	-	-
World Bank Disclosure	-	-	0.393** [2.425]	-	-	-	-
Earnings Management	-	-	-	-0.093** [-2.525]	-	-	-
Disclosure in Periodic Filings	-	-	-	-	0.936* [1.815]	-	-
Civil Law	-	-	-	-	-	-0.990*** [-2.802]	-
Efficiency of the Judicial System	-	-	-	-	-	-	0.198* [1.964]
Log (Total Assets)	0.057 [0.749]	0.057 [0.772]	0.072 [0.969]	0.171** [2.376]	0.066 [0.856]	0.102 [1.321]	0.054 [0.707]
ROA	-0.816 [-0.463]	-0.39 [-0.225]	-0.528 [-0.297]	1.344 [0.858]	-0.633 [-0.357]	-0.741 [-0.424]	-0.636 [-0.363]
Leverage	-0.555 [-0.542]	-0.507 [-0.509]	-0.759 [-0.754]	-0.546 [-0.429]	-0.633 [-0.638]	-0.777 [-0.772]	-0.459 [-0.467]
Sales Growth	-0.21 [-0.633]	-0.153 [-0.472]	-0.123 [-0.369]	-0.075 [-0.305]	-0.156 [-0.475]	-0.171 [-0.495]	-0.174 [-0.525]
Foreign Sales Ratio	-0.438 [-0.988]	-0.702 [-1.498]	-0.522 [-1.138]	-0.405 [-0.741]	-0.489 [-1.086]	-0.495 [-1.125]	-0.636 [-1.344]
Comment	0.072 [0.135]	-0.081 [-0.161]	-0.054 [-0.102]	0.252 [0.418]	-0.054 [-0.101]	0.054 [0.099]	-0.12 [-0.233]
Eligible	-0.195 [-0.715]	-0.213 [-0.764]	-0.12 [-0.443]	0.252 [0.820]	-0.162 [-0.585]	0.033 [0.116]	-0.192 [-0.688]
Institutional Ownership %	-0.204 [-0.553]	-0.213 [-0.582]	-0.216 [-0.587]	-0.555 [-1.389]	-0.192 [-0.516]	-0.12 [-0.327]	-0.186 [-0.502]
Inside Ownership %	-0.513 [-0.761]	-0.468 [-0.712]	-0.525 [-0.774]	-0.243 [-0.298]	-0.603 [-0.902]	-0.471 [-0.699]	-0.447 [-0.677]
IFRS adoption	-0.234 [-0.764]	-0.369 [-1.153]	-0.231 [-0.746]	-0.804* [-1.791]	-0.201 [-0.649]	-0.339 [-1.056]	-0.201 [-0.650]
Stock Market Cap / GDP	-0.216 [-1.339]	-0.111 [-0.750]	-0.126 [-0.837]	-0.165 [-0.948]	-0.111 [-0.729]	-0.225 [-1.406]	-0.168 [-1.044]
Constant	-0.939 [-0.898]	-1.95** [-2.035]	-2.1** [-1.999]	0.705 [0.711]	-0.543 [-0.620]	-0.495 [-0.580]	-1.362 [-1.388]
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	359	359	354	235	359	359	359
R-Squared	0.073	0.077	0.077	0.188	0.069	0.083	0.071

Table 6. The Cross-Sectional Determinants of the Stock Market Reaction to Announcement of the SEC's Finalized FPI Deregistration Rule Using the Methodology of Sefcik and Thompson (1986)

