TWO ESSAYS ON ALTERNATIVE MECHANISMS TO GOING PUBLIC

by

Ioannis V. Floros

B.Sc. in Economics, University of Piraeus, 1998

M.Sc. in Economics and Finance, University of Warwick, 1999

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This dissertation was presented

by

Ioannis V. Floros

It was defended on

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and approved by

Kuldeep Shastri, Ph.D. (Chairman)
Roger S. Ahlbrandt Sr., Endowed Chair in Finance and Professor of Business Administration
Katz Graduate School, University of Pittsburgh

Craig G. Dunbar, Ph.D.
Associate Professor, Associate Dean
Richard Ivey School of Business, University of Western Ontario

John Harry Evans III, Ph.D.
Katz Alumni Professor of Accounting
Katz Graduate School, University of Pittsburgh

Frederik P. Schlingemann, Ph.D.
Associate Professor of Finance
Katz Graduate School, University of Pittsburgh

Shawn E. Thomas, Ph.D.
Associate Professor of Finance
Katz Graduate School, University of Pittsburgh

Chad J. Zutter, Ph.D.
Assistant Professor of Finance
Katz Graduate School, University of Pittsburgh

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Abstract

This dissertation addresses the reasons why private companies that have decided to go public use the alternative reverse merger path instead of the traditional initial public offering. We test the importance of information asymmetry for the decision of domestic and foreign private company owners to go public in the US utilizing the reverse merger path. To measure information asymmetry we use size, profitability, development stage, expenses and financing variables. We conclude that private companies choosing the reverse merger path are highly information asymmetric since reverse merger deals require no offering to be conducted at the consummation of the deal making these companies less reliant on a wide public investor base. This dissertation consists of five Chapters: Chapter One reviews going public and cross-listing literature. Chapter Two presents our empirical findings of domestic reverse mergers-penny stock initial public offerings comparison. Chapter Three analyzes similarities and differences of domestic and foreign reverse mergers. Chapter Four expands our analysis to the international level. Chapter Five states our conclusions.

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1.0 INTRODUCTION

The decision to go public is of vital importance in the life cycle of a company. There is an extant finance literature analyzing the decision by companies going public for the first time. The majority of this literature has focused on the most common going public mechanism – the initial public offerings (IPOs) of the common stock of these companies. Firms hire an underwriter to advise, distribute securities and take principal positions in order to conduct an IPO and issue securities to the public for the first time. In the course of these activities, information is produced. Issuers pay a commission or gross spread and receive the net proceeds when issuing securities. Apart from these costs (direct costs) the issuers have to bear some indirect costs, namely underpricing and the time and input required from the issuer's executives. The IPO process is not only expensive but time consuming, involving an extensive consultation and regulation-mandated registration process. This raises the question of whether the main existing alternative going public paths are more efficient than IPOs. These alternatives include roll-ups, sell-outs, reverse leveraged buyouts (RLBOs) and reverse mergers (RMs).

Alternatives to IPOs have grown in popularity over the last six years. The number of closed RMs has increased dramatically especially after 2003. All signs indicate that this fast-paced growth will continue in the foreseeable future. There are several reasons contributing to this trend. First, RMs offer benefits that traditional IPOs do not, especially pronounced in companies that would like to raise capital quickly at a low cost. We show that companies with total assets ranging between $ 1.5 m and $ 30.0 m utilize the RM path to go public. Second, stricter SEC rules in 2005 imposed that RMs be completely legitimate, transparent, and meet up

to IPO standards. This way firms that have the intention of offering public equity will be able to do so as companies that have converged to the IPO standards and do not abide by lower listing criteria anymore. Finally, we find that after 2004 the market for Private Investments in Public Equity (PIPEs) has increased dramatically. Thus, more investors are willing to invest their money into projects connected with RMs.

RMs are the corporate events whereby a publicly traded company, usually a shell, acquires 100% of the stock of a private company that intends to go public. The private company in return (that is why we have the "reverse" part of the definition) buys the majority of the ownership together with the majority of the seats of the board of directors of the newly combined firm. So the private firm essentially acquires controlling interest in the publicly traded company, merges into it and becomes a publicly traded company. The shell has no significant assets or operations (less than $ 500 k on an annual basis) and is the remnant of a firm that was sold off or became bankrupt or a company formed by owners of a private company that intend to eventually be acquired by the shell company in order to access capital markets quickly at low cost. The majority of RM companies are traded Over-The-Counter Bulleting Board (OTCBB) after the consummation of the RM deal. Thus, their initial liquidity is low and their security issuance financing options are limited. At the consummation of the deal they become reporting companies up-to-date with their legal obligations towards the SEC.

In Chapter One we review the going public and cross-listing literature. We explain the gaps in the academic literature that are filled by comparing domestic RMs with penny stock IPOs (PSIPOs) and foreign RMs with capital-raising American Depositary Receipts (CRADRs) and foreign IPOs.

In Chapter Two we present the empirical findings of the domestic RMs-PSIPOs comparison. Chapter Two indicates that firms using RMs tend to be small, illiquid, unprofitable, at the development stage, with limited expenses and low cashing out activity. We examine the

motivations to choose the RM path over the Penny Stock IPO (PSIPO) path by utilizing a sample of 408 RMs and 213 PSIPOs respectively. RM firms tend to use the publicly traded stock as a medium of payment for acquisitions they have planned prior to going public. They are cash-low firms that have exhausted their internal cash reserves and have limited options for raising debt as they are highly information asymmetric companies. They are financed by Private Investments in Public Equity (PIPE). PIPEs are institutional investors willing to finance high-growth firms after the become public. RM companies can be opaque at their initial stages as they do not have to convince a large public investor base. They do not conduct any offering at the consummation of the deal and their ownership structure remains essentially unchanged at the completion of the RM deal. They utilize their PIPE-financing to cover their transaction costs (consulting fees, audit fees, printing costs etc) and also their beginning operational costs. PIPEs function in a manner similar to the role of venture capitalists (VCs) in IPOs. They provide cash financing and monitoring for RMs. They certify that the RM companies they invest in have promising investment prospects. They also provide the needed market making at the commencement of trading. This certification is needed as there is no other intermediary (investment bank) involved in RM transactions. We find that the owners of the private companies choosing the RM path have private information that influences their decision concerning how to go public.

In Chapter Three we analyze the similarities and the differences of domestic versus foreign RMs. We find that both domestic and foreign RM companies exhibit short duration of deal negotiations and low cost of deal completion. A small percentage of all RM deals is withdrawn, which shows that the owners of the private firms can feel secure that their deals will go through as soon as they decide to follow the RM path to enter the stock market. This finding is in accordance with the assumption that the RM process generally does not involve market timing issues. In both domestic and foreign RMs shell companies are used as vehicles by private companies to enter stock markets. Shell companies participating in RM deals do not outperform

the rest of the reporting shell companies. Shell companies do not have any assets or operations and they basically sell their up-to-date reports. Private companies are interested in acquiring their reporting status. Finally, all RMs are characterized as diversifying mergers having the two involved parties operating in different industries with no vertical relatedness.

Chapter Four expands the analysis shown in Chapter Two to the international level. Examining a sample of 216 foreign IPOs (FIPOs), 252 capital-raising ADRs (CRADRs) and 94 foreign RMs we find that foreign RMs (FRMs) utilize exactly the same mechanism as domestic RMs use in order to become public. The main difference is that private companies in FRM deals are foreign firms operating abroad. As shown in Chapter Two, FRMs are opaque firms that go public in the US because they do not conduct any offering at the consummation of the deal. We find FRMs to be smaller with short operating history, and limited sales and PIPE-financing. All their financial characteristics substantiate the information asymmetry hypothesis at the international level. In addition, FRMs conduct their first follow-on offering faster than both CRADRs and FIPOs which shows that their owners have the intention of further protecting minority shareholders' rights. FRMs are incorporated in countries with lower shareholder and creditor rights protection, but with an enhanced legal enforcement environment.

Chapter Five incorporates our concluding remarks. Both domestic and foreign RMs are highly information asymmetric. Specifically for FRMs, we find that FRMs' owners seek to protect minority shareholders' rights. We also find that the decision to go public using FRMs is not made to exploit private information advantages held by insiders. FRMs originate from countries with higher legal enforcement abilities, but lower creditor and shareholder rights.

For domestic RMs, we find that they follow the RM path to go public, because they want to use the publicly-traded stock as medium of payment for forthcoming acquisitions. They are frequently-PIPE financed which corroborates the information asymmetry hypothesis as PIPE investors participate in rapidly growing, but relatively opaque public companies. Domestic RMs

utilize the financing as well as the better monitoring provided by PIPEs in order to be upgraded to one of the main US stock exchanges. It is shown that domestic RM-owners have private information which they use when deciding about their going-public path.

2.0 LITERATURE REVIEW

There is an extant finance literature analyzing the decision by companies to go public for the first time. A majority of this literature has focused on the most common mechanism for the initial public offering (IPO) of the common stock of these companies. Although IPOs remain the most popular method used in the United States of America (US) to go public, more recently a number of companies have been going public using another mechanism commonly referred to as a reverse merger (RM) where a private company goes public through the acquisition of a public company[1].

As recognized in previous literature, going public through an IPO is time consuming and expensive[2]. The costs of an IPO include (a) the direct costs of hiring an investment bank, (b) the indirect costs of underpricing on the first day of trading and (c) the time and input required from the firm's executives. The process is time consuming because it involves an extensive consultation and regulation-mandated registration process. This raises the question whether the main existing alternative paths to going public are faster and of a lower cost. These alternatives include roll-ups, sell-outs, reverse leveraged buyouts (RLBOs) and RMs.

At the international level the issues related to cross-listing have also attracted academic attention. Past literature in finance analyzed the mechanism by which foreign public companies cross-list to become capital–raising, publicly-traded companies in stock markets in the United States (US). These companies most commonly cross-list using American Depositary Receipts

[1] The appendix provides a description of some typical RMs.
[2] See Ibbotson and Ritter (1995), Ritter (1998) and Ritter and Welch (2002) for reviews of the literature on IPOs.

(ADRs) as a trading medium. Alternatively, these companies become public in the US using FIPOs or FRMs. ADRs and IPOs are more traditional paths where the firm prevails as a single entity. FRMs are deals where a foreign private company goes public through the acquisition of a US public company resulting in a new combined entity after the consummation of the deal.

The usual path foreign firms follow to go public in the US is CRADRs. The driving factors for cross-listings are widely discussed in previous literature and include reputation enhancement, foreign acquisition preparation, prestige and visibility increase, market segmentation, capital-raising ability enhancement, product market-base broadening, and provision of credible exit options for foreign employees with stockholdings[3]. The costs in the case of CRADRs are similar to traditional IPOs.

At the domestic level, Brown, Dittmar and Servaes (2005) investigate the motivation to use a roll-up (many small, private companies merge in order to reduce operational costs as well as costs of going public) and compare it to an IPO. They analyze the stock performance in the post-roll-up year as well as the long-run operating performance of the roll-up firms relative to a sample of IPO firms. The roll-up firms are associated with poor stock returns and their operating performance is similar to comparable IPO firms. When main shareholders and managers remain with the companies formed from the roll-up, the post-roll-up stock performance improves.

Brau, Francis and Kohers (2003) compare the choice of going public through an IPO to being acquired by a public firm. They find that firms in highly concentrated markets, with more assets, higher insider ownership, lower leverage, lower liquidity and in time periods with higher 3-month T-Bill rates choose the IPO path. These findings indicate that it is important to use financial and macroeconomic factors to explain the going public decision.

[3] Pagano, Roell, and Zechner [2002], Reese and Weisbach [2002], Doigde, Karolyi, Lins, Miller and Stulz [2005], Licht [2003] and Pasquariello, Yuan, and Zhu [2006] are some of the papers analyzing the reasons for foreign firms listing abroad.

Poulsen and Stegemoller (2006) compare outright-sellouts to IPOs and find that firms use the IPO path when they have greater insider ownership prior to the transaction, higher growth, more investments and more R&D expenditures.

Hogan, Olson and Kish (2001) compare RLBOs to IPOs and find that the average initial returns of RLBO firms are consistently lower than those of IPO firms. The main factors that affect the information asymmetry and consequently the pricing of these companies are the reputation of the underwriter, the existence of lockup periods, the size of the stock exchange and the duration the RLBO firm remained private.

At the international level, the cross-listing literature analyzed the intention to protect minority shareholders from foreign incumbent management exploitation (the bonding hypothesis). Bonding hypothesis is one of the most frequently encountered reasons for cross-listing into the US.

Bailey, Karolyi and Salva [2005] argue that subsequent to cross-listing there is a better informational environment which benefits minority shareholders. Mitton (2002) shows that firms from weak investor protection countries have a positive stock price reaction when cross-listing. In contrast, Fanto [1996] further argues that the SEC disclosure requirements are effectively meaningless and have no impact on the information environment. Licht [2003] states that foreign companies' management takes advantage of the relaxed corporate governance rules imposed on foreign companies publicly traded in the US and emphasizes that several studies are ignorant of the special structure of the US regulatory regime governing foreign companies.

In Chapters Two, Three and Four we compare and contrast the decision to go public using domestic or foreign RMs versus their alternative traditional going-public paths. We hypothesize that both foreign and domestic RM companies are highly information asymmetric, since they do not conduct any offering at the consummation of the deal. This way the investors' evaluation cost for the private firm at the time of going public becomes irrelevant. Any moral

hazard and market timing issues are not apparent in RMs as the managerial ownership does not significantly change and no offering is conducted at the completion of the RM deal. In order to test this hypothesis, we analyze a sample of RMs of US-based private firms and US public firms obtained from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report with US PSIPOs listed in SDC's Global New Issues database[4].

To the best of our knowledge, there are four other papers in the academic finance literature on domestic RMs. Gleason, Rosenthal and Wiggins (2005) examine 121 RMs listed on the Securities Data Corporation (SDC) Mergers and Acquisitions database. They find that the public firms involved in the RMs are generally poor performers prior to the merger. RM announcements are associated with significant gains to the stocks of these companies. Based on this result, they conclude that RMs may provide shareholders of distressed firms a way to recover some of their investment. They find no improvement in operations or profitability and only 46% of the companies survive after two years.

Gleason, Jain and Rosenthal (2006) compare traditional IPOs, RMs and self-underwritten IPOs[5]. They conclude that RM and self-underwritten IPO companies are smaller and of lower profitability. They also show that these companies outperform their matched traditional IPO companies in the short run, but exhibit comparable performance three years following the going public decision.

Adjei, Cyree and Walker (2008) focus on the survivability of 286 and 2860 SDC listed RMs and IPOs respectively. They find that 42 percent of RMs compared with 27 percent of IPOs are delisted within three years of listing on an exchange. They show that 1.4% of RMs do not

[4] The SDC and the DFM databases differ in that the former lists deals where the public company is a regular operating company while the latter lists deals where the public company is a shell company with no significant operations. Shell companies are considered blank check companies and are identified in Securities Exchange Commission (SEC) documents with Security Industry Classification (SIC) codes 6770 and 9995.

[5] They obtain the traditional IPOs and RMs from SDC and self-underwritten IPOs from EDGAR IPO Express.

meet any initial listing requirements while all IPOs meet at least one requirement of the listing exchange. Additionally, they compute the most probable delisting time being the 24th month for RMs and the 37th month for IPOs.

Finally, Sjostrom (2008) describes the RM method of going public. The author analyzes the RMs' deal structure and legal compliance characteristics and argues that RMs are not really comparable to traditional IPOs. The author's concluding remark comes in accordance with our analysis as we compare RMs to PSIPOs and not traditional IPOs.

The first major difference between the current analysis, Gleason, Rosenthal and Wiggins (2005) and Gleason, Jain and Rosenthal (2006) is that we use a distinctive sample that is composed of deals where the public company is a regularly operating company (from SDC) and deals where the public company is a shell company (from DFM). The previous studies only focused on RMs listed in SDC. We feel that the inclusion of the deals from DFM is important since they represent a large majority of the more recent RMs and are more representative of the median size of RMs. Second, Gleason, Rosenthal and Wiggins (2005) focus on the performance of the public entities involved in RMs, while our study is focused on the financial characteristics of private companies prior to using RMs to go public. Third, we focus our comparison in PSIPOs and RMs as PSIPOs seem to be comparable to RMs. Finally, whereas Gleason, Jain and Rosenthal (2006), lump RMs and self-underwritten IPOs together in their comparison with traditional IPOs, we focus specifically on the choice between RMs and PSIPOs.

In addition to the aforementioned differences, we also provide a description of FRMs that have become a popular alternative path for foreign companies listing in US stock markets. We identify the factors that drive private companies to opt for FRMs versus FIPOs and CRADRs. Specifically, we analyze a sample of RMs of foreign private firms and US public firms obtained from Securities Data Corporation's (SDC) Mergers and Acquisitions database, DealFlow Media's (DFM) Reverse Merger Report with FIPOs listed in SDC's Global New Issues database

and capital-raising Level III ADRs (CRADRs) listed in Citibank's Capital Raising Events database (CCRE)[6].

[6] The SDC and the DFM databases differ in that the former lists deals where the public company is a regular operating company while the latter lists deals where the public company is a shell company with no significant operations. Shell companies are considered blank check companies and are identified in Securities Exchange Commission (SEC) documents with Security Industry Classification (SIC) codes 6770 and 9995.

3.0 DOMESTIC REVERSE MERGERS

3.1 TRENDS

As already stated, over the last twenty years, RMs have increased in popularity and economic significance. Figure 1 provides a plot of the number of IPOs, of Penny Stock IPOs (PSIPOs) and of RMs based in the US over the time period from 1990 to 2006. We present the number of RMs which is dwarfed by the number of IPOs in the 1990 to 2000 period. Specifically, in this 11-year period, there was an average of 438 IPOs a year while the corresponding figure for RMs is 20. In contrast in the five-year period from 2001 to 2005, there has been an average of 92 RMs a year, a figure much closer to the yearly average of 123 IPOs over the same period[7]. Indeed, we find that the number of RMs dramatically increases after 2003. We attribute this to the introduction of SOX in July 2002. The imposition of SOX rules is deferred for OTC BB traded companies (majority of RMs)[8]. Another reason for the increase in RMs is the declaration of shell companies in the first quarter of 2005, which obligated shell companies to have current periodic reporting making them more transparent for private acquirers. Interestingly enough, we find that the number of RMs remains high in 2006 after the imposition of the stricter SEC rules in November 7, 2005. Finally, we show that the number of PSIPOs is higher than the number of RMs in the

[7] In Reverse Merger Report (Issue IV, 2005) it is argued that this growth trend in RMs may have been reversed subsequent to November 7, 2005 when new Securities Exchange Commission (SEC) rules aimed at deterring any fraud and abuse in the stock market through the use of shell companies were activated. The data does not support this argument. Specifically, there were 181 completed RMs in the one-year period following November 2005, a pace that exceeds all previous years.

[8] In December 2006, the SEC indicated that the deferral will end with annual reports for fiscal years ending after December 15, 2007.

1990 to 1998 period. However, during the last 8 years the number of PSIPOs dramatically decreased[9]. Anecdotal evidence shows that since 1995 PSIPOs are underwritten brokerage firms with dubious reputations referred to as "bucket shops". The dramatic decrease in the PSIPOs may be attributed to the low credibility of the underwriters of PSIPOs after 1995 and to the introduction of the Penny Stock Reform Act in 1990. We verify the low credibility of PSIPOs underwriters after mapping the underwriting companies names retrieved from Securities Data Corporation (SDC) with the underwriters' rankings offered by Beatty and Welch (1996) and Carter, Dark and Singh (1998)[10].

A plot of the median total asset values of PSIPOs and RMs over the 1990 to 2006 period is presented in Figure 2. As can be seen from this figure, the median of PSIPOs total assets has an average value of $10.03 million with a range of $4.5 million to $33.04 million. In contrast, the median value of RMs has an average $6.14 million with a range of $1.123 million to $23.933 million. This suggests that even though the number of RMs has been increasing over time, this mechanism tends to be used by smaller private companies. RMs total assets value has been dwarfed by the PSIPOs total assets value in the 2000 to 2006 period. However, the total assets value difference diminishes in 2006.

[9] This finding comes in accordance with the results presented by Beatty and Kadiyala (2003) who argued that the imposition of the Penny Stock Reform Act of 1990 had the effect of reducing the number of IPOs priced below $5 in the 1990 to 1998 period.

[10] These rankings are on a 0 to 9 scale, with 9 being the most reputable underwriter. We find the median penny stock underwriters' reputation value to be 3.625 whereas the respective value for the PIPEs' placement agents is significantly higher, namely 7.13.

3.2 SAMPLE SELECTION

The sample related to domestic RMs comes from two sources – SDC and DFM. The SDC database is used to obtain an initial sample of firms involved in PSIPOs and RMs over the period starting January 1979 and ending December 2006. The sample of firms involved in domestic RMs obtained from SDC is augmented by RMs listed in the DFM database over the period from January 2004 to December 2006 as the period attracting the greatest attention in terms of number of RM deals.

The initial sample of RMs obtained from this search is filtered based on the following criteria: (a) news reports from Factiva (www.factiva.com) clearly identifying the deal is a RM, (b) the deal is between a private company based in the US and a public firm listed on a US-based exchange, (c) the deal involves only two companies[11], (d) deals have a reported effective date, (e) neither party in the deal has prior ownership in the other party and (f) financial information is available from Compustat (for SDC-retrieved RMs), 8-Ks, 8-K/As, 10Ks and SC-14F1s (for DFM-retrieved RMs). The imposition of these criteria leaves us with a total of 408 RMs, with 123 from SDC and 285 from DFM[12,13].

The initial sample of PSIPOs are also filtered based on the following criteria: (a) the offering is by a US-based private company on a US-based exchange, (b) the offering is not a reverse leverage buyout, real estate investment trust, closed-end fund limited partnership, unit investment trust, tracking stock issue, spin-off or rights issue, (c) the offering is not a two-

[11] Triangular RMs are included in the sample as they constitute the most common form of RMs. In triangular deals, the public shell creates an empty wholly owned subsidiary. The subsidiary then merges into the private company. The subsidiary of the shell disappears and the private company becomes a wholly owned subsidiary of the shell company. The owners of the formerly private company own a majority of the shares in the shell after the consummation of the deal.

[12] In some of the tests that follow, we need daily closing stock prices either from the Center for Research in Security Prices (CRSP), Yahoo Finance (www.finance.yahoo.com) or the Over-the-Counter (OTC) Bulletin Board (BB) (www.otcbb.com), databases. Adding this restriction reduces our sample size to 102.

[13] 55.79 percent of the RMs in our sample involve tax-free stock-for-stock exchanges.

tranche deal or a follow-on offer (d) financial accounting information is available from Compustat and (e) stock price information is available from the CRSP database[14]. We also follow the definition offered by the Securities Exchange Act of 1994 for penny stocks. According to Securities Exchange Act 1934 a penny stock is any stock: a) not traded on NYSE, AMEX or Nasdaq, b) priced at less than $5 per share when offered for the first time to the stock market, c) with an issuer of less than $6 m average revenues in the previous 3 years, d) whose issuer has fewer than $5 m in net tangible assets. The imposition of these criteria leaves us with a total of 213 PSIPOs.

3.3 SUMMARY STATISTICS

Table 1 provides a distribution of the reasons given for going public using domestic RMs as reported in Factiva. As can be seen from this table, 140 (34.3 percent) of the firms do not report any specific reason. Of the remaining 268 that state a reason, the five most common are internal growth / research and development of new products, patents (83), access to capital markets (50)[15], external growth / further acquisitions (38)[16], launching a new product (34) and operating synergies (27).

The above discussion focuses only on successful domestic RMs. We also identify 116 attempts at RMs that were withdrawn over the period starting January 1990 and ending December 2006. From the low number of withdrawn RM deals (the entire number of RM deals appearing on SDC during the respective time period is 1460), we conjecture that the owners of

[14] All offerings that have reported problems on Jay Ritter's web page (http://bear.cba.ufl.edu/ritter/) are also excluded from the sample.

[15] 192 of the 408 firms (47.06 percent) in our sample report that they are either financed concurrently with or within 2 years after the completion of the RM deal by Private Investments in Public Equity (PIPEs). It should be noted that the number of PIPE-financed RM deals has considerably increased during 2006 as it reached 67.23 percent.

[16] Interestingly enough, of these 38 firms, 24 are actually involved in acquisition activity in the three year period following the RM.

foreign private firms have high probability of concluding the RM deals and becoming public as soon as they decide to do so[17]. Panel A of table 2 provides a distribution of the reasons given for the withdrawal as reported in SDC and Factiva. No reasons for the withdrawal are provided by 63.79 percent of the firms (74). Of the remaining 42 firms, the reason was mutual consent of the management of both firms for 15.5 percent (18), current economic conditions for 7.76 percent (9), merger process being very time consuming for 4.31 percent (5) and a superior alternate offer for 3.45 percent (4). Panel B of table 2 follows the 116 firms in the post-withdrawal period to determine the course of action they followed in this period. There is no action reported for 83 firms. Of the remaining 33, 6.9 percent (8) were involved in IPOs, 6.9 percent (8) were acquired, 7.76 percent (9) filed for Chapter 11, 4.31 percent (5) completed a RM and 2.59 percent (3) reported further withdrawal from RM negotiations.

Table 3 provides a classification of the 408 successful domestic RMs by the type of merger using the procedure for merger classification in Fan and Goyal (2006). Specifically, mergers are classified as diversifying (different industries with no vertical relatedness between firms), pure horizontal (same industries with no vertical relatedness between firms), pure vertical (different industries with vertical relatedness between firms) and mixed[18]. Given that RMs are undertaken as a mechanism to go public, one would not expect the industry origination of the public company to be an important factor. That is precisely the result in table 3 since 80 percent of the RMs in our sample are diversifying mergers[19].

Gleason, Rosenthal and Wiggins (2005) report that only 46% of the companies in their RM sample survive after two years and conclude that RMs are a very risky mechanism for going public. The firms in our sample do not support this conclusion since they exhibit a much higher

[17] Dunbar (1998) and Busaba, Benveniste and Guo (2001) find that between the mid-1980s and mid-1990s almost 20% of all IPOs was withdrawn, whereas the respective figure for RMs for the period 1990-2006 is 7.945%.
[18] The vertical relatedness is based on a 1 percent cutoff. See Fan and Goyal (2006) for more details.
[19] Similar results are obtained if we focus on the 123 SDC RM deals only.

survival rate. Specifically, we find that 368 of the 408 firms (90.196 percent) survive three years after completing the RM[20]. We attribute the 40 RM companies' failure to survive to their inability to convince PIPE investors to finance them. In the non-surviving sample the percentage of PIPE-financing drops to 27.5 percent (47.06 percent of PIPE-financing in the entire RM sample). They are financed either through long-term loans or through revolving credit lines. Finally, we find that they are only financed once whereas surviving RM companies on average borrow three times through PIPEs investments, other private placements, secondary offerings and revolving credit lines.

The first clear difference between domestic RMs and PSIPOs is that the former are associated with a shorter duration when compared to the latter, where the duration of an RM is the difference between the fist announcement date and the completion date, while that for a PSIPO is the difference between the first registration date and the offer date. Specifically, we find that the median duration of RMs is 51 days while that of PSIPOs is 83 days. The latter figure of 83 is biased downwards because the date of initiation of a PSIPO deal is the kick-off meeting date of the owners with the intended underwriters and not the first registration date. Using the kick-off meeting date the median duration for PSIPOs is approximately 125 days. We conjecture that RMs' owners will manage to conclude their negotiations faster as they do not have to convince a) a large public investor base or b) an investment bank.

A second clear difference between firms using PSIPOs versus those using RMs is age. Specifically the 10-Ks of the companies using RMs indicate that the median age of these firms is 2.5 years. In contrast, PSIPOs exhibit 4.5 years as the median value of their operating history prior to becoming public. Loughran and Ritter [2001] report the median age of firms going

[20] We utilize information retrieved by the SEC and www.factiva.com to calculate the percentage of surviving RM companies. We verify that the RM firm is current with its SEC filings and conducts operations in a specific industry. We do not consider reporting companies the RMs that report with the SEC just because of debt obligations. We consider companies with currently reported 6770, 9995 SIC codes to be non-surviving companies.

public in the US to be about 7 years since the 1980s with an exception in the period from 1999 to 2001 when the median age was 5 years. Poulsen and Stegemoller (2006) report an average of 6 years of operations for US companies prior to becoming public. Chemmanur, He and Nandy (2006) report the average life of US manufacturing firms prior to going public to be approximately 9 years. Finally, Gompers [1996] finds that the average life for the US new public companies that were VC backed was about 5 years. This suggests that RMs serve as a going public device for firms that are relatively young intending to grow and not to restructure their debt to equity balance.

Table 4 presents a comparison of the financial characteristics of PSIPO and domestic RM firms. The comparisons are based on accounting data for the fiscal year prior to the year the firms go public. The specific variables examined include firm size (total assets and sales), leverage (current liabilities to assets, long-term debt to assets), expenditures (capital expenditures to sale and research and development expenditures to sales), free cash flow to sales, net profit margin, deal size, a development stage dummy and change in insider ownership as a result of the RM[21]. Median values for each of these variables for RMs and PSIPOs are in columns 2 and 3 of this table, respectively with Wilcoxon two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equal as presented in column 4[22].

As can be seen from this table, domestic RM firms are smaller[23], have more short-term debt, have less long-term debt, lower capital and research and development expenditures, lower free cash flow and net profit margin. The size of RM deals is smaller and the firms involved are

[21] The development stage dummy takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues.

[22] We choose to report medians and non-parametric test statistics since the distributions of the variable exhibit skewness.

[23] Specifically, regarding the median value of RM total assets, we find that 56% of the median value presented consists of accounts receivables and net intangibles whereas 44% consists of gross fixed assets and cash and cash equivalents. We conjecture that the greater part of the total assets median value is considered to be uncertain.

in the development stage. These results are all consistent with our previous observation that RMs serve as a going public device for firms that are relatively young, opaque with the intention of conducting strategic acquisitions.

The median values of the amount of ownership given up by insiders as a result of the going public transaction indicate that insiders own a larger percentage of the firm in RMs as compared to PSIPOs. This suggests that firm insiders involved in RMs do not use the deal to cash out their holdings.

Table 5 contains a description of the financial characteristics of domestic RM firms in the fiscal quarter after they become public. The specific variables examined include firm size (total assets and sales), leverage (current), capital expenditures, free cash flow, net profit margin, net income and institutional/beneficial holdings. RM firms are categorized according to whether they are upgraded, downgraded or remain on the same stock exchange two years after going public[24]. Panel A of the table compares firms that were upgraded with those that were downgraded, while Panel B provides a comparison of the upgraded firms with those remaining on the same exchange. Median values for each of the variables under consideration are in columns 2 and 3 of the table with Wilcoxon two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equally being presented in column 4.

In Table 5, Panel A, we find that the RM firms that are upgraded have significantly more short-term debt, higher working capital, lower free cash flow and lower net income when compared to the RM firms that are downgraded. They also have higher revenues and lower institutional/beneficial holdings. In non-tabulated results we analyze the differences in financial characteristics for one fiscal year and two fiscal years after the going public date. We find that

[24] The summary statistics in Table 5 are based on a sample of 37 upgraded, 26 downgraded and 196 RM companies remaining on the same stock exchange two fiscal years after the going public date. We were unable to retrieve stock exchange information for 6 RM companies. A company is considered to be upgraded if it moves to an exchange with stricter listing requirements, that is, from Pink Sheets to OTC Bulletin Board (BB), OTC BB to Nasdaq SmallCap or OTC BB to AMEX. In a downgrade, a company moves to an exchange with more relaxed listing criteria, that is, from OTC BB to Pink Sheets.

the RM firms that are upgraded remain larger, with higher revenues, lower net income and lower institutional/beneficial holdings. In contrast to the findings in Panel A of Table 5, the current liabilities of these upgraded companies are lower and their free cash flow are higher than the downgraded firms[25]. Based on these results, we conclude that the companies close to a stock exchange-upgrade improve their liquidity and get support from institutional holders.

In Table 6, Panel B, we find that the domestic RM firms that are upgraded are significantly larger, have higher working capital, lower free cash flow, lower profitability, higher capital expenditures and lower institutional/beneficial ownership when compared to the RM firms that remain on the same stock exchange. Based also on non-tabulated results we conclude that the aforementioned differences in the financial characteristics remain the same in the first and second fiscal year after the going public date[26] [27].

Together with Table 5 findings, we present Table 6 findings on the current ownership characteristics of the upgraded, downgraded and remaining on the same stock exchange RMs. Specifically, we compare the ownership structure decomposition of all RMs by investment management, brokerage firms, holding companies, corporations, individuals and insiders holdings. In addition, we examine the percentage of shares traded on the free float, which includes the number of shareholders and the amount of proceeds raised through PIPEs. Panel A (B) compares the statistical significance in the aforementioned median values between upgraded RMs and downgraded RMs (RMs that stayed on the same stock exchange). All ownership data are current data retrieved from Thomson ONE Banker database. Median values for each of these

[25] In non-tabulated results we find that two years after the going public date the RM companies close to being upgraded have similar institutional/beneficial holdings as compared to RM companies that are close to being downgraded.

[26] We repeat the tests incorporating also 2006 RM information with no significant change in the results. However, the findings are not tabulated as the financial accounting information used was one fiscal quarter after going public instead of fiscal year.

[27] We use a multinomial generalized logistic regression to predict the upgrade/downgrade activity of RMs. We use financial accounting variables together with PIPE financing, naked-short transactions, lockup duration, institutional/beneficial holdings and insider holdings as explanatory variables. The RMs that manage to be upgraded are smaller, have fewer naked-short transactions and higher free cash flow when compared to the RMs that remain traded on the small stock exchange.

variables of the RM firms are in columns 2 and 3 of this table, respectively with Wilcoxon two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equally presented in column 4.

In Panel A we show that the upgraded RMs have significantly lower corporation and individual participation in their ownership structure. We also find a greater percentage of shares traded on the free float, and a greater number of insiders' shareholders and elevated amounts of proceeds raised through PIPE deals when compared to the respective median values of downgraded RMs (however, not statistically significant). We conclude that PIPEs taking interest in RM companies, provide the financial and marketing support needed to achieve their ultimate goal, namely to upgrade to one of the main US stock exchanges.

In Panel B we present the ownership structure differences between upgraded RMs and the RMs that remain on the same exchange. We find that upgraded RMs have statistically significant higher investment management and brokerage firm ownership. They also exhibit a statistically significantly greater number of insider shareholders. The PIPE proceeds raised are higher (however, the latter median value is not statistically significant). Overall, we conclude that upgraded RMs are mainly owned by investment managers rather than individuals, have greater number of insiders' shareholders and have raised higher amounts of proceeds and release a greater number of registered stock to be traded on the free float. We conjecture that PIPEs investors and investment managers provide better monitoring as well as release a greater amount of shares to the free float when interested in upgrading a company to one of the main US stock exchanges. This way the RM companies get closer to meeting the listing criteria set by the main US stock exchanges[28].

[28] In non-tabulated results we plot the impulse response functions of the RM daily stock prices that are traded OTC BB. We utilize stock prices of RM companies that are traded for one, two and three calendar years OTC BB assuming an autoregressive process of order one being followed. We find that the RM firms that are traded continuously for 1 (2 and 3 respectively) years OTC BB, exhibit a decay in the stock price and are traded in the

3.4 EMPIRICAL FINDINGS

In this section we present the results from a number of empirical tests. First, we analyze the going public decision by estimating a logistic regression relating the mechanism used to firm characteristics of RMs and PSIPOs. The same firm characteristics' estimation is repeated by comparing only PIPE-financed RMs (Alternative Public Offerings / APOs) and PSIPOs. Second, we examine whether private information plays a vital role both in the decision to go public and the future performance of firms using a Heckman two-stage self selection analysis. Third, we examine whether there is any endogenous association between the choice to opt for RMs versus PSIPOs with the initial returns. Finally, since shell companies are playing a more prominent role in RMs, we analyze the financial characteristics of these companies to get a better understanding of this role.

3.4.1 Factors influencing the choice of PSIPOs versus RMs

Most previous studies on the going public decision have hypothesized that factors related to capital structure, growth, information asymmetry, insider ownership and certification influence this decision.

Kim and Weisbach (2005) argue that companies intending to go public do so to improve their liquidity. Pagano, Panetta, and Zingales (1998) show that private firms that go public improve their credit rating and lower their capital cost. Brau, Francis and Kohers (2003) find that debt cost is positively related with the probability of an IPO. Poulsen and Stegemoller (2006) report that companies with more capital constraints move to public ownership through an IPO. In the context of the underinvestment problem, Myers (1977) argues that the firms with higher sales

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pennies after 104 (243 and 281 respectively) calendar days. We conclude that the RM companies that remain being traded OTC BB lack the needed liquidity and market making.

growth and leverage are more likely to go public. Pagano and Roell [1998] suggest that funding necessity is an important reason for firms to go public. Pagano, Panetta and Zingales (1998) analyze Italian firms going public, and find that they are characterized by high growth, low leverage, and high investments. Helwege and Packer (2001) argue that growth should positively affect the decision to go public through an IPO.

This discussion suggests that improving liquidity is an important determinant of the going public decision. Since RM firms tend to be younger we hypothesize that their liquidity as defined by the ratio of current assets to current liabilities in the year prior to the going public year is critical.

Relevant literature also suggests the importance of anticipated growth in the going public decision. Growth is proxied by growth in assets, growth in sales and growth in capital expenditures.

Private firms have low transparency making them less attractive to investors when compared to public firms which file financial reports with the SEC. Chemmanur and Fulghieri (1999) analyze private firms with low transparency and show that the degree of information asymmetry is the decisive factor for funding with public versus private equity. Chemmanur, He and Nandy (2006) find that private firms with less information asymmetry are more likely to go public. Ellingsen and Rydqvist (1997) argue that accessing capital markets results in the dissemination of information and attracts more investors by making a firm more transparent. This suggests that higher transparency leads to a firm going public using PSIPO. Transparency is proxied by return on assets (ROA), a development stage dummy, research and development to sales and total assets. Ellis and Twite (2008) argue that PIPE investments occur in firms with large growth opportunities that are highly uncertain. We use the VC-backing dummy variable (for RMs the PIPE-financing is used) as an alternative proxy for testing information asymmetry.

VC-backing dummy variable is also used to proxy for the presence of certification in RMs versus PSIPOs.

We hypothesize that domestic RMs provide a convenient going public path for opaque firms that have used up all their internal funds and do not have any alternative financing other than going public. PIPEs transactions provide the financing needed at the consummation of the deal. There is no offering with the RM deal completion, making the evaluation of cost threshold proven by Chemmanur and Fulghieri (1999) irrelevant for RMs while deciding to go public.

In Appendix B, we present the traditional IPOs' and RMs' steps. The absence of investment bank certification hinders investor interest for the private company. Thus, we hypothesize that RMs having used up all their internal funds (low cash) and being levered-up, utilize the speedy RM path in order to expedite their growth plans and acquisitions. This will motivate RM-owners to maintain their company holdings in order to benefit from future strategic acquisitions, and get the necessary financing and certification as a publicly traded company from private equity companies.

A number of firms that chose the RM path stated that they chose to go public using this method because they planned to use the stock in future acquisitions. Celikyurt, Sevilir and Shivdasani (2007) explore the acquisition motives for going public. They find that newly publicly traded companies acquire other firms by using their access to capital markets to raise acquisition capital and by using the acquisition currency created at the IPO. Celikyurt, Sevilir and Shivdasani (2007) show that acquisitions play a substantial role in the growth of newly public firms together with the internal investments in research and development and capital expenditures. Therefore, we expect private firms that opt for RMs, to use stock as the payment medium for acquisitions within 3 years following deal completion. To proxy for this we use a

stock acquisitions dummy variable that takes on a value of 1 if the firm makes such an acquisition and 0 otherwise[29].

Delaware is regarded as a state with developed and flexible corporate law making it easier for companies to conduct acquisitions. For example, the proxy statement (DEF 14C) dated December 2004 and submitted by New Media Lottery Services Inc. states that ”the Board of Directors has determined that reincorporation in Delaware is in the best interests of our company and our stockholders because the State of Delaware has long been the leader in adopting, construing and implementing comprehensive, flexible corporation laws that are conducive to the operational needs and independence of corporations domiciled in that State, the corporation law of Delaware is widely regarded as the most extensive and well defined body of corporate law in the United States, both the legislature and the courts in Delaware have demonstrated an ability and a willingness to act quickly and effectively to meet changing business needs and the Delaware judiciary has acquired considerable expertise in dealing with complex corporate issues. Moreover, the Delaware courts have repeatedly shown their willingness to accelerate the resolution of complex corporate issues to meet the needs of parties engaged in corporate litigation. Again, since a number of firms that chose the RM path stated that they chose to go public using this method because they planned to use the stock in future acquisitions, we anticipate that it is more likely that these companies are incorporated in Delaware.

The change in insider ownership as a result of going public is another influential factor in the going public decision of a firm. Brennan and Franks (1997) using a sample of British firms conclude that directors give up a lower stake of their ownership when going public compared to

[29] We expect that RMs after becoming public have a more liquid stock and will find it less costly to raise acquisition financing in PIPEs and secondary offerings. Furthermore, a more liquid stock will be more liquid stock will be more appealing as an acquisition currency in stock financed acquisitions and will make it easier for firms to do stock financed acquisitions as it decreases the RMs information asymmetry. Our assumption does not contradict Bargeron, Schlingemann, Stulz and Zutter (2008) findings (target shareholders receive less when a private equity fund makes the acquisitions instead of a public firm) as the RMs managerial ownership after becoming public does not significantly change.

non-directors suggesting that directors do not intend to cash out. Zingales (1995), Mello and Parsons (1998) and Stoughton and Zechner (1998) consider the going public decision as the intermediate stage of selling the entire firm to public investors. We use the change in insider ownership to proxy for the cashing out tendency of private firm's management. We expect that private firm management opting for RM will not cash out retaining their stakes in the combined firm post- RM.

Prior to estimating the factors influencing the choice between PSIPOs and RMs we examine the issue of the existence and the timing of a structural break in the time-series of the average monthly RM observations. We attempt to focus on identifying a break in the mean monthly number of RMs. In Appendix D we show the F-values for the sequence of Chow tests conducted for every year of the 2002 to 2006 period. We are able to conduct the Chow test only for the sub-sample spanning the 2002 to 2006 period due to scarcity of RMs time-series observations in the previous years. As possible break date, we choose the maximum F-value exceeding the Andrews (1993) critical value that assesses statistical significance. We split the 2002-2006 sub-sample at every year and conduct the Chow test for every possible month within the year. In Appendix D we show that there is a possible structural break in August of 2006 as the Chow test statistic reaches its maximum value of 43.99. This finding is taken into account in the forthcoming logistic regressions as the same models are re-estimated by excluding the 2006 observations.

The estimates of our logistic models are presented in Table 7. In Model 1 we include only the information asymmetry-related variables (assets, roa, development stage dummy and research and development to sales). In model 2 we add the market-related variables, namely the stock acquisitions dummy variable and the deal size. In Model 3 we also include the ownership-related variables (change in insider ownership and venture capital backing variables). In Model 4 we add the liquidity and expenditures-related variables (current ratio and capital expenditures to

sales). Finally, in Model 5 we incorporate only the variables that consistently enter previous models being statistically significant and substitute the research and development to sales variable with the industry's (2-digit SIC code) median research and development expenses to sales variable. We assume that RMs with short operating histories, limited conducted research and development activities as they only have 2.5 year operating histories at the time of deciding their going public path[30]. As can be seen from this table, firms choosing to go public using RMs tend to be small, have low ROAs (though not consistently statistically significant), make at least one acquisition in the three years after going public using stock, are in the development stage, have low capital expenditures, smaller change in insider ownership, greater deal size[31] and have greater VC-backing as proxied by the PIPE-investments in RMs. With regard to research and development expenses we estimate the values of the fiscal year prior to the going public date to be low with the RMs' average industry research and development expenses being significantly greater. The smaller size and lower profitability, the development stage and the higher industry research and development expenses are consistent with RM firms being low growth and less transparent[32]. Additionally, the fact that RMs are more frequently VC-backed (PIPE-financed) shows that they have more growth opportunities, hence entail more uncertain future cash flows. Our results also suggest that insiders who are interested in cashing out tend to use PSIPOs instead of RMs. The Delaware incorporation dummy variable is not presented as it enters all 5

[30] We assume that the money raised from PIPE-financing and any later offering will be used for external growth (forthcoming acquisitions) as well as internal growth (research and development activities). Thus, it could be argued that the industry's median research and development expenditures is a more credible proxy to use for the research and development expenses when compared to the negligible research and development expenses one fiscal year prior to the consummation of the RM deal. We also find that 3 RM firms incorporate their research and development expenses in the sales and general expenses.