This table presents the multivariate regression results of the impact of firm and country characteristics on the stock market reaction of individual firms to the SEC's FPI Deregistration Rule approval. The Sefcik and Thompson (1986) methodology is used to estimate the model (see the Appendix for details). The dependent variable is the portfolio return on day t weighted using the weighting matrix of firm and country-specific variables, and multiplied by 300. The sample is restricted to 536 exchange-traded ADRs. Variable definitions are reported in Table 1. Standard errors are adjusted for heteroscedasticity and cross-correlation. The t-statistics are reported in parentheses below coefficient estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disclosure Requirements	2.622* [1.81]	-	-	-	-	-	-
Disclosure	-	0.045** [2.11]	-	-	-	-	-
World Bank Disclosure	-	-	0.504* [1.66]	-	-	-	-
Earnings Management	-	-	-	-0.093** [-1.99]	-	-	-
Disclosure in Periodic Filings	-	-	-	-	1.068 [0.99]	-	-
Civil Law	-	-	-	-	-	-1.383** [-2.27]	-
Efficiency of the Judicial System	-	-	-	-	-	-	0.396* [1.89]
Log (Total Assets)	-0.051 [-0.31]	-0.078 [-0.46]	-0.033 [-0.19]	-0.672 [-0.23]	-0.06 [-0.35]	0.009 [0.05]	-0.075 [-0.44]
ROA	-2.379 [-1.09]	-2.478 [-1.15]	-2.559 [-1.17]	-3.54 [-1.30]	-2.238 [-1.03]	-2.529 [-1.16]	-2.181 [-1.01]
Leverage	0.006 [0.30]	0.009 [0.37]	0.006 [0.30]	-0.015 [-0.51]	0.006 [0.23]	0.003 [0.18]	0.003 [0.18]
Sales Growth	0.003 [0.01]	-0.003 [-0.01]	0.024 [0.07]	0.069 [0.18]	0.003 [0.01]	0.027 [0.08]	-0.009 [-0.02]
Foreign Sales Ratio	0.072 [0.10]	-0.156 [-0.22]	0.021 [0.03]	0.366 [0.40]	0.012 [0.02]	-0.087 [-0.12]	-0.1353 [-0.09]
Comment	-0.036 [-0.07]	-0.207 [-0.41]	-0.015 [-0.03]	0.0969 [0.17]	-0.003 [-0.01]	0.237 [0.44]	-0.129 [-0.26]
Eligible	0.117 [0.14]	-0.087 [-0.10]	0.003 [0.01]	0.093 [0.09]	0.075 [0.09]	0.084 [0.10]	-0.009 [-0.01]
Institutional Ownership %	-0.732 [-0.50]	-0.549 [-0.37]	-0.657 [-0.45]	-0.867 [-0.52]	-0.342 [-0.24]	-1.128 [-0.56]	-0.312 [-0.21]
Inside Ownership %	-0.654* [-1.92]	-0.675* [-1.97]	-0.639* [-1.87]	-0.204* [-0.53]	-0.657* [-1.92]	-0.618* [-1.81]	-0.624* [-1.81]
IFRS adoption	-0.003 [-0.26]	-0.0003 [-0.04]	-0.006 [-0.10]	-0.252 [-0.59]	0.0003 [0.03]	0.003 [0.16]	0.0003 [0.01]
Stock Market Cap / GDP	-0.006 [-1.54]	-0.003 [-1.24]	-0.0003 [-1.07]	-0.003 [-0.87]	-0.003 [-1.04]	-0.006 [-1.61]	-0.006 [-1.47]
Constant	3.861 [1.26]	1.701 [0.51]	2.025 [0.59]	0.036 [1.06]	0.045 [1.52]	4.155 [1.44]	0.024 [0.76]
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Observations	536	536	531	411	536	536	536

Voluntary Deregistrations and New Registrations

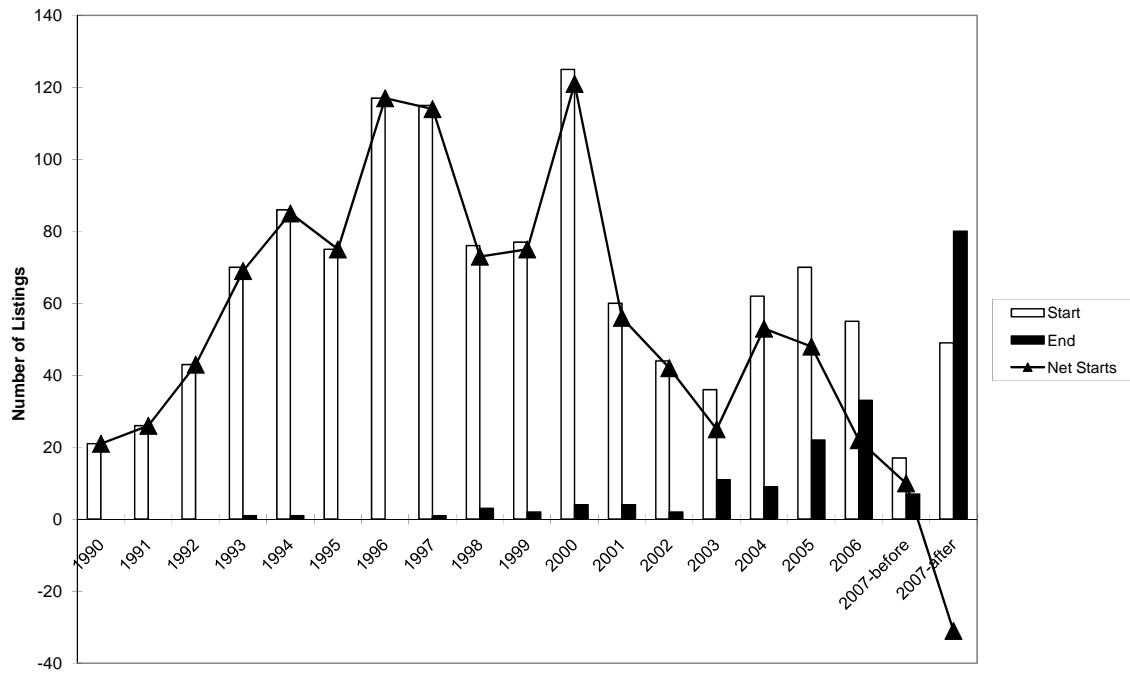


Figure 1. Number of firms voluntarily deregistering and registering with the SEC.

This figure presents the total number of yearly voluntary deregistrations and registrations from 1990 to 2007. The data was collected from several sources, including the stock exchanges, depository institutions, SEC and news databases. Based on the news reports, we exclude any deregistration related with mergers, acquisitions, bankruptcies and involuntary delistings due to exchange requirements. The number of deregistrations described as “Before-2007” corresponds to the period between January 1st and March 21st 2007. The number of deregistrations described as “After-2007” corresponds to the period between March 22nd and December 31st.

Appendix A. The Methodology of Sefcik and Thompson (1986)

The Sefcik and Thompson (1986) method is based on constructing portfolios of sample firms' returns using a weighting matrix that includes firm and country characteristics of the sample firms that are described in equation (2) and presented in Table 1. This weighting matrix (W) is defined as

$$W = [C' C]^{-1} C' = \begin{bmatrix} W_1' \\ W_2' \\ \cdot \\ W_J' \end{bmatrix} \quad (3)$$

Then, a portfolio for each characteristics J is formed as follows:

$$R_{jt} = W_j' R_{it} \quad (4)$$

where:

X_J is an $N \times 1$ vector of the j^{th} characteristic

J = number of firm and country characteristics analyzed including a constant.

C = $N \times J$ matrix of firm and country characteristics

$$C = [1, X_2, \dots, X_J] \quad (5)$$

W = $J \times N$ matrix of portfolio weights

W' = j^{th} row of the matrix W , corresponding to the j^{th} characteristic.

R_{it} = $N \times 1$ vector of individual firms' stock returns on day t

R_{jt} = Weighted return on day t for portfolio J .

In our case, J equals 12 firm and country characteristics plus 2-digit SIC dummies and the intercept term, and N equals 536. After forming J portfolios using equation (4), we run the following time-series regression for each portfolio:

$$R_t^j = \alpha^j + \beta^j R_{mt}^{World} + \lambda^j R_{mt}^{US} + \gamma_i^j D + \varepsilon_t^j \quad j = 1, 2, \dots, J \quad (6)$$

where:

R_t^j = weighted portfolio return series of all the exchange-traded ADRs for characteristic J , obtained from equation (4)

R_{mt}^{World} = return series on the World market index,

R_{mt}^{US} = return series on the U.S. market index,

D = a dummy variable that equals one for the three-day window surrounding March 22nd, 2007 and zero otherwise, and

Daily stock returns are measured between June 1, 2004 and June 1, 2007 (782 observations per firm) for 536 exchange-traded ADRs. Using a shorter estimation period, such as 200 days, does not change our results significantly.

The coefficient estimate on γ^j measures the impact of the j^{th} characteristic on the overall stock market reaction of portfolio firms to the SEC deregistration rule. This estimate is similar to the results obtained from cross-sectional regressions in a standard event study methodology with the difference that results obtained from the Sefcik and Thompson (1986) method accounts for cross-sectional correlation and heteroscedasticity.

Appendix B. Description of Additional Related Events

Event No	Date	Description
Event 1	January 25, 2005	SEC Chairman William Donaldson indicates in a speech that the SEC is considering to revise its rules on deregistration for FPIs. He declines to say what options the SEC is considering or to say when it may propose new rules.
Event 2	December 14, 2005	SEC proposes to allow FPIs to exit the Exchange Act Reporting system. The new proposed rules are applicable only to well-known seasoned issuers.
Event 3	December 13, 2006	SEC votes to re-propose rules allowing FPI deregistration under the Exchange Act.