[31] The median RMs' deal size is found to be lower in Table 4, however the average RMs' deal size value is found to be smaller.

[32] We investigate further the industries' distribution of PSIPOs and RMs in order to explain the level of research and development expenses. The three most popular RMs' industries are the chemicals & allied products (2-digit SIC: 28), miscellaneous services (2-digit SIC: 73) and investors, blank checks etc (2-digit SIC: 67), which justify the high average industry research and development expenses. Model 5 is re-estimated using the average 4-digit SIC code research and development expenses with no significant change in the Model's estimates.

models being insignificant. The explanatory power of the 5 models varies from 17.64% to 73.91%.

The consistently greatest explanatory power is achieved across four models by the stock acquisitions dummy variable. In model 2, the probability to opt for a RM is on average 0.4712 higher when stock is being used as medium of payment for forthcoming acquisitions.

Together with Table 7, we show the estimates of Table 8 where we estimate the factors influencing the decision to opt for an APO (PIPE-financed RM) versus PSIPO. We estimate the same exact 5 models as they appear in Table 7 with the factors' estimates remaining overall the same. In more detail, we find that RMs are significantly smaller, have low ROAs (although not consistently statistical significant), low current ratios, make acquisition in the three years after going public using stock[33], are in the development stage, exhibit greater deal size and lower cashing out activity as proxied by the change in insiders' ownership and are more frequently VC-backed (PIPE-investments in RMs). Finally, we note that the explanatory power of Table 8 models' varies from 31.54% to 77.24% higher than the R-square levels reported in Table 7.

As robustness checks we re-estimate the logistic regressions excluding 2005 and 2005&2006 PSIPO and RM deals respectively to determine if the imposition of stricter SEC rules had an impact of the choice of IPOs versus RMs. Our results are qualitatively the same suggesting that the imposition of the stricter SEC rules have had very little impact on the choice[34]. VC-backing dummy variable enters all 5 models logistic regressions being statistically insignificant which is the only noticeable difference in the estimates already presented in Tables

[33] We find that approximately 31.4% of the total RM sample conducts approximately on average 2 horizontal acquisitions within three years using mainly stock (rarely cash or convertible debt) as the medium of payment.

[34] We hypothesize that the likelihood of private companies opting for a RM versus a Penny Stock IPO in the post-SOX period (2003, 2004, 2005) will be high. The reason is that the SEC has not clarified whether RMs will get a further deadline extension in the SOX rules imposition, whereas PSIPO companies have to submit with the SEC their management report on internal controls as well as their auditors' attestation the fiscal year following December 15, 2007.

7 and 8[35]. We further re-estimate the logistic regressions separately for the RM deals from SDC and the ones from DFM. All estimates remain the same except for the size, the change in insiders' ownership and the VC-backing dummy variable. SDC retrieved RM firms do not significantly differ in size, cashing out activity and VC-backing from PSIPOs. We re-estimate all 5 models after matching RMs and PSIPOs on similar calendar time (+/- 2 fiscal years), similar industry (same 2 digit SIC code) and operating history (RMs operating history exceeds the PSIPOs one from 3 to 5 years). These robustness checks explore the significance of the estimators of the factors that would have affected the choice between PSIPOs and RMs if the RMs would have waited additional 3 to 5 years (which is also the difference in operating histories as presented earlier) in order to become public after matching on similar calendar time and industry. We find that RMs will still be smaller, conducting more frequently at least one acquisition in the three years after the consummation of the RM deal are at the development stage and are more frequently VC-backed (PIPE-financed)[36].

Another potential explanation for pursuing the RM path is the lower mispricing born by RM-owners right after the consummation of the deal. However, the steps outlined in Appendix B show that the RM process does not include underwriter intervention and offering of new shares at the initializing of trading right after the consummation of the deal. Furthermore, we find that RMs do not have more than 22.3% of their authorized shares distributed as common and outstanding. These findings are in accordance with the results presented on RMs' ownership characteristics presented in Table 7. Hence, it is not feasible to explain the RM initial returns as variables shown to consistently explain the initial returns in PSIPOs are not apparent in RMs.

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[35] These findings are non-tabulated, but are available upon request from the author.

[36] Finally, we include in non-tabulated models the total annual PIPEs' industry investments value in our logistic regressions. The values of the annual PIPEs' industry investments are retrieved from the PlacementTracker database and those of the annual VC investments from the VentureOne database respectively. We explore the explanatory power of the size of the PIPEs' industry in the decision to follow the RM versus the PSIPO path. We find that the PIPEs' industry enters all regressions being positive and significant. However, the inclusion of PIPEs' investment values causes complete separation in our estimation.

The underwriter's reputation, the partial adjustment of filing price, the market return over filing and moral hazard factors (like the managers' tenure with the company) do not seem to be relevant in the explanation of RMs' initial returns.

Additionally, we analyze the RMs' trading activity and find that out of 148 RM deals for which we are able to identify pricing data, 52 and 35 of them do not exhibit any trading activity during the first one and three days of trading respectively. We conclude that different factors affecting the initial returns in PSIPOs and RMs respectively and low variation of the RMs prices do not make it feasible to compare the initial returns in PSIPOs with RMs[37].

3.4.2 On the existence of private information prior to going public

Table 9 presents the Ordinary Least Square (OLS) estimates of the second-stage regression of the baseline Heckman two-stage self-selection regressions. The model uses Earnings before Interest Taxes, Depreciation and Amortization as the dependent variable[38].

In the first-stage Probit regression, the dependent variable is a dummy variable that takes a value of 1 if the firm uses an RM and 0 if the firm uses an PSIPO. We use the pooled PSIPO – RM sample. The independent variables used are assets, research and development expenses to sales, development stage dummy, stock acquisition dummy, VC- backing (PIPE-financing) dummy, current ratio, deal size and capital expenditures to sales. For our structural model we only use the aforementioned independent variables that are shown to significantly affect the

[37] Indicative of the low trading volume on RM stocks is the anecdotal evidence offered by David Feldman (www.reversemergerblog.com) where an example is offered concerning a company with 1 million shares in its public float. Upon a merger, the private company's shareholders obtain 90%, or 9 million shares out of a new total of 10 million shares outstanding. The new 9 million shares are initially restricted under SEC rules and cannot trade until registered. Thus, upon closing only the 1 million may trade until a registration is completed. Of that 1 million, typically one promoter controls about 2/3, and he or she is not likely to sell anytime soon. Thus in our example about 300,000 shares, or barely 3% of the total stock, is hoped to be trading until a registration of more shares is completed, about 3-4 months after closing the merger. Essentially, a very small percentage of shares is traded during the aforementioned time period.

[38] In non-tabulated results we also use the free cash flow as the dependent variable with no significant change caused in the estimates presented in the second stage of Table 9.

going public decision path in Tables 7 and 8. The estimates of this regression are used to estimate the Inverse Mills Ratio (IMR). In the second-stage OLS regression EBITDA is the dependent variable with the independents being only research and development expenses to sales, VC-backing (PIPE financing), current ratio, development stage with the addition of the IMR. The regression is estimated for the RM sample only. We assume that the variables that appear in the logistic regressions to consistently significantly explain the decision to go public are not necessarily the ones that also affect the expected surplus-dependent variable (EBITDA) used in the second-stage regression. The existence of private information in firms that use RMs would be supported by a statistically significant IMR.

In the first-stage regressions, the F-tests reject the null hypothesis of model-misspecification and the size, the deal size, the stock acquisitions dummy and the VC-backing (PIPE-financing) dummy are found to consistently significantly explain the decision to go public. As can be seen from Table 9, the coefficient of IMR is significant with the current ratio, the development stage and the VC-backing (PIPE-financing) dummy variable having coefficients that are not significantly different from zero. This suggests that private information plays a vital role in private owner going public decision making. We conclude that the owners of the private companies use their information prior to making their decision as to which mechanism they want to use to go public.

3.4.3 On the Endogeneity of initial returns and the choice of PSIPOs versurs RMs

In this section, we analyze the possibility that both initial returns and the choice of PSIPOs versus RMs are endogenous by using simultaneous two-stage regressions. We want to check whether there are any other variables that significantly influence the choice of the going public path. Our hypothesis is that there is an association between initial returns and the choice of the

going public decision path. We make this prediction based on the small percentage of registered shares given up to the free float by owners opting for the reverse merger path. However, determining a causal relationship between initial returns and the going public decision path proves to be difficult as they both occur simultaneously.

Panel A (B) of Table 10 presents the OLS (Probit) estimates of the two-stage least squares regressions. In the first stage of Panel A (B), we regress the choice variable of PSIPOs versus RMs (1-day initial returns) on a set of independent variables. In the second stage of Panel A (B), we regress the 1-day initial returns (the choice variable) on the independent variables shown to significantly affect the initial returns (the choice between PSIPOs and RMs) in Table 7 along with the predicted value of the choice variable (the 1–day initial returns) from the first stage[39].

In the second stage regression of panel A we find that the choice of PSIPOs versus RMs does not significantly affect the 1-day initial returns with all other independent variables being insignificant. We conjecture that the lack of statistical significance is caused by the limited price variation in the 1-day initial returns. In the second stage regression of panel B, we find that 1-day initial returns and the choice of PSIPOs versus RMs are significantly negatively related. As in Table 7, assets and industry average research and development expenditures to sales are negative and significant, whereas the VC-backing (PIPE-financing) and the stock acquisitions variables are insignificant[40]. These results lead us to conclude that 1-day initial returns negatively affect the going public decision path and the owners of the RMs have the lower mispricing in mind prior to deciding which going public path to follow. The RM-owners achieve the lower mispricing by decreasing the percentage of shares released to the free float right after the consummation of the RM deal.

[39] For our estimation we use Stata as described in Keshk (2003).

[40] The findings do not significantly change when we re-estimate the two-stage simultaneous regressions using the three day initial returns as the continuous dependent variable.

3.4.4 Characteristics of shell companies participating in domestic RM transactions

Shell companies constitute an integral part of the RM transactions. In June 2005, the SEC defined any company with no or nominal operations, and with no or nominal assets or assets consisting solely of cash and cash equivalents" as a shell company. They are traded either on the NASDAQ Bulletin Board or Pink Sheets. They come into existence either with the sole intent of merging with unidentified single or multiple companies, or after selling their operations and assets following bankruptcy and undergo the costs of disclosure requirements imposed by the SEC[41]. Shell companies are represented as blank check companies and are identified in SEC documents with the SIC codes 6770 and 9995. Their financial accounting statements indicate that they are in development and have not yet released a specific business plan. Anecdotal evidence suggests that the increase in the use of shell firms in RMs is a direct consequence of improved performance by these firms. In this section we provide a test of this hypothesis by analyzing the change in financial performance of shell firms identified by DFM's Reverse Merger Report. The change is measured from the first quarter of 2005 to the first quarter of 2006. In addition, we compare the financial characteristics of all non-RM shell firms with those involved in RMs and compare their performance.

Shell companies are categorized as follows: a) OTC Bulleting Board reporting companies, b) Pink Sheets traded companies or c) Pink Sheets non-trading companies[42]. RMs with the OTC Bulletin Board reporting shell companies, bypass the preparation and filing of an Exchange Act registration statement, provide enough stockholders to support public trading, and avoid the listing application process. RMs with Pink Sheets traded companies, cannot avoid the Exchange Act registration statement and benefits, and must obtain shareholders and avoid the

[41] The costs of the imposition of disclosure requirements on smaller OTC BB firms are documented in Bushee and Leuz [2005].

[42] Please refer to Appendix C to get more details on the differences in the listing process on the OTC Bulletin Board and on the Pink Sheets.

listing application process. Finally, if the RM takes place with a Pink Sheets non-trading company, then the only benefit is obtaining a number of stockholders sufficient to establish a public market upon conclusion of the registration process.

Panel A of Table 11 contains the financial characteristics of all shell companies in our sample. We focus on the median values as the data exhibits skewness. As can be seen from this panel, the median reporting shell companies have no long-term liabilities or sales, working capital of approximately $(0.06) m and total assets of $ 0.009 m.

Panel B of table 11 indicates that the financial characteristics of the reporting shell companies do not improve from 2005 to 2006. Specifically, we find that total assets decrease with current assets decreasing at a greater rate than current liabilities. In addition, these firms also exhibit a reduction in net income. This result does not provide support for the argument that the popularity of the use of shell companies in RMs is being driven by their improving financial performance.

Finally, we observe in panel C of table 11 that the shell companies participating in RM deals are similar to the total sample of reporting shell companies in all the financial aspects considered here. This does not support the argument that the shell companies that participate in RMs are chosen because of their superior performance.

4.0 COMPARISON OF DOMESTIC RMS AND FOREIGN RMS

4.1 TRENDS

It would be interesting to see whether the financial and ownership characteristics of domestic RMs still hold at the international level. RM transactions are frequently encountered with the private company operating abroad. We expect that foreign RMs will still be highly information asymmetric companies having paid though a greater "reputation capital" (i.e. greater operating history, positive cash flows) as they have to convince the US investor base that is unfamiliar with their operations.

Figure 3 provides a plot of the number of FIPOs, capital-raising Level III ADRs (CRADRs) and FRMs from 1986 to 2005. The number of RMs is dwarfed by the number of FIPOs and CRADRs in the 1986 to 2000 period. Specifically, in this 15-year period, there are an average of 17.6 FIPOs and 20.7 CRADRs a year while the corresponding figure for FRMs is 3. In contrast in the five-year period from 2001 to 2005, there are on average 23.2 FRMs a year, a figure greater than the yearly average of 8 FIPOs and of 7.6 CRADRs over the same period. As shown in domestic RMs, the number of FRMs increases dramatically after 2002. When compared to domestic RMs, FRMs exhibit a lower number of observations even in the period subsiding 2002. We present in Figure 1 that domestic RMs reach 175 in 2005, whereas 51 is the respective number of FRMs. One possible reason for this is that foreign markets have recently reformed their legislative environment (e.g. introduction of the Circular 106 in China) imposing stricter rules for foreign companies investing in the US.

Figure 4 plots the median market values of FIPOs, CRADRs and FRMs over the 1986 to 2005 period. The median market value of IPOs has averaged $ 73.41 m with a range of $ 5 m to $ 402.95 m. The average of the median market values of CRADRs is $ 102.59 m with a range of $ 10 to $ 237.1 m. The median value of FRMs has averaged $ 7.69 m with a range of $ 1.73 m to $ 19.26 m. This comparison suggests that the RM mechanism tends to be used by smaller private companies. On the other hand, large private companies choosing to go public in the US use either FIPOs or CRADRs. From the figure it is obvious that CRADRs and foreign IPOs are significantly larger than FRMs. The findings still remain the same even if we use the annual total asset size values. For this purpose we compare FRMs with Level I ADRs, to test whether our findings alter when the foreign companies that cross-list, but do not conduct any offering in the US are used. This way we will check whether the findings are influenced by the fact that foreign companies following FIPOs and CRADRs raise capital in the US.

4.2 SUMMARY STATISTICS

In Table 12 we list the reasons for going public using FRMs reported by Factiva. Sixty (64 percent) of the firms do not report any specific reason. For the remaining 34 firms the most common reasons are growth (15), access to capital markets (14)[43] and further acquisitions (7)[44]. We contrast these findings to the reasons reported by the private domestic RM company-executives as shown in Table 1. We conclude that private companies choose RMs to access

[43] 55 out of 94 firms (58.51 percent) in our sample report that they are either financed concurrently with or within 2 years after the completion of the RM deal by Private Investments in Public Equity (PIPEs). We find that PIPE-financed RMs raise $ 2.89 m (median value).

[44] Of these 7 firms, 3 are actually involved in acquisition activity in the three year period following the RM. We conclude that RM firms-executives' intentions are not always executed.

capital markets in order to continue growth and build liquidity in order conduct further acquisitions.

The above discussion only includes the completed FRMs. At this point we would also like to analyze any possible withdrawals during the FRM deals' negotiations. From SDC we identify 20 attempts at RMs that were withdrawn over the period starting January 1979 and ending December 2005[45]. From the low number of FRM deals, we conjecture that the owners of foreign private firms have high probability of concluding the RM deals and becoming public as soon as they decide to do so. We also show the respective findings on domestic withdrawn RM deals retrieved from Table 2. Panel A of table 2 provides a distribution of the reasons for the withdrawal as reported by Factiva. Fifty percent of the firms (10) provide no reason for the withdrawal. For the remaining 10 firms, the most common reason is the public company's inability to restructure prior to the consummation of the RM deal. For domestic RMs the most frequently encountered reason for deal withdrawal is the mutual consent of the management of both firms. Panel B of table 13 depicts the firms in the post-withdrawal period and describes their subsequent actions. As reported in Factiva, no action is reported for 16 firms. Of the remaining 4, all of them reported the completion of another FRM deal. For domestic RMs the most frequently followed paths are the subsequent completion of an IPO and the public trading after acquisition.

Table 14 provides a classification of the 94 successful FRMs by the type of merger using the procedure for merger classification in Fan and Goyal (2006). We also show the respective findings on domestic withdrawn RM deals retrieved from Table 3. Given that RMs are undertaken as a mechanism to go public, one would not expect the industry origination of the public company to be an important factor. That is precisely the result in table 3, since 90 percent

[45] We are not successful in analyzing any possible withdrawals in the FRM sample including 94 RM deals. As a result the findings discussed refer to the entire sample of withdrawn FRM deals we could retrieve from SDC.

of the RMs in our sample is diversifying mergers[46]. Similarly, in the case of domestic RM deals the majority is classified as diversifying mergers (76%). We apply the same classification to the 35 SDC RM deals with no significant change in the findings.

Gleason, Rosenthal and Wiggins (2005) report that only 46% of the companies in their domestic RM sample survive after two years and conclude that RMs are a very risky mechanism for going public. However, in Chapter Two we report that 91% of the domestic RM companies still operate and report to the SEC two years after going public. The difference in the survival rates may reflect the different time period used, the difference in the type of companies constituting the two datasets and the definition of "survivability" used. We check the reporting status and the related announcements of the FRM companies and find that 97% of our sample, continue to operate in the fourth quarter of 2006. FRMs' survivability is high and close to the survivability exhibited by domestic RMs (91%).

The first clear difference between FRMs and FIPOs is that the former are characterized by their short duration, where the duration of a FRM is the difference between the first announcement date and the completion date, while that for an IPO is the difference between the first registration date and the offer date. Specifically, we find that the median duration of FRMs is 60 days while that of FIPOs is 80 days. One must keep in mind that the latter figure of 80 is biased downwards because the beginning date of an IPO deal should not be the first registration date but the kick-off meeting date of the owners with the intended underwriters. If that is taken into account, the median duration for IPOs is approximately 122 days. Thus, we conclude that RMs constitute a speedy and low-cost (to gain controlling interest in a OTC BB shell company the cost ranges between $ 700,000 and 800,000) going public path. When compared to the domestic RMs the duration of the negotiations is longer, since the participating entities have to

[46]Interestingly enough in both FRM deals (from Table 12) in which the CEOs reported as the reason for going forward with the RM deal the operating synergies, both of them shown to be diversifying mergers.

overcome the legislative barriers as well (mainly get official approval from the regulatory body abroad).

A second clear difference between firms using IPOs versus those using RMs is age. Specifically the 10-Ks of the companies using RMs indicate that the median age of these firms is 2 years. We conclude that FRM companies are relatively close to the inception date and even closer than the 3 years reported as median value of years of operation for the domestic RM companies. We infer that the "reputation capital" paid by FRMs to access the US stock markets is limited. Pagano, Panetta and Zingales (1998) found that the Italian firms intending to enter the Italian stock exchange have an average life of 33 years which is considerably higher when compared to the years of operations of the US private firms. This would suggest that FRMs serve as a going public device for firms that are relatively young.

Panel A (B) of table 15 present a comparison of the financial characteristics of foreign IPO (CRADRs) and FRM firms. The comparisons are based on accounting data and on transaction costs data pertaining to the stock exchanges that they were listed in for the fiscal year prior to the year firms go public and stock price data for the one- and three-day period following the day they go public. We also compare the audit fees paid in the years 2003, 2004 and 2005. The specific financial accounting variables examined include firm size (total assets and sales), leverage (current liabilities to assets, long-term debt to assets), capital expenditures to sales, research and development expenditures to sales, free cash flow to sales, net profit margin, deal size, and change in insider ownership as a result of the RM. Median values for each of these variables for IPOs and RMs are in columns 2 and 3 of this table, respectively with Wilcoxon

two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equal being presented in column 4[47].

As can be seen from Panel A, FRM firms are smaller, have more short-term debt, have less long-term debt, lower capital expenditures, lower research and development expenditures and lower free cash flow. The size of RM deals is smaller. These results are all consistent with our previous observation that RMs serve as a going public device for firms that are relatively young.

In terms of the amount of ownership given up by insiders as a result of the going public transaction, the median values indicate that insiders own more of the firm in RMs as compared to FIPOs. The relinquished insider ownership percentages suggest that insiders of firms involved in RMs are not using the deal to cash out their holdings.

Specifically regarding FRMs there are some other factors that may affect the decision of private companies' owners to raise capital in the US. First, the effect of the Sarbanes-Oxley Act (SOX) on FRMs when compared to FIPOs we find that FRMs bear higher costs abiding by the SOX rules in all three fiscal years (2003, 2004 and 2005) that are analyzed. These findings are in accordance with the hypothesis that the imposition of the SOX imposes a greater financial burden on companies with smaller market capitalization[48]. In addition, FRMs bear higher transaction costs as mainly traded OTC BB and Pink Sheets. We use the audit fees as reported by the US publicly traded companies as the main proxy for SOX costs. We re-estimate the multinomial logistic regression models without including the 2005 or 2004 RM deals and the 2005 RM deals respectively in order to verify whether the main findings remain after excluding any possible SOX effect.

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[47] We choose to report medians and non-parametric test statistics since the distributions of the variable exhibit skewness. Prior to conducting the non-parametric test statistics we utilize the Shapiro-Wilk test and the normality probability plot to find that the data fail to follow the normal distribution.

[48] We find SOX to be significantly different between FRMs, CRADRs and FIPOs as they enlist in different stock exchanges (OTC BB or Pink Sheets and main US stock exchanges respectively). There is no significant difference found between domestic RMs and PSIPOs as they both trade OTC BB.

As can be seen from Panel B, FRM firms are smaller, have more short-term debt, less long-term debt, lower capital expenditures and lower research and development expenditures than CRADR firms. The size of FRM deals is smaller. These results are again all consistent with our previous observation that RMs serve as a going public device for firms that are relatively young.

Regarding the effect of the SOX on FRMs when compared to CRADRs we find that FRMs bear higher costs abiding by the SOX rules in all three fiscal years (2003, 2004 and 2005) analyzed here. These findings are in accordance with the belief that the imposition of the SOX causes a greater financial burden to companies with smaller market capitalization.

By comparing Tables 4 with 15 we conjecture that FRMs are larger, with more expanded sales, improved profitability, greater deal size and lower insider ownership change. If we combine these findings with the fact that the operating history of FRMs is greater, we conclude that FRMs waited longer to build their "reputation capital" by expanding their operations in order to enlist in the US stock exchanges.

Table 16 presents the financial characteristics of all FRM firms the quarter after they become public. FRM firms are categorized according to whether they are upgraded, downgraded or remain on the same stock exchange two years after going public[49]. The specific variables examined include firm size (total assets and sales), leverage (current), capital expenditures, free cash flow, net profit margin, net income and institutional/beneficial holdings. Median values for each of these variables of RMs are in columns 2 and 3 of this table, respectively with Wilcoxon two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equal being presented in column 4.

[49] Table 5 summary statistics are based on a sample of 17 upgraded, 7 downgraded and 68 RM companies remaining on the same stock exchange two fiscal years after the going public date. Data is retrieved from www.finance.yahoo.com and www.factiva.com relevant press releases. We were unable to retrieve stock exchange information for 2 FRM companies.

In Table 16, Panel A, we compare the financial characteristics of FRM companies that managed to be upgraded with the ones that were downgraded. We find that FRM firms that manage to be upgraded have significantly more short-term debt, higher working capital and higher net income. They are larger with higher revenues and lower institutional/beneficial holdings. In non-tabulated results we also analyze the differences in financials for one fiscal year and two fiscal years after the going public date respectively. We find that the FRM firms that managed to be upgraded exhibit higher institutional/beneficial holdings. All other financial characteristics do not exhibit statistically significant differences. Finally, the differences remain insignificant two years after the going public date for the FRM companies that are close to be upgraded or downgraded respectively.

In Table 16, Panel B, we present that the FRM firms that manage to be upgraded are significantly larger with more expanded sales, have more short-term debt, have higher working capital, and higher insider and institutional/beneficial ownership when compared to the FRM firms that remain on the same stock exchange (Nasdaq, Nasdaq SC, OTC BB and Pink Sheets). In non-tabulated results we conclude that the aforementioned differences in the financials remain the same in the first and second fiscal year after the going public date with the short-term debt and insider holdings differences becoming insignificant[50].

In addition to Table 16, we present in Table 17 the current ownership characteristics of the upgraded RMs and compare them with the downgraded RMs and the ones that remain on the same stock exchange. Specifically, we analyze the ownership structure decomposition of all RMs by investment management, brokerage firms, holding companies, corporations, individuals and insiders holdings. In addition, we examine the percentage of shares traded on the free float, the

[50] We use multinomial generalized logistic regressions to predict the upgrade/downgrade/stay activity of FRMs. We use financial accounting variables together with PIPE-financing, naked-short transactions, lockup duration, institutional/beneficial holdings and insider holdings as explanatory variables. The regressions exhibit quasi-complete separation due to few observations available for the downgraded FRMs (only 1 observation).

number of shareholders and the amount of proceeds raised through PIPEs. Panel A (B) compares the statistical significance in the aforementioned median values between upgraded RMs and downgraded RMs (RMs that stayed on the same stock exchange). All ownership data are current data retrieved from Thomson ONE Banker database. Median values for each of these variables of the RM firms are in columns 2 and 3 of this table, respectively with Wilcoxon two-sample median z-test statistics and associated p-values for the hypothesis that the two medians are equal being presented in column 4.

In Panel A we show that the upgraded RMs have greater investment management's, brokerage firms', and insiders' ownership. On the contrary, upgraded RMs exhibit lower individuals' holdings. We also find greater percentage of shares traded on the free float, greater number of shareholders and elevated amounts of proceeds raised through PIPE deals when compared to the respective median values of downgraded RMs. However, it should be noted that all these differences are not statistically significant. We conclude that PIPEs taking interest in RM companies, provide financial and marketing support needed to achieve their ultimate goal, namely to upgrade to one of the main US stock exchanges.

In Panel B we present the ownership structure differences between upgraded RMs and RMs that remain on the same exchange. We find that the upgraded RMs have statistically significant higher investment management's, brokerage firms' and holding companies' ownership. They also exhibit statistically significant greater number of shareholders and greater amounts of proceeds raised. We conclude that the upgraded RMs are mainly owned by corporations rather than individuals, have greater number of shareholders and have raised higher amounts of proceeds. Overall, we conjecture that the findings presented in Tables 5 and 6 still hold when we expand the financials' and ownership analysis to the international level. Thus, the differences between RMs that get upgraded with the ones that get downgraded or remain on the same stock exchange hold regardless on whether the private company operates in the US or

abroad. The publicly-traded company changes financial and ownership structure depending on whether it attempts to meet the standards of a higher-standards stock exchange.

5.0 FOREIGN RMS

5.1 LEGAL ORIGIN

Figure 5 provides the legal origin distribution of the companies in our sample that use the three alternative paths to access the US stock exchanges using the mapping criteria provided in LLSV (1998)[51]. We find that English Common law countries have the highest representation for all FIPOs (82%), FRMs (69%) and CRADRs (39%). Comparing the three paths of going public we conjecture that the foreign firms that follow the FIPO path come from the most advanced legislative environment.

Figure 6 depicts the distribution of countries by alternative paths followed. We conclude that the British Virgin Islands is the main originating country for FRMs, Israel for FIPOs and the UK for CRADRs. All three countries are English common law countries which provide a protective legal environment for minority shareholders.

[51] There are fourteen countries which are represented in our sample that are not in LLSV. These countries include Russia, Luxembourg, Cyprus, Bermuda, Bahamas, Barbados, China, British Virgin Islands, Cayman Islands, Dominican Republic, Jersey, Liberia, Monaco and Puerto Rico. To create a mapping we combine information retrieved from: a) University of Ottawa, Department of Law; List of World Legal Systems b) 2006 CIA World FactBook, c) University of Pittsburgh, Department of Law; Newspaper with Legal News and Research (JURIST). We are successful in mapping the legal origins of 12 out of the fourteen countries.

5.2 SAMPLE SELECTION

The sample constructed for comparing FRMs to CRADRs and FIPOs comes from three sources – SDC, CCRE and DFM. The SDC database is used to obtain an initial sample of firms involved in FIPOs and FRMs over the period starting January 1979 and ending December 2005. The sample of firms involved in RMs obtained from SDC is augmented by RMs listed in the DFM database over the period from January 1999 to December 2005. The CCRE database is used to construct the CRADRs sample over the period of January 1990 to December 2005.

We filter the initial sample of RMs obtained based on the following criteria: (a) news reports from Factiva (www.factiva.com) clearly identify the deal is a FRM, (b) the deal is between a foreign private company and a public firm listed on a US-based exchange, (c) the deal involves two companies only[52], (d) the deal has a reported effective date, (e) neither party in the deal has prior ownership in the other party and (f) financial information is available from Compustat, 8-Ks, 8-K/As, 10Ks and SC-14F1s. The imposition of these criteria leaves us with a total of 94 FRMs, with 35 from SDC and 59 from DFM[53,54].

We obtain the initial sample of CRADRs from CCRE and cross-check the validity of information provided in CCRE using prospectuses provided by Worldscope. We filter the sample based on the following criteria: (a) they have submitted an F-1 form with the SEC, b) they have increased their number of underlying outstanding shares (new shares issued by the cross-listed company in the home market), c) they have applied for listing in the US markets only, d) they do

[52]Triangular RMs are included in the sample as also in the domestic RMs' sample.
[53]We use a SPACs (Specified Purpose Acquisition Companies) sample kindly offered to us by DealFLow Media. We include 11 SPACs deals from which we have identified subsequent FRM deals and we have hand-collected necessary financial accounting information from available SEC reportings (8-Ks and 8-K/As) for only 1 SPAC deal. This SPAC deal is added to the rest of the financial RM deals. In some of the tests that follow, we need daily closing stock prices either from the Center for Research in Security Prices (CRSP), Yahoo Finance (www.finance.yahoo.com) or the Over-the-Counter (OTC) Bulletin Board (BB) (www.otcbb.com), databases. Adding this restriction reduces our sample size to 32.
[54] 70 percent of our RM sample represents tax-free stock-for-stock exchange deals.

not have any ADR programs trading in any of the US stock exchanges prior to listing, and e) they have initialized the ADR programs themselves by issuing primary underlying shares (ADSs) in the home country market[55]. The imposition of these criteria leaves us with 252 CRADRs.

We filter the initial sample of FIPOs obtained from SDC based on the following criteria: a) the offering is by a foreign private company on a US-based exchange, (b) the offering is not a reverse leverage buyout, real estate investment trust, closed-end fund limited partnership, unit investment trust, tracking stock issue, spin-off or rights issue, (c) the offering is not a two-tranche deal or a follow-on offer (d) financial accounting information is available from Compustat and (e) stock price information is available from the CRSP database[56]. The imposition of these criteria leaves us with a total of 216 FIPOs.

5.3 EMPIRICAL FINDINGS

In this section we present the results from a number of tests. First we analyze the going public decision by estimating a generalized multinomial logistic regression relating the mechanism used to firm characteristics. Second, we attempt to re-estimate the regressions after splitting the initial FIPOs and CRADR samples according to their exchange listings or using Level I ADRs instead of CRADRs. Third, we examine the timing of the follow-on offerings conducted by FIPOs and FRMs. Finally, since shell companies are playing a prominent role in FRMs, we analyze the financial characteristics of these companies to get a better understanding of this role.

[55] We have not been able to find a reliable way to check whether the CRADRs in our dataset suffer from survivorship bias. Hail and Leuz [2006] argue that they managed to resolve the survivorship bias by using the Citibank capital raising dataset that contains the "Active" and "Inactive" data fields. However, we figured out that the "Inactive" data field in Citibank database shows only the ADR programs not being managed by Citibank, which does not necessarily show that it is not traded anymore.

[56] All offerings that have reported problem listed on Jay Ritter's web page (http://bear.cba.ufl.edu/ritter/) are also excluded from the sample.

5.3.1 Factors influencing the choice of FIPOs, CRADRs versus FRMs

As discussed in Chapter Two factors related to capital structure, growth, information asymmetry, and insider ownership influence the going public decision. For foreign companies entering US stock exchanges we anticipate that the legal origin characteristics, the exchange-related transaction costs and the accessibility to the US stock market also affect the decision to go public in the US.

Similar to our information asymmetry hypothesis for domestic RMs we examine whether FRMs provide a convenient going public path for opaque firms that have used up their internal funds and do not have any alternative financing for going public. PIPEs transactions provide the financing needed at the consummation of the deal. To proxy transparency we again use return on assets (ROA), a development stage dummy[57], research and development expenses to sales and total assets.

A number of firms that chose the FRM path stated that they chose to go public using this method because they planned to use the stock in future acquisitions. Therefore, we expect private firms that opt for FRMs, to use stock as the payment medium for acquisitions within 3 years following deal completion. To proxy for this we use a stock acquisitions dummy variable that takes on a value of 1 if the firm makes such an acquisition and 0 otherwise.

All companies included in our generalized multinomial logistic regressions are foreign companies that have enlisted in the US. We expect that foreign countries influence the legal environment pertaining to the countries about to enlist. In La Porta, Lopez-De-Silanes, Shleifer and Vishny (1998) the legal environment is characterized by the degree of shareholder rights protection, the creditor rights protection, and the level of legal enforcement. LLSV divide the

[57] The development stage dummy takes the value of 1 in the case that the company exhibits annual revenues less than $ 500,000 or when annual R&D expenses exceed annual revenues.

proxies constructed for any of the three different aspects of the legal environment into the originating country legal system, namely the English common law countries, the French civil law countries, the German civil law countries and the Scandinavian civil law countries. We want to establish the consequences of any possible differences among laws pertaining to investor protection. For this purpose we use the anti-director rights together with the creditor rights variables that proxy for the shareholder and the creditor rights respectively. We also use the judicial efficiency and the private and public enforcement variables that proxy for the integrity and the efficiency of the legal enforcement environment. Together with all aforementioned legal environment proxies we also use the rule of law and the corruption variables following LLSV (1998). Rule of law assesses the law and order in a country whereas the corruption variable measures the governmental corruption.

Reese and Weisbach (2002) argue that English Common Law firms conduct follow-on offerings abroad less frequently than firms under French Civil Law. Firms with weak shareholder protection cross-list with the intention to bond themselves with minority shareholders and raise capital at home. We investigate all follow-on offerings for each foreign company 3 years after going public in the US to proxy for the bonding intentions of the foreign companies' owners.

Transaction costs constitute a vital component of the total cross-listing cost. Halling, Pagano and Randl [2008] show that foreign companies tend to cross-list into markets with less trading and superior insider trading protection. Reese and Weisbach [2002] illustrate that US stock exchanges offer lower trading costs, tighter accounting standards, and better shareholder protection than most European countries. Pagano, Randl, Roell and Zechner [2000] compare the trading costs of the originating and the destination listings and find the destination listing costs to be significantly lower. Domowitz, Glen and Madhavan [2000] study trading costs across countries and over time and show that the transaction costs are higher in emerging markets and decrease with time. To proxy for the transaction costs we use the average trading costs as a

percentage of trade value for active managers per stock market. The transaction cost data consist of commissions, brokerage fees and market impact costs[58].

In Appendix C we tabulate the initial listing requirements for trading on the US main stock exchanges, on the OTC Bulletin Board and on the Pink Sheets. We analyze the initial listing requirements for trading on the Nasdaq SmallCap market and cross-check them with the FRMs firm characteristics and conclude that FRMs could have been trading on the Nasdaq SmallCap by increasing the number of shareholders to 300 and achieving $ 50 m of market capitalization. Anecdotal evidence shows that certain FRMs (e.g. Blue Wave Systems Inc) start trading on Nasdaq right after the consummation of the RM deal. FRMs could have been traded on Nasdaq SmallCap by potentially conducting a prolonged marketing campaign, achieving an expanded shareholder base and greater market capitalization[59].

The results of this analysis are presented in Table 18. Models (1), (2) and (3) mainly differ from Model (4) in that they exclude legal environment proxies. In this table, firms choosing to go public using FRMs tend to be small, have high total debt, have low current ratios[60], have high profitability, have low research and development and capital expenditures. Additionally, they bear low transaction costs, have high law and order, high enforcement environment, low judicial efficiency, low creditor rights and shareholder rights protection in their

[58] The data with all transaction costs information is provided by Elkins/McSherry Co. and consists of average trading costs as a percentage of trade value for active managers in a universe of 42 countries. The data are quarterly, from the last quarter of 1995 to the last quarter of 2006. The cost information is broken down into the following parts: commissions, fees and market impact costs. The broker commissions (explicit costs) represent the average commission charged by brokers to money managers to trade equities. The fees (explicit costs) represent the taxes, stamp duties or any other government imposed trading fees. The market impact costs (implicit costs) of the transaction are the deviations of the transaction prices from the "unperturbed prices" that would have prevailed had the trade not occurred.

[59] Roll-ups could be considered another alternative to become public. Following the definition offered by Atz (1999) roll-ups are the consolidating corporate events whereby several privately owned companies operating in the same industry that wish to sell thei business become one and subsequently apply to become public using the traditional IPO path. As roll-ups utilize the same process to become public as the traditional IPOs, we include them in the FIPOs sample.

[60] We analyze the RMs' current ratios further and find that in the four fiscal quarters after the consummation of the RM deals current ratios increase from 1.950 to 2.624. We examine the financials of the FRMs further and conclude that cash, receivables, inventories and prepayments are the most important accounts in order of magnitude. Accounts payables, accrued liabilities, long-term debt and payables to banks are the most important accounts on the liabilities side in order of magnitude.

originating countries. This is consistent with FRM firms enlisting in the US in order to protect their minority shareholders and benefit from low transaction costs in the US stock exchanges, but not necessarily to improve the legal framework under which they operate[61].

We again report the coefficients in probabilities form. The greatest explanatory power is achieved by short-term and long-term debt variable across all models. On average, in Models 2 (3, 4) the probability to opt for a FRM is 1.34277 (1.508, 209894) lower for a $ 1 m increase in research and development and capital expenditures variable[62].

As robustness checks we re-estimate the logistic regressions excluding 2004 and then 2004 and 2005 foreign IPO, CRADR and FRM deals and qualitatively determine that the strict SEC rules have no impact. Finally, we re-estimate the logistic regression for the RM deals from SDC and DFM separately. All estimates remain the same except for the stock acquisitions dummy variable. The coefficient of the stock acquisitions dummy is negative and significant for FRMs from SDC[63]. In contrast, the coefficient of the stock acquisitions dummy is positive and significant for FRMs from DFM. We conclude that the "regularly operating" FRM companies have planned further acquisitions and utilize publicly traded stock as a payment medium. We conclude that the FRMs that are greater in size have planned acquisitions prior to going public, which is why they access the US stock markets using the FRM path[64].

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[61] It should be noted that the R^2 coefficient becomes 90% in Model 4, which incorporates all legal environment variables.

[62] In connection with the multinomial logistic regressions, we test (in non-tabulated results) whether there is any self-selection bias while the foreign companies choose any of the three alternative paths. We utilize the baseline two-stage Heckman regressions and find that no private information influences the decision of the managers of the foreign companies on which path follow. We conclude that the owners of the foreign companies do not seem to have private information prior to making their decision to access the US stock markets. The high maximum rescaled-R^2 values consistently shown in all multinomial logistic regression models corroborate the non-existence of self-selection bias. When compared to domestic RM regressions (Table 7 and 8) the R^2 values are lower, which may also explain the existence of a statistically significant Inverse Mills Ratio only in domestic RMs regressions.

[63] We further analyze the acquisitions conducted by the FRMs. We find that 29 out of 94 FRMs conduct acquisitions. The majority of these acquisitions take place between companies of the same industry (2-digit SIC code)- horizontal mergers, acquire controlling interest in the target firm and all of them use stock (less frequently cash and convertible debt) as the medium of payment.

[64] In non-tabulated models the growth, the change in insider ownership and the audit fees variables do not enter the regressions being significant.

In Table 19 we re-estimate all four models of table 18 by using foreign IPO and CRADR companies that are only traded on Nasdaq, Nasdaq SC, OTC BB and Pink Sheets to check whether the exchange listings influence the explanatory power of the driving factors to choose the FRM path against the foreign IPO and CRADR. Firms choosing to go public using FRMs tend to be small, have high total debt, and have high profitability. Additionally, they bear low transaction costs, have high law and order, have high enforcement environment, have low judicial efficiency, but have low shareholder rights protection in their originating countries. These results are consistent with Table 17 findings. FRM companies differ from Nasdaq, Nasdaq SC, OTC BB and Pink Sheets traded FIPOs and CRADRs in that they exhibit high creditor rights protection, operate in many business segments, but few geographical segments[65]. FRMs' size, liquidity and development stage levels corroborate our hypothesis that these companies are highly information asymmetric.

We again report the coefficients in probabilities form. The greatest explanatory power is achieved by the judicial efficiency variable. On average, the probability to opt for a FRM is 1.01631 (1.56522) lower in Model (4) when compared to FIPOs (CRADRs) when the judicial efficiency variable increases by 1-unit.

In Table 20 we compare the financial characteristics of FRMs to the financial characteristics of FIPOs and CRADRs after matching them on industry, founding date and operating history prior to going public. Specifically, we use the 2-digit SIC code as industry criterion, a similar founding date not differing more than 2 years and allow the operating history

[65] The four models are re-estimated by using foreign IPO and CRADR companies that are only traded on NYSE and AMEX. The logistic regressions exhibit quasi-complete separation due to the low number of observations used from the foreign IPO and CRADR samples.

difference to be 4 years between the CRADRs / FIPOs and the FRMs (the CRADRs and the FIPOs being greater)[66].

We estimate all factors to be statistically insignificant, following the same direction as in Tables 18 and 19. In more detail, the matched FRMs, are smaller, exhibit lower current ratios, greater total debt ratios and lower total expense ratios with their cash flows variable being greater. The aforementioned RMs' financial differences to CRADRs and FIPOs remain if FRMs waited 4 additional years being a private firm and then pursuing the more traditional route of either CRADRs or FIPOs. The estimators' insignificance could be explained by the low total number of observations used, ranging between 54 and 58.

In Table 21 we re-estimate all four models of table 17 by using FIPOs, FRMs and Level I ADRs instead of CRADRs. We examine whether Table 17 findings qualitatively alter when including cross-listed foreign companies that do not conduct any offering in the US (Level I ADRs do not conduct an offering in the US). Firms choosing to go public using FRMs still tend to be small, have high total debt, have high profitability, exhibit lower expenses and bear low transaction costs. Regarding their legal environment, FRMs still operate in countries with improved enforcement mechanisms, but with less enhanced creditor and minority shareholders' rights protection. The major difference with Table 17 findings is the fact that Level I ADRs are found to be more frequently than FRMs at the development stage, which does not corroborate the information asymmetry hypothesis. Most of Level I ADRs operate in the financial services (holding companies) or in the healthcare industry where sales volume is lower than the research and development expenses. If we eliminate these companies from the analysis, FRMs appear to be more frequently at the development stage and have higher research and development

[66] Prior to re-estimating the multinomial logistic regressions we find that the median operating history of the CRADRs and the FIPOs is 7 years with the respective figure for FRMs being 3 years prior to going public. The data are hand-gathered from the companies' 10-Ks.

expenses. FRMs appear to be more profitable, but with lower liquidity. Their high current liabilities (lines of credit) and short operating history could cause their low liquidity levels.

Another potential explanation for pursuing the FRM path is the lower mispricing born by RM-owners right after the consummation of the deal. However, the steps outlined in Appendix B as shown in Chapter Two explain that the RM process does not include underwriter intervention and offering of new shares at the initializing of trading right after the consummation of the deal. Furthermore, we find that FRMs do not have more than 21% of their authorized shares distributed as common and outstanding. Hence, it is not feasible to explain the RM initial returns as variables shown to consistently explain the initial returns in the traditional IPOs are not apparent in RMs. Additionally, we analyze the RMs trading activity and find that out of 32 RM deals for which we are able to identify pricing data, 17 of them do not exhibit any trading activity during the first three days of trading. We conclude that different factors affecting the initial returns in IPOs and RMs respectively and low variation of the RMs prices do not make it feasible to compare the initial returns in IPOs with RMs[67].

Overall, from the battery of tests analyzed we conjecture that FRMs are smaller, exhibit lower expenses, lower profitability and higher debt levels when compared either to CRADRs or to FIPOs. These findings corroborate the conclusions drawn about RMs when comparing domestic RMs to PSIPOs in Chapter Two. However, foreign FRMs differ from domestic RMs in that they have expanded their operations more. Thus, they are not that frequently in development stage and they do not only use stock as a medium of payment for their acquisitions (they also

[67] Indicative of the low trading volume on RM stocks is the anecdotal evidence offered by David Feldman (www.reversemergerblog.com) where an example is offered concerning a company with 1 m shares in its public float. Upon a merger, the private company's shareholders obtain 90%, or 9 m shares out of a new total of 10 m shares outstanding. The new 9 m shares are initially restricted under SEC rules and cannot trade until registered. Thus, upon closing only the 1 m may trade until a registration is completed. Of that 1 m, typically one promoter controls about 2/3, and he or she is not likely to sell anytime soon. Thus in our example about 300,000 shares, or barely 3% of the total stock, is hoped to be trading until a registration of more shares is completed, about 3-4 months after closing the merger. Essentially, a very small percentage of shares is traded during the aforementioned time period.

conduct frequent cash-acquisitions). As already stated these companies had to pay a "reputation capital" prior to succeeding in listing in the US stock markets.

5.3.2 On the timing of follow-on offerings

Table 22 presents the Cox proportional-hazard model (Hazard) estimates to predict the timing of the first follow-on offering conditional on not having conducted one before. The semi-parametric Cox models that we employ allow us to predict the firm's follow-on offering decisions in a panel setting, while allowing some of the independent variables to be time-varying. The Cox proportional-hazard model estimates the probability that in a given quarter a firm that has not conducted a follow-on offering will offer equity or debt[68] (our financial accounting data in the years to follow the initial listing appear in quarters)[69]. Models (1) and (2) predict the timing of the first follow-on offering for FRMs while models (3) and (4) for FIPOs[70]. Models (1) and (3) show the most important factors (operating history / judicial efficiency and capital expenditures respectively) that influence the timing of the follow-on offerings for FRMs and FIPOs, respectively. Models (2) and (4) lump together all time-dependent (sales, EBITDA, long-term debt, intangibles, current assets, current liabilities, capital expenditures, change in insider ownership) and time-independent (operating history and judicial efficiency) variables.

Since all variables in our models are quantitative, we report the statistic obtained by subtracting 1 from the hazard ratio and multiplying by 100[71]. Model (1) shows the operating

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[68] Follow-on offerings are considered to be any equity and debt offerings as well as any PIPEs conducted.

[69] The hazard function is composed of two separate parts: The first part is the baseline hazard, and the second part is the relative hazard. The Cox model is a semi-parametric model in that it estimates the coefficients of the independent variables without making any assumption about the nature or shape of the hazard function. Therefore, the model assumes that, whatever the shape of the baseline hazard, it is the same for all companies

[70] We are unable to apply the hazard models on the CRADR companies as there are many missing observations and the hazard models seem to be mis-specified.

[71] The hazard ratio indicates the probability of the event taking place conditional on not having happened before. For indicator (dummy) variables with values 1 and 0, we can interpret the hazard ratio as the probability of the estimated event (hazard) for those with a value of 1 to the estimated hazard for those with a value of 0 (controlling for other

history and judicial efficiency to be the most important factors influencing the follow-on offering decision for the FRM companies whereas according to Model (3) the capital expenditures variable is the most important for foreign IPO companies. We show in Model (2) that for the FRMs the hazard of follow-on offerings increases with the intangibles, current liabilities, judicial efficiency and age, but decreases with long-term debt. Model (4) shows that in the case of FIPOs the hazard of follow-on offerings increases with the EBITDA, the current assets and the capital expenditures whereas it decreases with sales and current liabilities. In Model (3) the judicial efficiency variable is the most influential variable on the hazard of follow-on offerings for FRMs. For each 1-unit increase in the judicial efficiency, the hazard of FRM follow-on offerings increases by 295.6 percent. In Model (4) we find that the EBITDA variable has the greatest influence on the hazard of follow-on offerings for FIPOs. For each 1-unit increase in the EBITDA, the hazard of FIPOs follow-on offerings increases by 13.6 percent.

In non-tabulated results, we calculate the mean survival time of the follow-on offerings for all FRM, foreign IPO and CRADR companies[72]. As expected, FRM companies' survival time is 2.694 years, 7.75533 years for FIPOs, and 9.66780 years for CRADRs. The shorter survival time of the FRMs is expected since they do not conduct any initial offering and are closer to inception. These findings lead us to conclude that FRMs' owners are willing to protect the minority shareholders rights and count on their continued investments as they access repeatedly the stock markets.

covariates). For detailed analysis on the explanation of hazard models estimates, refer to "Survival Analysis Using SaS, A Practical Guide" by Paul D. Allison.

[72] Using the mean survival time we estimate the average time intervening the going public date and the first follow-on offering date.

5.3.3 Characteristics of shell companies participating in FRM transactions

Shell companies constitute an integral part of the FRM transactions and play the same role in the FRM transactions as they do in domestic RMs.

Panel A of table 23 contains the financial characteristics of all shell companies in our sample. We rely on the median values since the data exhibits skewness. The median values for the entire reporting shell companies' sample, exhibit no long-term liabilities or sales, low total assets ($ 7.8 k), low current assets ($ 4.8 k), low current liabilities ($ 68 k), negative, low working capital (- $ 63.2 k), negative and low net income (- $ 60 k) and low market capitalization ($ 1.3 m).

In panel B we present that the shell companies participating in FRM deals are similar to the total sample of reporting shell companies in all financial aspects. They show no long-term liabilities or revenues and low median values for total assets, current assets, current liabilities and net income. This disproves that the shell companies are chosen to participate in FRMs because of their superior performance.

Panel C indicates that financial characteristics of the reporting shell companies do not improve from 2005 to 2006. Specifically, we find that total assets, decrease while long-term debt increases. This result does not support that the shell company popularity for FRMs is driven by their improving financial performance.

Finally, we find in panel D that FRM participating shell companies have financial characteristics similar to the total sample of reporting shell companies, disproving that shell companies participating in FRMs are chosen because of their superior performance. These results come in accordance with Table 14 findings, where it is shown that RMs are diversifying mergers and the shell companies are used as vehicles to access the US stock markets.

Overall, we conclude that shell companies serve the role of providing a vehicle for private companies to go public no matter if that concerns domestic RMs or FRMs. Shells are companies with limited assets and operations that are up-to-date with their reporting status without though offering any synergistic opportunities to the private companies intending to go public.

6.0 CONCLUSIONS

Our results indicate that both domestic and foreign RMs constitute an alternative path to go public for highly information asymmetric firms that do not conduct any offering at the consummation of the deal. Their financing is provided by private institutional investors concurrently with the completion of the RM deal. At the domestic level we compare RMs to PSIPOs and at the international level we compare them to CRADRs and foreign IPOs. We find that both domestic and FRMs tend to be smaller, are levered-up and exhibit lower profitability. RM companies give up a smaller percentage of insider ownership which confirms that the owners of RM companies do not intend to cash out.

We find that both domestic RMs and FRMs exhibit lower duration of negotiations, lower cost of negotiations' completion and higher probability of deal-completion. They manage to be upgraded by expanding their operations, improving their working capital and having institutional holders gaining greater control of the companies and distributing a greater percentage of their total number of shares to the free-float. We conjecture that RMs are highly information asymmetric companies, while their owners are willing to remain in the company with the ultimate goal to get upgraded to one of the main US stock exchanges.

We analyze the financial characteristics of reporting shell companies and find they do not improve their performance across time. Further, the increased use of shells in both domestic RMs and FRMs cannot be attributed to improvements in their financial performance.

Specifically for FRMs, we apply proportional Cox Hazard models and conclude that FRM companies conduct their first follow-on offering faster than FIPOs and CRADRs. This

shows that the need for financing is urgent and the intention of the FRM companies' owners is to further protect minority shareholders' rights. An alternative explanation could also be that PIPE investors assist RM companies in closing the offering deals faster. We also find that the decision to go public using FRMs is not made to exploit private information advantages held by insiders. FRMs originate from countries with higher legal enforcement abilities, but lower creditor and shareholder rights.

For domestic RMs, we find that they follow the RM path to go public, because they want to use the publicly-traded stock as medium of payment for forthcoming acquisitions and are frequently PIPE-financed. Domestic RMs utilize the financing as well as the better monitoring provided by PIPEs in order to be upgraded to one of the main US stock exchanges. It is shown that domestic RM-owners have private information which they use when deciding about their going-public path.

APPENDIX A

EXAMPLES OF RMS

A. Financial Media Group:

Effective date of deal completion: January 6th, 2006

Date of Agreement and Plan of Reorganization: September 19th, 2005

Participating companies: Financial Media Group Inc (FMG) / Wallstreet Direct Inc (WD) and certain shareholders of Wallstreet Direct Inc

State of Incorporation: Nevada / Nevada

Deal specifics: FMG acquired 100% of the issued and outstanding stock of WD in exchange for 20m shares of FMG common shares. In addition, FMG has reserved 22.39% shares to be issued to WD warrant holders upon the exercise of up to 2,730,502 Class A Warrants at an exercise price of $1.16 per share and up to 2,730,502 Class B Warrants at an exercise price of $1.74 per share.

Upon completion: The former shareholders of WD became a wholly owned subsidiary of FMG. Immediately after the acquisition, the former shareholders of WD owned 82% of the issued and outstanding shares of FMD whereas the current FMG shareholders owned 18%.

Management changes: Two current directors of FMG resigned and the current chairman of the Board of WD was appointed chairman of the BOD and CEO of FMG. The former CEO of FMG was appointed the COO of FMG after the completion of the deal.

Item 2.01 (SEC 8-K filing): On January 6, 2006, Financial Media Group, Inc., a Nevada corporation, ("FMG"), completed the acquisition (the "Acquisition") of WallStreet Direct, Inc., a Nevada corporation ("WSD"). The Acquisition was effected pursuant to the terms of an Agreement and Plan of Reorganization, dated September 19, 2005, (the "Agreement") by and among FMG, WSD and certain stockholders of WSD. Pursuant to the terms of the Agreement FMG acquired all of the issued and outstanding capital stock of WSD in exchange for 20,000,000 shares of FMG common stock. Upon the close WSD became a wholly owned subsidiary of FMG. Immediately after the Acquisition the former shareholders of WSD owned 20,000,000 shares of FMG or approximately 82% of the issued and outstanding shares of FMG and the current FMG shareholders owned 4,394,530 shares or approximately 18%. In addition, FMG has reserved 5,461,004 shares to be issued to WSD warrant holders upon the exercise of up to 2,730,502 Class A Warrants at an exercise price of $1.16 per share and up to 2,730,502 Class B Warrants at an exercise price of $1.74 per share. As part of the acquisition, Diego Moya and Dr. Conrad Loreto each resigned from their positions as directors of FMG, and Mr. Khazali resigned as Chief Executive Officer of FMG. Mr. Albert Aimers, Chairman of the Board of WSD, was appointed Chairman of the Board and Chief Executive Officer of FMG and Mr. Khazali was appointed as Chief Operating Officer. Mr. Nick Iyer, President and director of WSD was appointed a director of FMG. Further information about WSD, FMG and certain related matters is included in this Item 2.01 below.

2. Celtron International Inc.

Effective date of deal completion: December 31st, 2005

Date of Agreement and Plan of Reorganization: December 9th, 2005

Participating companies: Celtron International Inc. (CI) / Satellite Security Systems Inc (SSI), Celtron S3 Acquisition Corp. and Opus International LLC (OI)

State of Incorporation: California / Maryland / Maryland

Deal specifics: CI acquired 100% of the issued and outstanding common shares of S3, through a reverse triangular merger, with and into S3, having S3 as the surviving company. S3 received in exchange 65,076,750 CI's common shares. CI assumed outstanding options to purchase S3 common stock that can be exercised on 1.9m shares of CI common stock. OI had prior to the acquisition 15.5% common shares of CI and after the merger will have 54% of CI's common stock.

Upon completion: The former shareholders of S3 / OI became a wholly owned subsidiary of CI. Immediately after the acquisition, the former shareholders of OI owned 54% of the issued and outstanding shares of CI. It is noted that OI is a subsidiary of S3.

Management changes: The president and CEO of OI have on an aggregate basis 4.6% of common outstanding stock of CI, giving the members of the new BOD voting control of the company. The consideration of the voting power was in exchange of 100% of outstanding stock of S3.

Item 2.01 (SEC 8-K filing): On December 9, 2005, Celtron International, Inc. entered into an Agreement and Plan of Merger (the "Merger Agreement") dated December 9, 2005 with Satellite Security Systems, Inc., a California Corporation ("S3"), Celtron S3 Acquisition Corp. ("Merger Sub"), and Opus International, LLC, a Maryland limited liability company ("Opus"). On December 31, 2005, the Merger Agreement was completed, and Celtron acquired * shares of S3, constituting 100% of its issued and outstanding common stock, through a reverse triangular merger (the "Merger") of Merger Sub, a wholly owned subsidiary of Celtron formed for the purpose of the merger, with and into S3, with S3 as the surviving corporation. The completion of the transaction resulted in S3 becoming a wholly owned subsidiary of Celtron. In exchange for the outstanding shares of S3, the former holders of S3 common stock received 65,076,750 shares of Celtron common stock. Celtron also assumed outstanding options to purchase S3

common stock, which would be exercisable for approximately 1.9 million shares of Celtron common stock. Following the closing, the former shareholders of S3 have two demand registration rights and unlimited registration rights with respect to all shares of Celtron common stock that they hold. Opus formerly owned 5.0 million shares of Celtron common stock, constituting approximately 15.5% of the outstanding common stock of Celtron. After the merger, Opus owns 53,259,314 shares of Celtron common stock, constituting approximately 54% of the common stock outstanding. 54,739,314 shares of common stock were issued to Opus International, LLC; 1,967,393 shares of common stock were issued to Dr. Harry E. Maas, M.D. Trust; 3,763,230 shares of common stock were issued to John L. Phillips; 100,993 shares of common stock to Ken Majer; 5,311 shares of common stock to Ernie Bayless and 4,500,509 shares of common stock to Dixon Trust. All shares were issued in reliance upon Section 4(2) of the Securities Act of 1933, to sophisticated investors who had access to all relevant corporate and financial information. The consideration received by Celtron was 100% of the outstanding common stock of S3. Celtron also assumed outstanding options to purchase S3 common stock, which would be exercisable for approximately 1.9 million shares of Celtron common stock.

3. TrueYou.com

Effective date of deal completion: December 22nd, 2005

Date of Agreement and Plan of Reorganization: December 20th, 2005

Participating companies: TrueYou.com (TY) / Advanced Aesthetics Inc (AA) and the security holders of AA

State of Incorporation: Delaware / Delaware

Deal specifics: TY issued to AA shareholders 27,926.4689 newly shares of its Series B convertible preferred stock at par value $0.001 per share each of which is convertible into 10,000 shares of TY's common stock, at par value $0.001 per share. Additionally, they issued to AA

shareholders 8,452.0222 newly shares of its Series C convertible preferred stock at par value $0.001 per share each of which is convertible into 10,000 shares of TY's common stock, at par value $0.001 per share and finally newly issued warrants to purchase 3,970.0363 shares of its Series B preferred stock. So, in aggregate they are issued preferred stock and warrants that are convertible and exercisable into an aggregate of 97.2% of the issued and outstanding shares if converted.

Upon completion: Upon completion of the reverse merger deal, AA became a subsidiary of TY.

Management changes: At the closing, TY's BOD members and officers resigned. AA's officers took over keeping the same positions they had at AA. The former TY's directors were offered piggyback registration rights to register new TY's capital stock.

Item 1.01 (SEC 8-K filing): On December 20, 2005, TrueYou.Com, Inc. (the "Registrant") entered into a Share Exchange Agreement (the "Share Exchange Agreement") with Advanced Aesthetics, Inc., a Delaware corporation ("AAI"), and the security holders of AAI (the "AAI security holders") pursuant to which the AAI security holders received newly issued securities of the Registrant in exchange for their securities of AAI. The following summary of the Share Exchange Agreement is qualified in its entirety by reference to the full text of the Share Exchange Agreement, a copy of which is attached to this Current Report on Form 8-K as Exhibit 2.1 and incorporated herein by reference. Under the terms of the Share Exchange Agreement, the Registrant issued to the AAI security holders: (i) 27,926.4689 newly issued shares of its Series B Convertible Preferred Stock, par value $0.001 per share (the "Series B Preferred Stock"), each of which is convertible into 10,000 shares of the Registrant's common stock, par value $0.001 per share ("Common Stock"), (ii) 8,452.0222 newly issued shares of its Series C Convertible Preferred Stock, par value $0.001 per share (the "Series C Preferred Stock"), each of which is convertible into 10,000 shares of Common Stock and (iii) newly issued warrants to purchase 3,970.0363 shares of its Series B Preferred Stock (the "New

Warrants"). On December 22, 2005, affiliates of North Sound Capital LLC and Valesco Capital Management LP invested $15,300,000 in exchange for 1,530 newly issued shares of our Series D Convertible Preferred Stock, par value $0.001 per share (the "Series D Preferred Stock" and together with the Series B Preferred Stock and the Series C Preferred Stock, the "New Preferred Stock"), each of which is convertible into approximately 52,175 shares of Common Stock and New Warrants to purchase 2,394.8396 shares of Series B Preferred Stock (the foregoing transaction, the "Series D Preferred Financing"). The New Preferred Stock and New Warrants issued in connection with the consummation of the Share Exchange Agreement and the Series D Preferred Financing will be convertible and exercisable, as applicable, into an aggregate of 507,545,142 shares of Common Stock, representing in the aggregate approximately 97.2% of the issued and outstanding equity interest and voting rights of the Registrant on an as-converted basis. The shares of Series B Preferred Stock will automatically convert into Common Stock after the Registrant amends its Certificate of Incorporation in order to increase the number of shares of Common Stock it is authorized to issue. The Registrant is obligated under the Share Exchange Agreement to amend its Certificate of Incorporation as soon as practicable following the Closing. Subject to certain restrictions, the shares of Series C Preferred Stock and Series D Preferred Stock will automatically convert into Common Stock upon the consummation of an underwritten public offering with gross proceeds to us of not less than $30,000,000; provided, that at such time a registration statement covering the resale of such shares is effective or such shares can be sold under Rule 144. Upon the closing of the transactions contemplated by the Share Exchange Agreement, on December 20, 2005 (the "Closing"), AAI became a subsidiary of the Registrant. At the Closing, the Registrant's board of directors prior to the Closing resigned and was replaced by Messrs. Richard Rakowski, John Higgins, Andrew Lipman, Stephen Coltrin, Daniel Piette, Phillippe Franchet and Ms. Jane Terker as new members of the Board of Directors of the Registrant. In

addition, at the Closing, all of the Registrant's officers prior to the Closing resigned and were replaced by the existing officers of AAI to their equivalent positions at the Registrant. The Registrant granted former directors, Alan Gelband and Mark Bieler, piggyback registration rights under the Share Exchange Agreement and assumed all of the obligations of AAI to register capital stock under various agreements to which AAI is a party.

APPENDIX B

DESCRIPTION OF THE IPO AND THE RM PROCESS

Description of the IPO process

The table below outlines the steps involved in the going public process. The information is from Ellis, Michaely and O'Hara (2000)

Major Stages and Main Events	Short Description
Initial step; Selecting book-running manager and co-manager	Selecting the investment banker underwriting the going public process. The reputation, the expertise and quality of research in the specific industry of the investment banker influence the final decision.
Letter of intent	Signing off the initial agreement between the underwriter and the issuer protecting the underwriter against any uncovered expenses in the event the offer is withdrawn, specifying the gross spread and having the issuer committing to grant a 15 percent overallotment option to the underwriter
Registration process; Registration statement and due diligence	Drafting a registration statement for filing with the SEC in order for the public to have adequate and reliable

	information regarding securities that are offered for sale. The underwriter has a "due diligence" requirement to verify that the information provided to investors is accurate.
Preliminary prospectus ("Red Herring")	Transforming the registration statement submitted with the SEC into a preliminary prospectus, which is being used as a marketing tool.
Marketing; Distributing the final prospectus and scheduling road shows	Concurrently with the "Red Herring" promoting the IPO through presentations to (mainly) institutional investors.
Pricing and shares allocation	On the day prior to the effective date, discussing the offer price and the exact number of shares to be sold (discussions take place between the issuer and the underwriter).
Aftermarket activities; Stabilization and overallotment option	Supporting the stock by buying shares if order imbalances arise. Supporting the aftermarket price only at or below the offering price, and limiting it to a relatively short time period after the initialization of trading (the underwriter typically sells 115 percent of the issue at the offering).
Research coverage	Twenty five calendar days after the initialization of trading, commenting on the valuation and providing earnings estimates on the new company (the underwriters start distributing information to the public only after the ending of the so called "quiet period")

Description of the Reverse Merger (RM) process

The table below outlines the steps involved in the going public process through the RMs. The information is from Brenner and Schroff (2004)

Major Stages and Main Events	Short Description
Shell company; choosing the consulting firm	Finding a public company with no nominal assets and no current operations. The consulting firm will provide additional information on the shell companies traded OTC BB and Pink Sheets and will contribute in the preparation of the statements needed to be submitted with the SEC.
Financing strategy	Developing a financing strategy (through a internal funds, debt or a Private Investment in Public Equity).
Letter of intent	Signing off the initial agreement between the shell company and the private company's owners. The letter of intent states the willingness of the two parties to take the private company public by concluding the reverse merger process.
Due diligence	Conducting due diligence by both shell company's and private company's auditors as both parties are entitled to a certain ownership percentage in the combined firm after the consummation of the reverse merger deal.
Securities brokers	Locating at least one market maker to make a market for and help promote the company's stock.
Shell company's noncash assets	Concurrently with the consummation of the deal, selling

	any remaining shell company's noncash assets.
Aftermarket support	Reverse splitting the combined firm's stock especially when it is trading at pennies per share. Employing consulting firms' aftermarket support teams to provide aftermarket support activities in the year after becoming publicly traded (purchasing the stock, employing market makers, providing analyst coverage).

APPENDIX C

DESCRIPTION OF THE LISTING CRITERIA FOR THE MAIN US STOCK EXCHANGES, OTC BULLETING BOARD AND PINK SHEETS

Description of the NYSE (New York Stock Exchange) initial listing criteria

The table below outlines the listing criteria for the companies listed on the NYSE. For a more complete discussion of the minimum numerical standards applicable to U.S. companies please refer to www.nyse.com

Description of Listing Criteria	Minimum Quantitative Standards
Round-lot Holders (number of holders of a unit of trading - generally 100 shares)	400
Or Total shareholders together with: Average Monthly Trading Volume (for the most recent six months)	2,200 100,000
Or Total shareholders together with: Average Monthly Trading	500

Volume (for the most recent twelve months)	1,000,000
Public shares Market value of public shares for public companies IPOs, spin-offs, carve-outs and affiliated companies	1,100,000 $ 100 m $ 60 m
Aggregate pretax earnings (D) over the last three years Minimum in each of the 2 most recent years (must be positive amount in the third year) Or: Aggregate operating cash flow(E) over the last three years (each year must report a positive amount) Or: Revenues for the most recent fiscal year Global market capitalization	$ 10 m $ 2 m $ 25 m $ 75 m $ 750 m
Or: Affiliated Company Original distribution requirements as noted; market capitalization of $500	

million or greater; entity must have 12 months of operations (although it is not required to have been a separate entity for that long); parent or affiliated company is a listed company in good standing; and parent or affiliated company retains control of the entity or is under common control with the entity.	
Or: Funds (less than three years operating history)	$ 60 m

Description of the Nasdaq National Market and Nasdaq SmallCap initial listing criteria

The table below outlines the listing criteria for the companies listed on the Nasdaq National Market and Nasdaq SmallCap Market. For a more complete discussion of the minimum numerical standards applicable to U.S. companies please refer to www.nasdaq.com

Nasdaq National Market			
Requirements	Standard 1	Standard 2	Standard 3
Market Capitalization Total Assets Total Revenue	N/A	N/A	$ 75 M or $ 75 m and $ 75 m
Pretax Income (in latest fiscal year or 2 of last 3 fiscal years)	$ 1 m	N/A	N/A
Public Float (shares)	1.1 m	1.1 m	1.1 m
Operating History	N/A	2 years	N/A
Market Value of Public Float	$ 8 m	$ 18 m	$ 20 m
Minimum Bid Price	$ 5.00	$ 5	$ 5

Round Lot Shareholders	400	400	400
Market Makers	3	3	4
Corporate Governance	Yes	Yes	Yes

Nasdaq SmallCap Market	
Requirements	Standard 1
Net Tangible Assets Market Capitalization Net Income (most recently completed fiscal year or 2 of the last 3 years)	$ 4 m or $ 50 m or $ 750,000
Public Float (shares)	1 m
Market Value of Public Float	$ 5 m
Minimum Bid Price	$ 4
Round Lot Shareholders	300
Operating History	1 year or $ 50 m
Market Makers	3
Corporate Governance	Yes

Description of the American Stock Exchange (AMEX) initial listing criteria

The table below outlines the listing criteria for the companies listed on the American Stock Exchange. For a more complete discussion of the minimum numerical standards applicable to U.S. companies please refer to www.amex.com

American Stock Exchange				
Requirements	Standard 1	Standard 2	Standard 3	Standard 4
Pre-tax income (Required in the latest fiscal year, or two of the three most recent fiscal years)	$ 750,000	N/A	N/A	N/A
Market capitalization	N/A	N/A	$ 50 m	$ 75 m or at least $ 75 m in total assets and $ 75 m in revenues
Market Value of Public Float	$ 3 m	$ 15 m	$ 15 m	$ 20 m
Minimum Price	$ 3	$ 3	$ 2	$ 3
Operating History	N/A	2	N/A	N/A
Shareholders' equity	$ 4 m	$ 4 m	$ 4 m	N/A
Public Shareholders/Public				

float(shares) (Public shareholders and public float do not include shareholders or shares held directly or indirectly by any officer, director, controlling shareholder or other concentrated (i.e. 10 percent or greater), affiliated or family holdings.	Option 1: 800/500,000 Option 2: 400/1,000,000 Option 3: 400/500,000 (Option 3 requires a daily trading volume of 2,000 shares during the six months prior to listing)

Description of OTC Bulletin Board initial listing criteria – Comparison of OTC Bulletin Board and Nasdaq listing criteria

The table below outlines the listing criteria for the companies listed on the OTC Bulletin Board. For a more complete discussion of the minimum numerical standards applicable to U.S. companies please refer to www.otcbb.com

OTC Bulleting Board
Requirements
The OTCBB is not an issuer listing service, market or exchange. Although the OTCBB does not have any listing requirements per se, to be eligible for quotation on the OTCBB, issuers must remain current in their filings with the SEC or applicable regulatory authority. Market Makers will not be permitted to begin quotation of a security whose issuer does not meet this filing requirement. Securities already quoted on the OTCBB that become delinquent in their required filings will be removed following a 30 or 60 day grace period if they do not make their required filing during that time. A fifth character of "E" in a security's trading symbol is used to denote securities that FINRA believes are delinquent in their required filings; securities so denoted will be removed from the OTCBB after the applicable grace period expires.

The OTCBB is a quotation medium for subscribing members, not an issuer listing service, and should not be confused with The NASDAQ Stock Market. OTCBB securities are traded by a community of Market Makers that enter quotes and trade reports through a highly sophisticated, closed computer network, which can be accessed through the NASDAQ Workstation. The OTCBB is unlike The NASDAQ Stock Market in that it:

- does not impose listing standards
- does not provide automated trade executions
- does not maintain relationships with quoted issuers

- does not have the same obligations for Market Makers

Feature or Requirement	OTCBB	Nasdaq
Minimum quantitative listing requirements	No	Yes
Listing and maintenance fees to issuers	No	Yes
Requirements to maintain quotation or listing	Yes**	Yes
Real-time electronic quotes for domestic issues	Yes	Yes
Minimum Form 211 or listing processing time	3 days	6-8 weeks***

* The OTCBB is separate and distinct from The NASDAQ Stock Market.

** Issuers of securities which began quotation on the OTCBB after January 4, 1999 are required to file periodic financial information with the SEC or other regulatory authority to maintain quotation eligibility.

*** A Form 211 is not required for listing on NASDAQ; however, the average time of approval for listing on NASDAQ is 6-8 weeks.

The OTCBB is distinct from the Pink Sheets. The Pink Sheets are not owned or operated by The NASDAQ Stock Market, Inc. or the FINRA. The Pink Sheets LLC is a privately owned company whose Electronic Quotation Service provides an Internet-based, real-time quotation service for OTC equities and bonds.

Description of Pink Sheets initial listing criteria

The table below outlines the listing criteria for the companies listed on the Pink Sheets. For a more complete discussion of the minimum numerical standards applicable to U.S. companies please refer to www.sec.gov

Pink Sheets
Requirements
The "Pink Sheets" is an electronic quotation system that displays quotes from broker dealers for many over-the-counter (OTC) securities. The Pink Sheets does not require companies whose securities are quoted upon its systems to meet any listing requirements. With the exception of a few foreign issuers, the companies quoted in the Pink Sheets tend to be closely held, extremely small and/or thinly traded. Most do not meet the minimum listing requirements for trading on a national securities exchange, such as the New York Stock Exchange or the Nasdaq Stock Market. Many of these companies do not file periodic reports or audited financial statements with the SEC, making it very difficult for investors to find reliable, unbiased information about those companies.

APPENDIX D

TEST FOR STRUCTURAL BREAKS IN THE TIME-SERIES OF THE AVERAGE MONTHLY NUMBER OF DOMESTIC RMS

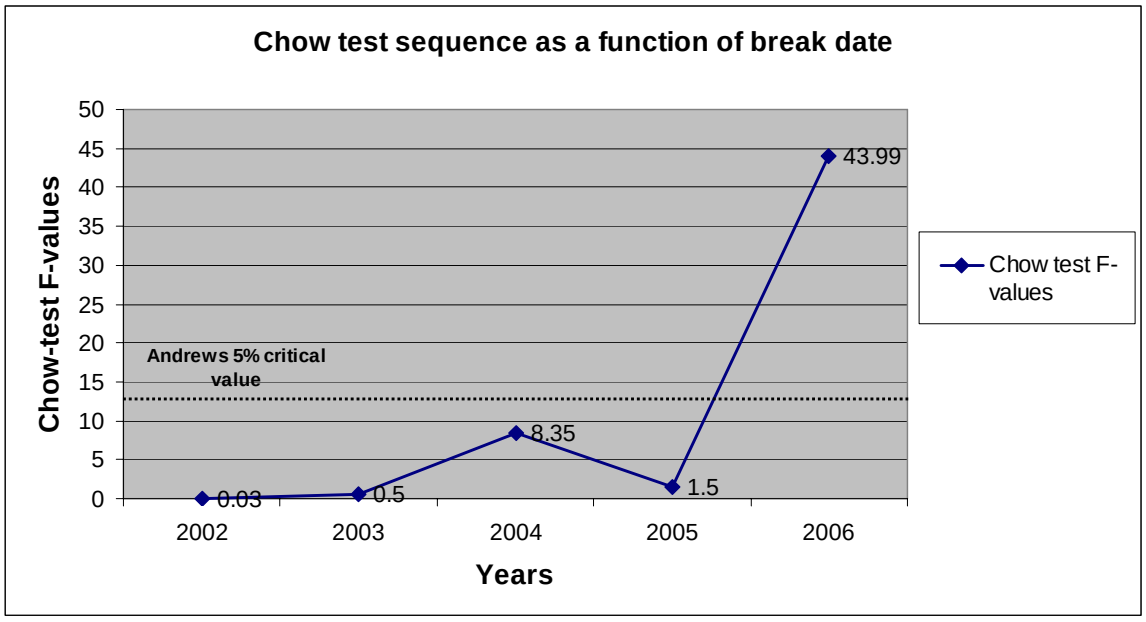

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Table 1: Motivation for Domestic Reverse Mergers as a Going Public Mechanism
The reasons listed for going public using domestic reverse mergers (RMs) for a sample of 408 RMs from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The information on the reasons is obtained from news reports in Factiva (www.factiva.com).

Reason listed	Number
Accessibility to capital markets	50
Acquisition of greater market share	13
Acquisition of target management reputation	1
Diversification	14
External Growth (future acquisitions)	38
Internal Growth (research and development of new products, patents etc)	83
Increase management retention rate	2
Increase transparency	6
Launching new products	34
Operating synergies	27
No reason reported	140
Total number	408

Table 2: Motivation for Withdrawal of Domestic Reverse Mergers

The reasons listed for withdrawn domestic reverse mergers (RMs) and the path followed in the post-withdrawal period for a sample of 116 firms from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The information on the reasons and the post-withdrawal path is obtained from SDC and news reports in Factiva (www.factiva.com).

Panel A; Reasons for withdrawal of RM

Reason listed	Number
Actions by the public company's management	1
A superior offer received by another company	4
Public company found to have more liabilities during the due diligence process	2
Mutual consent by both companies' management (their corporate goals and strategies have become divergent)	18
Inability of the public company to restructure	2
Current economic conditions	9
The merger process proved to be very time-consuming	5
No solicitation received by respective shareholders' base	1
No reason	74
Total number	116

Panel B; The post-withdrawal path

The action taken	Number
Completion of IPO	8
Completion of reverse merger	5
Public listing after being acquired	8
Filing for chapter 11	9
Further withdrawals of reverse merger negotiations	3
No reason reported	83
Total number	116

Table 3: Industry Distribution of Domestic Reverse Mergers

Distribution of Reverse Mergers (RMs) by merger type for a sample of 408 RMs from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The type of merger is based on the mapping procedure in Fan and Goyal (2006) where a diversifying merger is between two firms that belong to different industries but exhibit no vertical relatedness, a horizontal merger is between two firms that belong to the same industry but exhibit no vertical relatedness, a vertical merger is between two firms that belong to different industries but exhibit vertical relatedness and a mixed vertical and horizontal merger is between two firms that belong to same industries but exhibit vertical relatedness.

Type of Merger	Number	Percentage of sample
Diversifying	326	80
Horizontal	29	7
Vertical	16	4
Mixed Horizontal and Vertical	13	3
Unknown	24	6
Total	408	100

Table 4: Financial Characteristics of Firms Going Public using Domestic Reverse Mergers and Penny Stock Initial Public Offerings

A comparison of firms going public using penny stock initial public offerings (PSIPOs) and domestic reverse mergers (RMs). The table reports median values for various financial characteristics of firms using PSIPOs and RMs. Free cash flow is calculated as operating cash flow minus capital expenditures, Net profit margin is net income by sales, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Change in insider ownership is the total percentage of insider ownership given up because of going public. The sample consists of 213 PSIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 408 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, the Center for Research in Security prices (CRSP), Yahoo Finance, 8-Ks, 8-K/As, 10Ks and SC-14F1s.

Financial characteristic	Firms using domestic RMs	Firms using Penny Stock IPOs	Wilcoxon 2-sample median z-test statistic (p-value)
Total assets ($m)	2.57	7.16	7.6625 (<.0001)
Sales ($m)	0.33	5.01	8.6251 (<.0001)
Current liabilities to total assets (%)	64	23	-8.5115 (<.0001)
Long-term debt to total assets (%)	0	3	5.6849 (<.0001)
Capital Expenditures to sales (%)	2	4	3.7662 (0.0002)
Research and development to sales (%)	0	5	6.7318 (<.0001)
Free cash flow to sales	-1.79	-2.12	-0.4519 (0.6513)
Net profit margin (%)	-32	-9	5.7054 (<.0001)
Deal size ($m)	3.77	5.5	-3.7731 (0.0002)
Development stage dummy	1	0	-10.0206 (<.0001)
Change in insider ownership (%)	16	24	4.9094 (<.0001)

Table 5: Financial Characteristics of Domestic Reverse Merger Firms Categorized by Changes in Stock Listing

A comparison of domestic reverse mergers (RMs) that are upgraded with RMs that are downgraded (Panel A) and with RMs that remain on the same stock exchange (Panel B). The table reports median values for various financial characteristics of firms using RMs. Free cash flow is calculated as operating cash flow minus capital expenditures and change in working capital, net profit margin is net income by sales. The sample consists of 283 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from SEC 10-Qs. Data on institutional/Beneficial holdings is from SEC 13-Ds, 13-Fs and 13-Gs and proxy statements.

Panel A			
Financial characteristic	RMs – Upgrade	RMs - Downgrade	Wilcoxon 2-sample median z-test statistic (p-value)
Total assets ($m)	10.84	3.67	-1.3639 (0.1726)
Sales ($m)	2.03	0.72	-0.6146 (0.5388)
Current liabilities ($m)	1.72	0.09	-2.3568 (0.0184)
Working capital ($m)	2.8	-0.11	-2.0384 (0.0415)
Capital expenditures ($m)	0.25	0.13	-0.8511 (0.3947)
Free cash flow ($m)	-4.6	-0.38	2.5968 (0.0094)
Net profit margin ($m)	-0.98	-0.26	0.8492 (0.3958)
Net income ($m)	-1.44	-0.38	1.7566 (0.0790)
Institutional/Beneficial holdings (%)	0.14	0.2	-0.6420 (0.5208)

Panel B			
Financial characteristic	RMs - Upgrade	RMs - Same stock exchange	Wilcoxon 2-sample median z-test statistic (p-value)
Total assets ($m)	10.84	2.93	3.2604 (0.0011)
Sales ($m)	2.03	1.2	0.3249 (0.7452)
Current liabilities ($m)	1.72	0.78	1.4505 (0.1469)
Working capital ($m)	2.8	-0.05	3.3506 (0.0008)
Capital expenditures ($m)	0.25	0.05	2.0556 (0.0398)
Free cash flow ($m)	-4.6	-0.37	-4.8786 (<.0001)
Net profit margin ($m)	-0.98	-0.25	-1.3525 (0.1762)
Net income ($m)	-1.44	-0.47	-2.0534 (0.04)
Institutional/Beneficial holdings (%)	0.14	0.2	-1.2468 (0.2125)

Table 6: Ownership Characteristics of Domestic Reverse Mergers Categorized by Changes in Stock Listing

A comparison of RMs that are upgraded with RMs that are downgraded (Panel A) and with RMs that remain being traded on the same stock exchange (Panel B). The table reports the median values for various ownership characteristics of RMs. The current median values refer to the ownership percentages reported for investment managers, brokerage firms, holding companies, corporations, individuals and insiders in RMs. The proceeds refer to the proceeds raised by the RMs due to Private Investments in Public Equity (PIPEs). The current percentage of shares on free float is tabulated as well as the current number of shareholders (excluding the shareholders trading shares on the free float). The sample consists of 202 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Ownership data is from Thomson One Banker.

Panel A; Comparison of ownership characteristics between RMs that are upgraded with the foreign RMs that are downgraded

Ownership characteristic	RMs – Upgrade	RMs - Downgrade	Wilcoxon 2-sample median z-test statistic (p-value)
Investment Management (%)	11.03	13.04	-0.7183 (0.4726)
Brokerage Firms (%)	0.01	0	-1.3484 (0.1775)
Holding Companies (%)	0	0	-0.2981 (0.7656)
Corporations (%)	0	34.65	1.8985 (0.0576)
Individuals (%)	27.71	35.73	0.04 (0.0540)
Free Float (%)	58	26	-2.0764 (0.0379)
Number of Inside Shareholders	16.5	6	-1.8994 (0.0575)
Proceeds ($ m)	7	1.66	-1.2144 (0.2246)
Insiders (%)	42.09	227.74	0.3554 (0.7223)

Panel B; Comparison of ownership characteristics between RMs that are upgraded with the foreign RMs that remain on the same stock exchange

Ownership characteristic	RMs - Upgrade	RMs - Same stock exchange	Wilcoxon 2-sample median z-test statistic (p-value)
Investment Management (%)	11.03	0.02	2.0175 (0.0436)
Brokerage Firms (%)	0.01	0	5.7977 (<.0001)
Holding Companies (%)	0	0	0.4093 (0.6246)
Corporations (%)	0	0	0.3653 (0.7149)
Individuals (%)	27.71	33.65	-0.7302 (0.4653)
Free Float (%)	58	57	0.2714 (0.3749)
Number of Inside Shareholders	16.5	6	4.1934 (<.0001)
Proceeds ($ m)	7	5	0.9453 (0.3445)
Insiders (%)	42.09	37.24	0.8547 (0.3927)

Table 7: Choice between Domestic Reverse Mergers and Penny Stock Initial Public Offerings

Coefficients from a logistic regression analysis of factors influencing the decision to go public using penny stock initial public offerings (PSIPOs) and domestic reverse mergers (RMs). The dependent variable is a dummy variable that takes on a value of 0 if the firm uses a PSIPO and 1 if it uses a RM. ROA is net income to assets, Current ratio is current assets to current liabilities, Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Change in insider ownership is the total percentage of insider ownership given up because of going public and Venture capital takes on a value of 1 if there is venture capital backing or PIPE financing in the firm. The sample consists of 213 PSIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 408 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, 8-Ks, 8-K/As, 10Ks and SC-14F1s. The figure in parenthesis is the p-value.

Variable	1	2	3	4	5
Intercept	0.1427 (0.0006)	-0.0376 (0.6364)	0.0802 (0.4808)	0.0571 (0.6333)	-0.2077 (0.0767)
Assets	-0.0303 (0.0429)	-0.1170 (0.0003)	-0.1114 (0.0010)	-0.1071 (0.0034)	-0.1922 (0.0001)
ROA	-0.0427 (0.0510)	-0.0370 (0.2566)	-0.0249 (0.4594)	-0.0262 (0.3944)	-
Development stage	0.1878 (<.0001)	0.27747 (0.0003)	0.2137 (0.0109)	0.2490 (0.0055)	0.0006 (0.9960)
Research and development to sales	-0.0756 (0.0566)	-0.1307 (0.0424)	-0.0958 (0.1485)	-0.0904 (0.1430)	-
Industry (2 SIC code) research and development to sales	-	-	-		0.06363 (<.0001)
Stock acquisitions	-	0.4712 (<.0001)	0.4880 (<.0001)	0.4999 (<.0001)	0.3677 (0.010)
Deal size	-	0.0086 (0.0484)	0.0068 (0.0783)	0.0070 (0.1692)	0.0101 (0.0695)
Change in insider ownership	-	-	-0.5123 (0.1194)	-0.3746 (0.2845)	-
Venture capital backing	-	-	0.2905 (0.0010)	0.3383 (0.0003)	0.2974 (0.0096)
Current ratio	-	-		-0.0006 (0.5551)	-
Capital expenditures to sales	-	-		-0.4504 (0.0442)	-0.2549 (0.0854)
Max-rescaled R^2	0.1764	0.3832	0.4180	0.4282	0.7391

Table 8: Choice between PIPE-Financed Domestic Reverse Mergers and Penny Stock Initial Public Offerings

Coefficients from a logistic regression analysis of factors influencing the decision to go public using penny stock initial public offerings (PSIPOs) and PIPE-financed domestic reverse mergers (APOs). The dependent variable is a dummy variable that takes on a value of 0 if the firm uses a PSIPO and 1 if it uses an APO. ROA is net income to assets, Current ratio is current assets to current liabilities, Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Change in insider ownership is the total percentage of insider ownership given up because of going public and Venture capital takes on a value of 1 if there is venture capital backing or PIPE-financing in the firm. The sample consists of 213 PSIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 192 APOs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, 8-Ks, 8-K/As, 10Ks and SC-14F1s. The figure in parenthesis is the p-value.

Variable	1	2	3	4	5
Intercept	-0.089 (0.2234)	-0.1882 (0.1165)	-2.3087 (0.4466)	-2.4734 (0.6070)	-0.0086 (0.9599)
Assets	-0.0291 (0.0691)	-0.1792 (0.0009)	-0.4954 (0.0028)	-0.5520 (0.0098)	-0.1060 (0.0280)
ROA	-0.1062 (0.0129)	-0.029 (0.5037)	-0.0004 (0.9970)	-0.00086 (0.9957)	-
Development stage	0.3511 (<.0001)	0.3491 (0.0008)	0.2379 (0.2904)	0.7101 (0.0907)	0.0214 (0.8812)
Research and development to sales	-0.1872 (0.0154)	-0.4588 (0.0122)	-0.9012 (0.0263)	-1.2784 (0.0254)	-
Industry (2 SIC code) research and development to sales	-	-	-	-	0.1591 (<.0001)
Stock acquisitions	-	0.25437 (0.1274)	2.1690 (0.3159)	2.4997 (0.4648)	-
Deal size	-	0.0184 (0.0046)	0.0113 (0.3312)	0.0132 (0.3106)	-
Change in insider ownership	-	-	-1.920 (0.0541)	-2.6073 (0.0531)	-0.8384 (0.1121)
Venture capital backing	-	-	3.7893 (0.2134)	4.3718 (0.3646)	-
Current ratio	-	-	-	-0.0405 (0.0318)	-0.0324 (0.0211)
Capital expenditures to sales	-	-	-	-0.0535 (0.4651)	-
Max-rescaled R^2	0.3154	0.4953	0.7956	0.9199	0.7724

Table 9: Private Information and the Choice of Domestic Reverse Mergers and Penny Stock Initial Public Offerings as a Going Public Mechanism

Coefficients from a Heckman baseline two-stage self selection analysis testing for the existence of private information before going public. In the first stage we estimate a probit equation using maximum likelihood where the dependant variable is a dummy variable that takes on a value of 0 if the firm uses an PSIPO and 1 if it uses a RM. The first stage regression is used to calculate the Inverse Mills Ratio (IMR). In the second stage, we estimate an ordinary least squares regression of the surplus that is generated after the firm goes public using an RM. The surplus is proxied by EBITDA. Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues and Venture capital takes on a value of 1 if there is venture capital backing or PIPE-financing in the firm. The sample consists of 213 PSIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 408 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, 8-Ks, 8-K/As, 10Ks and SC-14F1s. The figure in parenthesis is the p-value.

Independent variable	Probit model (Dependent Variable: Decision choice variable)	OLS model (Dependent Variable: EBITDA)
Intercept	0.2259 (0.1732)	8.3630 (0.0236)
Assets	-0.3965 (<.0001)	-0.8809 (0.2301)
Research and development to sales	-0.1192 (0.1905)	-0.3225 (0.5802)
Stock Acquisitions	1.0219 (<.0001)	-
Capital expenditures to sales	-0.3565 (0.1952)	0.1942 (0.9193)
Venture capital	0.8156 (<.0001)	-6.54 (0.0625)
Deal size	0.0209 (0.0554)	-
Current ratio	-	-
Development stage	-	-1.32 (0.1922)
Inverse Mills Ratio	-	-11.9468 (0.0108)
F - Value	3.95	
Adjusted R^2	0.1542	

Table 10: Endogeneity in Initial Returns and the Choice of Domestic Reverse Mergers and Penny Stock Initial Public Offerings as a Going Public Mechanism

Coefficients from two-stage probit least squares simultaneous equations analysis testing for the existence of an endogenous relation between the initial returns and the choice between reverse mergers and penny stock initial public offerings. In the first stage of Panel A we estimate the decision choice variable (a dummy variable that takes on a value of 0 if the firm uses an PSIPO and 1 if it uses a RM) while in the second stage we estimate an OLS equation with the initial returns as the dependent variable and and the predicted value of the decision choice variable as one of the independent variables. In the first stage of Panel B we estimate the first day initial returns. In the second stage of Panel B we estimate a Probit equation using the decision choice variable as the dependent variable and the predicted value of the first day initial returns as one of the independent variables. ROA is net income to assets, Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Change in insider ownership is the total percentage of insider ownership given up because of going public and Venture capital takes on a value of 1 if there is venture capital backing in the firm. The sample consists of 213 PSIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 408 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, 8-Ks, 8-K/As, 10Ks and SC-14F1s. The figure in parenthesis is the p-value.

	Panel A: OLS with dependent Variable 1-day initial returns		Panel B: Probit with dependent Variable: Decision choice (PSIPO/RM)	
Exogenous Variables	1st Stage	2nd Stage	1st Stage	2nd Stage
Intercept	-0.3966	1.728	2.0838	1.1432
	(0.304)	(0.39)	(0.317)	(0.020)
Decision Choice*		-0.214		
		(0.619)		
1-day initial returns *				-0.7802
				(0.018)
Assets	-0.2784	0.3405	0.0726	-0.2338
	(0.013)	(0.938)	(0.870)	(0.054)
Change of insider ownership	0.4063	-0.8038	-1.0942	
	(0.723)	(0.897)	(0.860)	
Research and development to sales	-0.2257	-0.276	-0.2683	-0.4256
	(0.054)	(0.670)	(0.682)	(0.012)
Development stage	0.7685	-0.7227	-0.9537	
	(0.017)	(0.698)	(0.603)	
Venture capital	0.3504	-0.715	-0.8525	-0.3024
	(0.264)	(0.674)	(0.619)	(0.498)
Stock acquisitions	1.2979		-1.1774	0.3896
	(<0.0001)		(0.520)	(0.430)
Adjusted R-square	0.0401		0.0344	

Table 11: Financial Characteristics of Shell Companies involved in Domestic Reverse Mergers

The financial characteristics of reporting shell companies over the period starting January 2005 and ending March 2006. The shell companies are identified from the Reverse Merger Report and financial information on these companies is obtained from the Securities Exchange Commission (SEC) 8-K filings.

	Panel A: Firm characteristics of all reporting shell companies							
Statistics	Total Assets	Current Assets	Current Liabilities	Market Capitalization	Long-term liabilities	Revenues	Net Income	Working Capital
Mean	0.457158987	0.283238904	0.471208213	4.165994048	0.098345902	0.048259333	-1.222564809	-0.187969309
Median	0.0097	0.0056	0.069	1.2435	0	0	-0.063	-0.0634
Maximum	12.014	7.427	6.218	112.5	8.466	5.531	0.167	1.209
Minimum	0	0	-0.414	0	0	0	-137.702	0.414
St. Deviation	1.521335673	0.908416276	1.015847102	10.48207098	0.689476317	0.414784049	10.21681566	-0.107430826

	Panel B: Change in firm characteristics from the first quarter in 2005 to the first quarter in 2006 for all reporting shell companies						
Statistics	Total Assets	Current Assets	Current Liabilities	Market Capitalization	Long-term liabilities	Revenues	Net Income
Mean	-59.2%	-53%	25.5%	74%	354%	-83%	-81%
Median	-80.0%	-62%	-33.0%	48%	0%	0%	-1%
Max	-69.7%	-54%	6.8%	57%	93%	-83%	-92%
Min	0.0%	0%	-100.0%	-42%	0%	0%	-97%
St. Dev	-60.3%	-44%	23.2%	82%	168%	-84%	-94%

	Panel C: Firm characteristics of reporting shell companies that participated in reverse mergers						
Statistics	Total Assets	Current Assets	Current Liabilities	Market Capitalization	Long-term liabilities	Revenues	Net income
mean	0.332211111	0.243453556	0.396237628	2.267692308	0	0.003072222	-0.145688667
median	0.0037	0.0037	0.054	0.93	0	0	-0.0665
max	2.707	2.704	4.75	14	0	0.049	0.167
min	0	0	0	0.2	0	0	-0.891
st. dev	0.785705388	0.644705707	1.109155693	3.7121134	0	0.011507532	0.270401111

Table 12: Motivation for Domestic and Foreign Reverse Mergers as a Going Public Mechanism

The reasons listed for going public using both domestic and foreign reverse mergers (RMs) for a sample of 265 and 94 respectively from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The information on the reasons is obtained from news reports in Factiva (www.factiva.com).

Reason reported	Number of domestic reverse merger firms	Number of foreign reverse merger firms
No reason reported	120	60
Operating synergies	22 (11 of which have shown to be diversifying mergers)	2 (both of which have shown to be diversifying mergers)
Growth	47	15
Acquisition of greater market share	10	6
Accessibility to capital markets	35	14
Further acquisitions	29	7
Acquisition of target management reputation	1	0
Industries' diversification	8	5
Launching of new products	24	2
Increase of transparency (become a fully reporting company)	5	0
Increase of current management retention rate (hire better management in the future)	2	0
Total number	252	102

Table 13: Motivation for Withdrawal of Domestic and Foreign Reverse Mergers
The reasons listed for withdrawn domestic and foreign reverse mergers (RMs) and the path followed in the post-withdrawal period for a sample of 104 and 20 firms respectively from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The information on the reasons and the post-withdrawal path is obtained from SDC and news reports in Factiva (www.factiva.com).

Panel A; Reasons for withdrawal of domestic and FRMs

Reason description	Number of domestic RMs	Number of FRMs
No reason reported	63	10
Actions by the public company's management	1	2
A superior offer received by another company	4	
Public company found to have more liabilities during the due diligence process	3	
Mutual consent by both companies' management	16	1
Inability of the public company to restructure	2	5
Current economic conditions	9	
The merger process is very time-consuming	5	2
No solicitation received by respective shareholders' base	1	
Total number	104	20

Panel B: The post-withdrawal path for both domestic and FRMs

Further deals reported	Number of domestic RMs	Number of FRMs
No path reported	80	16
Completion of IPO	8	0
Completion of "regularly operating" reverse merger	3	0
Completion of "shell" reverse merger	1	4
Public trading after completion of acquisition	8	0
Filing for chapter 11	1	0
Further withdrawals of reverse merger negotiations	3	0
Total number	104	20

Table 14: Industry Distribution of Domestic and Foreign Reverse Mergers
Distribution of domestic and foreign reverse mergers (RMs) by merger type for a sample of 265 and 94 domestic and FRMs respectively from Securities Data Corporation's (SDC) Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. The type of merger is based on the mapping procedure in Fan and Goyal (2006) where a diversifying merger is between two firms that belong to different industries but exhibit no vertical relatedness, a horizontal merger is between two firms that belong to the same industry but exhibit no vertical relatedness, a vertical merger is between two firms that belong to different industries but exhibit vertical relatedness and a mixed vertical and horizontal merger is between two firms that belong to same industries but exhibit vertical relatedness.

Type of merger	Number of domestic RMs		Number of FRMs	
Diversifying mergers	201	76%	85	90%
Mixed vertical-and-horizontal merger	11	4%	0	0%
Pure horizontal merger	1	0%	0	0%
Pure vertical merger	15	6%	0	0%
Exactly the same industry (4 digit SIC code) - Increasing market share	26	10%	3	3%
Unknown	11	4%	6	6%
Total number of reverse mergers checked:	265	100%	94	100%

Table 15: Financial Characteristics of Firms Going Public Using Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs

A comparison of firms going public using foreign initial public offerings (FIPOs) capital-raising ADRs (CRADRs), and foreign reverse mergers (RMs). The table reports median values for various financial characteristics of firms using FIPOs, capital-raising ADRs, domestic and FRMs. Free cash flow is calculated as operating cash flow minus capital expenditures, Net profit margin is net income by sales, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Change in insider ownership is the total percentage of insider ownership given up because of going public, audit fees transaction costs are the average trade values paid by active managers broken down into commissions, fees and market impact costs. The sample consists of 216 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database, 252 CRADRs from Citibank's Capital Raising Events database and 94 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from Compustat, the Center for Research in Security prices (CRSP), Yahoo Finance, 8-Ks, 8-K/As, 10Ks and SC-14F1s and Elkins/McSherry Global Universe database.

Panel A; Comparison of financial characteristics of FRMs and FIPOs

Financial Characteristic	Firms using FRMs	Firms using foreign IPOs	Wilcoxon median Z-test statistic & 2-sided p-values
Total assets (in $ m)	4.52	81.78	-11.3533 (<0.0001)
Sales (in $ m)	1.7	45.36	-9.6476 (<0.0001)
Current Liabilities to total assets (%)	48	19	7.2099 (<0.0001)
Long-Term Debt to total assets (%)	0	1	-5.38 (<0.0001)
Capital Expenditure to total assets (%)	2	4	-2.9339 (0.0033)
Net profit margin (%)	6	8	-0.2398 (0.8105)
Deal Size (in $ m)	4.15	46.3	-8.1663 (<0.0001)
Research Development to sales (%)	0	7	-7.8022 (<0.0001)
Change in insider ownership (%)	10.15	17.3	-1.4781 (0.1394)
Audit fees (2003) to total assets (%)	1	0	3.4115 (0.0006)
Audit fees (cumulative 2003 + 2004) to total assets (%)	2	1	3.5901 (0.0003)
Audit fees (cumulative 2003 + 2004 + 2005) to total assets (%)	4	1	4.8945 (<0.0001)
Transaction costs in basis points	33.37	31.77	1.4233 (0.1549)
Assets Growth (%)	37	38	-0.5982 (0.5497)
Sales growth (%)	50	33	1.1793 (0.2383)
Capex growth (%)	-33	36	-1.8709 (0.0614)

Panel B; Comparison of financial characteristics of FRMs and CRADRs

Financial Characteristic	Firms using FRMs	Firms using CRADRs	Wilcoxon median Z-test statistic & 2-sided p-values
Total assets (in $ m)	4.52	449.52	-12.9806 (<0.0001)
Sales (in $ m)	1.7	227.48	-12.0342 (<0.0001)
Current Liabilities to total assets (%)	48	21	6.7795 (<0.0001)
Long-Term Debt to total assets (%)	0	6	-7.5526 (<0.0001)
Capital Expenditure to total assets (%)	2	6	-5.3564 (<0.0001)
Net Profit Margin (%)	6	7	0.6341 (0.526)
Deal Size (in $ m)	4.15	88.667	-10.9528 (<0.0001)
Research Development to sales (%)	0	3	-7.0099 (<0.0001)
Change in insider ownership (%)	10.15	9.5	-1.4781 (0.1394)
Audit fees (2003) to total assets (%)	1	0	4.7278 (<0.0001)
Audit fees (cumulative 2003 + 2004) to total assets (%)	2	0	-4.7036 (<0.0001)
Audit fees (cumulative 2003 + 2004 + 2005) to total assets (%)	4	1	-4.5313 (<0.0001)
Transaction costs in basis points	33.37	31.94	1.5391 (0.1238)
Assets Growth (%)	37	41	-0.9806 (0.3268)
Sales growth (%)	50	42	0.042 (0.9665)
Capex growth (%)	-33	69	-2.8773 (0.004)

Table 16: Financial Characteristics of Foreign Reverse Mergers Categorized by Changes in Stock Listing

A comparison of RMs that are upgraded with FRMs that are downgraded (Panel A) and with RMs that remain being traded on the same stock exchange (Panel B). The table reports median values for various financial characteristics of firms using RMs. Free cash flow is calculated as operating cash flow minus capital expenditures, Net profit margin is net income by sales, Institutional/Beneficial holdings is the percentage known to the reporting company to be retained by a person or a company as beneficial ownership (1% or 5% of the reporting company's voting securities). The sample consists of 94 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Data on the financial characteristics is from SEC 10-Qs. Data on institutional/Beneficial holdings is from SEC 13-Ds, 13-Fs and 13-Gs and proxy statements.

Panel A; Comparison of financial characteristics between FRMs that are upgraded with the FRMs that are downgraded

Financial characteristic	Upgraded FRMs	Downgraded FRMs	Wilcoxon 2-sample median z-test statistic (p-value)
Total assets ($m)	17.21	0.71	-2.6371 (0.0084)
Sales ($m)	2.19	0.16	-2.4251 (0.0153)
Current liabilities ($m)	6.2	0.78	-1.8807 (0.06)
Working capital ($m)	5.05	-0.03	-2.5788 (0.0099)
Capital expenditures ($m)	0.05	0.01	-0.9549 (0.3396)
Free cash flow ($m)	0	-0.61	-1.2022 (0.2293)
Net profit margin ($m)	0.52	-0.12	-2.1329 (0.0329)
Net income ($m)	0.42	-0.44	-2.4044 (0.0162)
Insider holdings (%)	66.73	58	-0.8121 (0.4167)
Institutional/Beneficial holdings (%)	33	67	-1.7216 (0.0851)

Panel B; Comparison of financial characteristics between FRMs that are upgraded with the FRMs that remain on the same stock exchange

Financial characteristic	Upgraded FRMs	FRMs remaining on the same stock exchange	Wilcoxon 2-sample median z-test statistic (p-value)
Total assets ($m)	17.21	9.77	2.8908 (0.0038)
Sales ($m)	2.19	0.97	3.0506 (0.0023)
Current liabilities ($m)	6.2	3	1.9121 (0.0559)
Working capital ($m)	5.05	0.1	3.3990 (0.0007)
Capital expenditures ($m)	0.05	0.03	1.6227 (0.1047)
Free cash flow ($m)	0	-0.33	1.2807 (0.2003)
Net profit margin ($m)	0.52	0	2.8948 (0.0038)
Net income ($m)	0.42	0	2.9347 (0.0033)
Insider ownership (%)	66.73	57.3	1.8473 (0.0647)
Institutional/Beneficial holdings (%)	33	24.5	3.5614 (0.0004)

Table 17: Ownership Characteristics of Foreign Reverse Mergers Categorized by Changes in Stock Listing

A comparison of RMs that are upgraded with FRMs that are downgraded (Panel A) and with RMs that remain being traded on the same stock exchange (Panel B). The table reports the median values for various ownership characteristics of RMs. The current median values refer to the ownership percentages reported for investment managers, brokerage firms, holding companies, corporations, individuals and insiders in RMs. The proceeds refer to the proceeds raised by the RMs due to Private Investments in Public Equity (PIPEs). The current percentage of shares on free float is tabulated as well as the current number of shareholders (excluding the shareholders trading shares on the free float). The sample consists of 94 RMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report. Ownership data is from Thomson One Banker.

Panel A; Comparison of ownership characteristics between FRMs that are upgraded with the FRMs that are downgraded

Ownership characteristic	Upgraded FRMs	Downgraded FRMs	Wilcoxon 2-sample median z-test statistic (p-value)
Investment Management	11.22	0	-1.39 (0.1645)
Brokerage Firms (%)	0.26	0	-1.2776 (0.2014)
Holding Companies (%)	0	0	-0.3309 (0.7407)
Corporations (%)	0	0	-0.4456 (0.6559)
Individuals (%)	12.4	66.99	1.0425 (0.2972)
Free Float (%)	52.5	33	5 (0.5628)
Number of Shareholders	37	6	-1.2753 (0.2022)
Proceeds ($ m)	7.45	1.99	-0.7519 (0.4521)
Insiders (%)	83.28	60.62	-0.3472 (0.7285)

Panel B; Comparison of ownership characteristics between FRMs that are upgraded with the FRMs that remain on the same stock exchange

Onwership characteristic	Upgraded FRMs	FRMs remaining on the same stock exchange	Wilcoxon 2-sample median z-test statistic (p-value)
Investment Management	11.22	0	4.1898 (<.0001)
Brokerage Firms (%)	0.26	0	6.792 (<.0001)
Holding Companies (%)	0	0	2.2806 (0.0226)
Corporations (%)	0	0	5.6279 (0.3566)
Individuals (%)	12.4	37.85	-1.0772 (0.2814)
Free Float (%)	52.5	54	-0.4847 (0.6279)
Number of Shareholders	37	6	4.9907 (<.0001)
Proceeds ($ m)	7.45	1.9	1.2732 (0.2030)
Insiders (%)	83.28	74.15	1.1234 (0.2652)

Table 18: Choice among Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs

Coefficients from a multinomial generalized logistic regression analysis of factors influencing the decision to go public using foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs). The dependent variable is a categorical variable that takes on a value of 1 if the firm uses a CRADR, 2 if it uses a foreign IPO and 3 if it uses a FRM. ROA is net income to assets, Current ratio is current assets to current liabilities, Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock, Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues, Net profit margin is net income to sales, Total debt ratio is the sum of long-term and current liabilities to total assets, Total expenses ratio is the sum of capital and research and development expenditures to total assets, Access to capital takes on a value of 1 if a secondary offering of equity or debt takes place within three years of going public, Judicial efficiency, private and public enforcement are from LSS [2003], antidirector rights is from LLSV [1998], transaction costs are the average broker commissions, fees and market impact costs per US stock exchange from Elkins/McSherry database. Per independent variable the first row compares the tendency to choose RMs over CRADRs and the second row RMs over FIPOs. The sample consists of 216 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database, of 252 CRADRs from Citibank's Capital Raising Events database and 94 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger database. Data on the financial characteristics is from Compustat, 8-Ks, 8-K/As, 10Ks, 6-Fs, 20-Fs and SC-14F1s. The figure in parenthesis is the p-value.

Independent variables	[1]	[2]	[3]	[4]
Intercept 1	-3.20371 (<0.0001)	-5.07805 (0.0005)	-6.14454 (0.0011)	-11.03898 (0.0576)
Intercept2	-2.29448 (<0.0001)	-4.15716 (0.0015)	-5.23131 (0.0027)	-13.12179 (0.0187)
Judicial Efficiency1				2.60494 (0.0624)
Judicial Efficiency2				2.46397 (0.0667)
Rule of Law1				-0.6316 (0.1067)
Rule of Law2				-0.70621 (0.0540)
Corruption1				-0.73313 (0.2911)
Corruption2				-0.46921 (0.4791)
Creditor Rights1				1.38416 (0.0959)
Creditor Rights2				1.29199 (0.1054)
Public Enforcement1				-4.09436 (0.1333)
Public Enforcement2				-3.3536 (0.1987)
Private Enforcement1				-5.38116 (0.0324)
Private Enforcement2				-1.47347 (0.5346)
Antidirector Rights1				1.21064 (0.1022)
Antidirector Rights2				0.79606 (0.2634)
Business Segments1				-0.92267 (0.1483)
Business Segments2				0.87395 (0.1550)
Geographical Segments1				0.38151 (0.1198)
Geographical Segments2				0.40991 (0.0814)
Transaction costs1	0.03207 (0.0022)	0.039 (0.0161)	0.05613 (0.0097)	
Transaction costs2	0.02569 (0.0068)	0.03131 (0.0265)	0.04811 (0.0146)	
Stock acquisitions1	-0.35851 (0.3373)			
Stock acquisitions2	-0.27112 (0.4009)			
Access Capital1			-0.87737 (0.0168)	-0.97955 (0.1119)

Access Capital2			-0.59914 (0.0671)	-0.64947 (0.2635)
Assets growth1	0.01092 (0.5307)			
Assets growth2	0.00103 (0.9533)			
Development stage1	0.0723 (0.8248)	-0.57881 (0.2825)	-0.15254 (0.8019)	
Development stage2	-0.00249 (0.9931)	0.34985 (0.4608)	0.02096 (0.9696)	
Total Debt Ratio1		-1.87413 (0.0158)	-2.03296 (0.0131)	-2.08806 (0.0161)
Total Debt Ratio2		-0.90009 (0.1488)	-1.09346 (0.0964)	-0.84492 (0.2301)
Total Expenses Ratio1		1.34277 (0.0255)	1.508 (0.04)	2.09894 (0.0897)
Total Expenses Ratio2		1.24998 (0.0024)	1.48636 (0.0051)	1.64509 (0.1421)
Cash Flow1		-0.05806 (0.0024)	-0.06839 (0.0027)	-0.0746 (0.00418)
Cash Flow2		-0.00356 (0.9092)	-0.01758 (0.6905)	-0.02977 (0.6643)
Current ratio1		0.10153 (0.1403)	0.10129 (0.1952)	0.24494 (0.2049)
Current ratio2		0.11975 (0.0575)	0.12057 (0.097)	0.27244 (0.1404)
Assets1	0.5511 (<0.0001)	1.06424 (<0.0001)	1.28857 (<0.0001)	1.58396 (0.0355)
Assets2	0.43834 (<0.0001)	0.83104 (0.0001)	1.04398 (0.0007)	1.36942 (0.0587)
Sample Size for regression	191 (63. 71. reference: 57)	167 (52. 39. reference: 76)	159 (52. 39. reference: 68)	222 (82. 93. reference: 47)
Max-rescaled R-Square	0.6805	0.8371	0.8452	0.9012

Table 19: Choice among Foreign Reverse Mergers and Various Sub-Samples of Foreign Initial Public Offerings and Capital-Raising ADRs

Coefficients from a multinomial generalized logistic regression analysis of factors influencing the decision to go public using Nasdaq, Nasdaq SC, OTC BB and Pink Sheets traded foreign initial public offerings (FIPOs), Nasdaq traded capital-raising ADRs (CRADRs) and all publicly traded foreign reverse mergers (FRMs). The dependent variable is a categorical variable that takes on a value of 1 if the firm uses a CRADR. 2 if it uses a foreign IPO and 3 if it uses a FRM. ROA is net income to assets. Current ratio is current assets to current liabilities. Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock. Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues. Net profit margin is net income to sales. Total debt ratio is the sum of long-term and current liabilities to total assets. Total expenses ratio is the sum of capital and research and development expenditures to total assets. Access to capital takes on a value of 1 if a secondary offering of equity or debt takes place within three years of going public. Judicial efficiency. private and public enforcement are from LSS [2003]. antidirector rights is from LLSV [1998]. Transaction costs are the average broker commissions, fees and market impact costs per US stock exchange from Elkins/McSherry database. Per independent variable the first row compares the tendency to choose RMs over CRADRs and the second row RMs over FIPOs. The sample consists of 216 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database. of 252 CRADRs from Citibank's Capital Raising Events database and 94 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger database. Data on the financial characteristics is from Compustat. 8-Ks. 8-K/As. 10Ks. 6-Fs. 20-Fs and SC-14F1s. The figure in parenthesis is the p-value.

Independent variables	[1]	[2]	[3]	[4]
Intercept 1	-1.31265 (<0.0001)	-3.65315 (0.0001)	-3.53341 (0.0003)	-4.22417 (0.0391)
Intercept2	-1.38173 (<0.0001)	-2.14947 (0.0037)	-2.64027 (0.0055)	-7.57899 (0.0167)
Judicial Efficiency1				1.01631 (0.0552)
Judicial Efficiency2				1.56622 (0.0546)
Rule of Law1				-0.22804 (0.0973)
Rule of Law2				-0.41903 (0.0411)
Corruption1				-0.32056 (0.2144)
Corruption2				-0.38086 (0.3356)
Creditor Rights1				-0.54672 (0.0788)
Creditor Rights2				-0.83119 (0.0804)
Public Enforcement1				-1.66933 (0.1079)
Public Enforcement2				-2.21664 (0.1582)
Private Enforcement1				-1.95308 (0.0251)
Private Enforcement2				-0.95298 (0.4664)
Antidirector Rights1				0.47824 (0.0718)
Antidirector Rights2				0.52803 (0.2129)
Business Segments1				-0.4686 (0.0696)
Business Segments2				-0.63587 (0.1043)
Geographical Segments1				0.1679 (0.0868)
Geographical Segments2				0.27474 (0.0684)
Transaction costs1	0.01243 (0.0063)	0.02181 (0.01)	0.03066 (0.0055)	
Transaction costs2	0.0161 (0.0029)	0.01732 (0.0281)	0.02626 (0.0142)	

Stock acquisitions1	-0.09484 (0.5461)			
Stock acquisitions2	-0.1539 (0.4126)			
Access Capital1			-0.40412 (0.0267)	-0.31314 (0.1275)
Access Capital2			-0.36826 (0.0444)	-0.39428 (0.1956)
Assets growth1	0.00471 (0.5339)			
Assets growth2	0.00209 (0.8338)			
Development stage1	0.01952 (0.8875)	-0.28173 (0.3080)	-0.05175 (0.8614)	
Development stage2	0.02414 (0.8880)	-0.19999 (0.4419)	0.03159 (0.9137)	
Total Debt Ratio1		-0.56275 (0.1330)	-0.64502 (0.0881)	-0.59299 (0.0543)
Total Debt Ratio2		-0.77346 (0.0576)	-0.91592 (0.0344)	-0.45289 (0.2273)
Total Expenses Ratio1		0.54915 (0.114)	0.61014 (0.1237)	0.43222 (0.3347)
Total Expenses Ratio2		0.68646 (0.0028)	0.79794 (0.0049)	0.98879 (0.1164)
Cash Flow1		-0.0282 (0.0029)	-0.03266 (0.0021)	-0.0296 (0.0201)
Cash Flow2		-0.00035 (0.9788)	-0.00382 (0.8389)	-0.00857 (0.6565)
Current ratio1		0.04898 (0.1549)	0.04526 (0.2238)	0.09418 (0.1695)
Current ratio2		0.05752 (0.1015)	0.05285 (0.1648)	0.16522 (0.1204)
Assets1	0.23222 (<0.0001)	0.6147 (<0.0001)	0.71594 (<0.0001)	0.60074 (0.0223)
Assets2	0.2456 (<0.0001)	0.45092 (0.0003)	0.55312 (0.0009)	0.78234 (0.0501)
Sample Size for regression	140 (36, 47 reference: 57)	141 (32, 33 reference: 76)	133 (32, 33 reference: 68)	179 (52, 80 reference: 47)
Max-rescaled R-Square	0.6673	0.8379	0.8477	0.919

Table 20: Choice among Foreign Reverse Mergers and Industry, Founding Date and Operating History Matched Sub-Samples of Foreign Initial Public Offerings and Capital-Raising ADRs on Industry and Operating History

Coefficients from a multinomial generalized logistic regression analysis of factors influencing the decision to go public using foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs) matched on industry and operating history. Specifically, RMs are matched on 2-digit SIC codes allowing the operating history as a private company of the IPOs and the CRADRs to be at least four years greater than that of the RMs. The dependent variable is a categorical variable that takes on a value of 1 if the firm uses a CRADR, 2 if it uses a foreign IPO and 3 if it uses a FRM. ROA is net income to assets. Current ratio is current assets to current liabilities. Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock. Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues. Net profit margin is net income to sales. Total debt ratio is the sum of long-term and current liabilities to total assets. Total expenses ratio is the sum of capital and research and development expenditures to total assets. Access to capital takes on a value of 1 if a secondary offering of equity or debt takes place within three years of going public. Transaction costs are the average broker commissions, fees and market impact costs per US stock exchange from Elkins/McSherry database. Per independent variable the first row compares the tendency to choose RMs over CRADRs and the second row RMs over FIPOs. The sample consists of 26 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database, of 24 CRADRs from Citibank's Capital Raising Events database and 52 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger database. Data on the financial characteristics, industry and operating history is from Compustat. 8-Ks. 8-K/As. 10Ks. 6-Fs. 20-Fs and SC-14F1s. The figure in parenthesis is the p-value.

Independent variables	[1]	[2]	[3]
Intercept 1	-1.61562 (0.0767)	-3.44538 (0.2150)	-30.58255 (0.3828)
Intercept2	-1.80528 (0.0192)	-5.50373 (0.0687)	--32.84977 (0.3506)
Judicial Efficiency1			
Judicial Efficiency2			
Rule of Law1			
Rule of Law2			
Corruption1			
Corruption2			
Creditor Rights1			
Creditor Rights2			
Public Enforcement1			
Public Enforcement2			
Private Enforcement1			
Private Enforcement2			
Antidirector Rights1			
Antidirector Rights2			
Business Segments1			
Business Segments2			
Geographical Segments1			
Geographical Segments2			
Transaction costs1	-0.01667 (0.4370)	-0.01102 (0.6164)	0.04594 (0.5038)

Transaction costs2	0.00152 (0.9075)	-0.00822 (0.7158)	0.09907 (0.2782)
Stock acquisitions1	-1.9878 (0.9793)		
Stock acquisitions2	-2.58375 (0.9749)		
Access Capital1			-5.30945 (0.9652)
Access Capital2			-6.51341 (0.9618)
Assets growth1	0.09028 (0.4840)		
Assets growth2	-0.02786 (0.7799)		
Development stage1	-3.29810 (0.9278)	-8.00816 (0.8172)	
Development stage2	0.51652 (0.8017)	-0.89244 (0.5036)	
Total Debt Ratio1		-0.76173 (0.4099)	0.55524 (0.7890)
Total Debt Ratio2		0.38232 (0.4069)	1.57313 (0.2782)
Total Expenses Ratio1		4.8225 (0.2645)	45.06293 (0.3820)
Total Expenses Ratio2		7.00509 (0.1425)	51.9533 (0.3659)
Cash Flow1		-0.52792 (0.0597)	-2.1147 (0.3323)
Cash Flow2		-0.22524 (0.2360)	-2.00291 (0.4116)
Current ratio1		0.08308 (0.6303)	1.40923 (0.4332)
Current ratio2		0.24463 (0.1681)	1.73311 (0.3866)
Assets1	0.55282 (0.0021)	0.93567 (0.0783)	7.18439 (0.3854)
Assets2	0.51406 (0.0073)	0.98265 (0.0984)	7.1359 (0.3887)
Sample Size for regression	, 14, reference: 29)	58 (9, 11, reference: 38)	4 (9, 11, reference: 34)
Max-rescaled R-Square	0.7995	0.9062	0.9369

Table 21: Choice among Foreign Reverse Mergers, Foreign Initial Public Offerings and Level I ADRs

Coefficients from a multinomial generalized logistic regression analysis of factors influencing the decision to go public using foreign initial public offerings (FIPOs), Level I ADRs and foreign reverse mergers (FRMs). The dependent variable is a categorical variable that takes on a value of 1 if the firm uses a Level I ADR, 2 if it uses a FIPO and 3 if it uses a FRM. ROA is net income to assets. Current ratio is current assets to current liabilities. Stock acquisition takes on a value 1 if the makes an acquisition within three fiscal years of going public primarily using stock. Development stage takes on a value of 1 if the firm has annual income less than $0.5m and/or if it has research and development expenses larger than revenues. Net profit margin is net income to sales. Total debt ratio is the sum of long-term and current liabilities to total assets. Total expenses ratio is the sum of capital and research and development expenditures to total assets. Access to capital takes on a value of 1 if a secondary offering of equity or debt takes place within three years of going public. Transaction costs are the average broker commissions, fees and market impact costs per US stock exchange from Elkins/McSherry database. Per independent variable the first row compares the tendency to choose RMs over CRADRs and the second row RMs over FIPOs. The sample consists of 216 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database, of 265 Level I ADRs from Citibank's Capital Raising Events database (cross-verified with JP Morgan ADR database and Bank of New York ADR database) and 94 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger database. Data on the financial characteristics, industry and operating history is from Compustat. 8-Ks. 8-K/As. 10Ks. 6-Fs. 20-Fs and SC-14F1s. The figure in parenthesis is the p-value.

Independent variables	[1]	[2]	[3]	[4]
Intercept 1	-1.50474 (<0.0001)	-5.07805 (<.0001)	-2.00962 (<.0001)	-0.49622 (0.2724)
Intercept2	-1.25570 (<0.0001)	-1.88545 (<.0001)	-1.90751 (<.0001)	-4.15029 (<.0001)
Judicial Efficiency1				-0.00985 (0.8578)
Judicial Efficiency2				0.37521 (0.0025)
Rule of Law1				0.195 (0.0137)
Rule of Law2				-0.28186 (<.0001)
Corruption1				-0.22546 (0.0223)
Corruption2				0.20820 (0.0491)
Creditor Rights1				-0.05097 (0.3109)
Creditor Rights2				-0.24837 (0.0019)
Public Enforcement1				-1.11449 (0.0264)
Public Enforcement2				-0.85485 (0.2018)
Private Enforcement1				-1.24116 (0.0533)
Private Enforcement2				-2.20104 (0.0176)
Antidirector Rights1				0.36804 (0.0002)
Antidirector Rights2				0.10398 (0.2802)
Transaction costs1	0.01906 (0.0025)	0.02351 (0.0016)	0.02357 (0.0016)	
Transaction costs2	0.01569 (0.0366)	0.01963 (0.0115)	0.02106 (0.0103)	
Stock acquisitions1	0.43324 (0.0012)			
Stock acquisitions2	0.01569 (0.2122)			

Access Capital1			-0.03747 (0.7504)	0.05266 (0.6375)
Access Capital2			-0.09173 (0.4989)	0.14223 (0.3494)
Assets growth1	-0.00056 (0.6972)			
Assets growth2	-0.00082 (0.6936)			
Development stage1	0.49704 (0.0010)	0.58453 (0.0037)	0.63667 (0.0025)	
Development stage2	0.27524 (0.1536)	0.01963 (0.2670)	0.35005 (0.1780)	
Total Debt Ratio1		-0.01155 (0.5623)	-0.00792 (0.6736)	-0.02661 (0.1566)
Total Debt Ratio2		-0.26401 (0.2495)	-0.27125 (0.2506)	-0.08597 (0.6390)
Total Expenses Ratio1		0.23448 (0.1723)	0.18632 (0.2660)	0.38290 (0.0233)
Total Expenses Ratio2		0.33071 (0.0716)	0.31014 (0.1073)	0.20344 (0.3409)
Cash Flow1		-0.00475 (0.1503)	-0.00477 (0.1275)	-0.5673 (0.2526)
Cash Flow2		-0.00345 (0.6278)	-0.00408 (0.5614)	-0.4286 (0.6777)
Current ratio1		0.03402 (0.0388)	0.03103 (0.0544)	0.056 (0.0005)
Current ratio2		0.06672 (<.0001)	0.06650 (<.0001)	0.082 (0.0004)
Assets1	0.22862 (<0.0001)	0.33082 (<0.0001)	0.31787 (<0.0001)	0.3107 (<.0001)
Assets2	0.23019 (<0.0001)	0.25926 (<.0001)	0.2650 (<.0001)	0.3010 (<.0001)
Sample Size for regression	273 (145. 71. reference: 57)	240 (125. 39. reference: 76	232 (125. 39. reference: 68)	359 (195. 96. reference: 68)
Max-rescaled R-Square	0.6260	0.6680	0.6551	0.8381

Table 22: Timing of the Follow-on Offerings of Foreign Reverse Mergers and Foreign Initial Public Offerings

Coefficients from a proportional Cox Hazard model to predict the timing of the follow-on offerings of foreign initial public offerings (FIPOs) and foreign reverse mergers (RMs) conditional on not having one before. Models (1) and (2) refer to FRMs and models (3) and (4) to FIPOs. Models (1) and (3) estimate the most important factor influencing the follow-on offerings in the case of FRMs and FIPOs respectively. All firms that have not experienced any follow-on offering are right-censored (12/31/2006). For the firms that conducted a follow-on offering, we gather data up to the follow-on offering date. Age is the operating history of the company prior to going public, Change in insider ownership is the total percentage of insider ownership given up because of going public and Judicial efficiency is from LLSV [1998]. The sample consists of 216 FIPOs from Securities Data Corporation's (SDC) Global Initial Offering database and 94 FRMs from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger database. Data on the financial characteristics is from Compustat. 8-Ks. 8-K/As. 10Ks and SC-14F1s. The figure in parenthesis is the Chi-square-value.

Independent variable	[1]	[2]	[3]	[4]
Age	27.7 (0.0218)	35.7 (0.0007)		
Sales		-8 (0.3979)		-1.1 (0.0106)
Ebitda		-0.6 (0.8984)		13.6 (0.0078)
Long-term liabilities		-62.2 (0.0906)		-0.4 (0.5162)
Intangibles		100.3 (0.0016)		
Current Assets		-2.2 (0.4648)		1 (0.0771)
Current Liabilities		7.8 (0.0887)		-1 (0.075)
Capital expenditures		-5 (0.4491)	0.2 (0.0415)	1.3 (0.04)
Change in insider ownership		-1.8 (0.4861)		1.1 (0.7135)
Judicial efficiency	372.2 (0.0306)	295.6 (0.0097)		72.6 (0.1703)
Number of events/censorized observations	26/51	13/55	57/158	16/98
Likelihood Ratio Test	0.0004	0.0002	0.1076	0.0002

Table 23: Financial Characteristics of Shell Companies involved in Foreign Reverse Mergers

The financial characteristics of reporting shell companies over the period starting January 2005 and ending June 2006. In panels (c) and (d) median values of the financial characteristics of the shell companies are used. The shell companies are identified from the Reverse Merger Report and financial information on these companies is obtained from the Securities Exchange Commission (SEC) 8-K filings

Panel A; Firm characteristics of all reporting shell companies

	Total Assets	Current Assets	Current Liabilities	Market Capitalization	Long-term liabilities	Revenues	Net Income	Working Capital
Mean	0.6212	0.3549	0.51174	7.1382	0.1156	0.0458	-0.5463	-0.1569
Median	0.0078	0.0048	0.068	1.3	0	0	-0.06	-0.0632
Maximum	72.668	33.639	27.576	240	12	5.531	106.418	6.063
Minimum	0	0	-0.414	0	0	-1.14	-137.702	0.414
St. Deviation	4.5419	2.1604	1.8642	23.1058	0.9153	0.3660	10.5674	0.2962

Panel B; Firm characteristics of reporting shell companies that participated in foreign reverse mergers

	Total Assets	Current Assets	Current Liabilities	Long-term liabilities	Revenues	Net Income
mean (in $ m)	0.8390	0.6576	0.3317	0.0694	0.6289	-0.8198
median (in $ m)	0.012	0.011	0.057	0	0	-0.042
min (in $ m)	0	0	0	0	-0.038	-14.321
max (in $ m)	16.696	15.722	5.407	5.343	20.494	1.169
st. dev	30.777	24.347	0.8281	0.5813	2.7955	2.3203

Panel C; Comparison of financial characteristics of all reporting shell companies period 1/1/2005 – 6/30/2006

Panel D; Comparison of financial characteristics of all reporting shell companies e shell companies participating in the foreign reverse mergers

Variables	Shell Companies 1st quarter 2005	Shell Companies 2nd quarter 2006	Wilcoxon 2-sample median Z-test statistic & p-values	Variables	Shell Companies entire sample	FRMs shell companies	Wilcoxon 2-sample median Z-test statistic & p-values
total assets (in $ m)	0.01	0	-2.0321 (0.0211)	total assets (in $ m)	0.01	0.01	0.5479 (0.2919)
Sales (in $ m)	0	0	-1.6563 (0.0488)	Sales (in $ m)	0	0	4.5541 (<0.0001)
Current Assets (in $ m)	0.01	0	-1.9795 (0.0239)	Current Assets (in $ m)	0	0.01	0.9427 (0.1729)
Current Liabilities (in $ m)	0.11	0.05	-1.2558 (0.1046)	Current Liabilities (in $ m)	0.07	0.06	-1.0299 (0.1515)
Long-Term Debt (in $ m)	0	0	1.9199 (0.0274)	Long-Term Debt (in $ m)	0	0	-0.4722 (0.3184)
Net Income (in $ m)	-0.08	-0.04	0.9766 (0.1644)	Net Income (in $ m)	-0.06	-0.04	0.4323 (0.3328)

Figure 1: Time-Series Frequency of Domestic Reverse Mergers, Initial Public Offerings and Penny Stock IPOs from 1990 to 2006
A time-series plot of the annual number of initial public offerings (IPOs), Penny Stock IPOs (PSIPOs) and domestic reverse mergers (RMs) over the period starting January 1990 and ending December 2006. The information on IPOs and PSIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database while that for domestic RMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report.

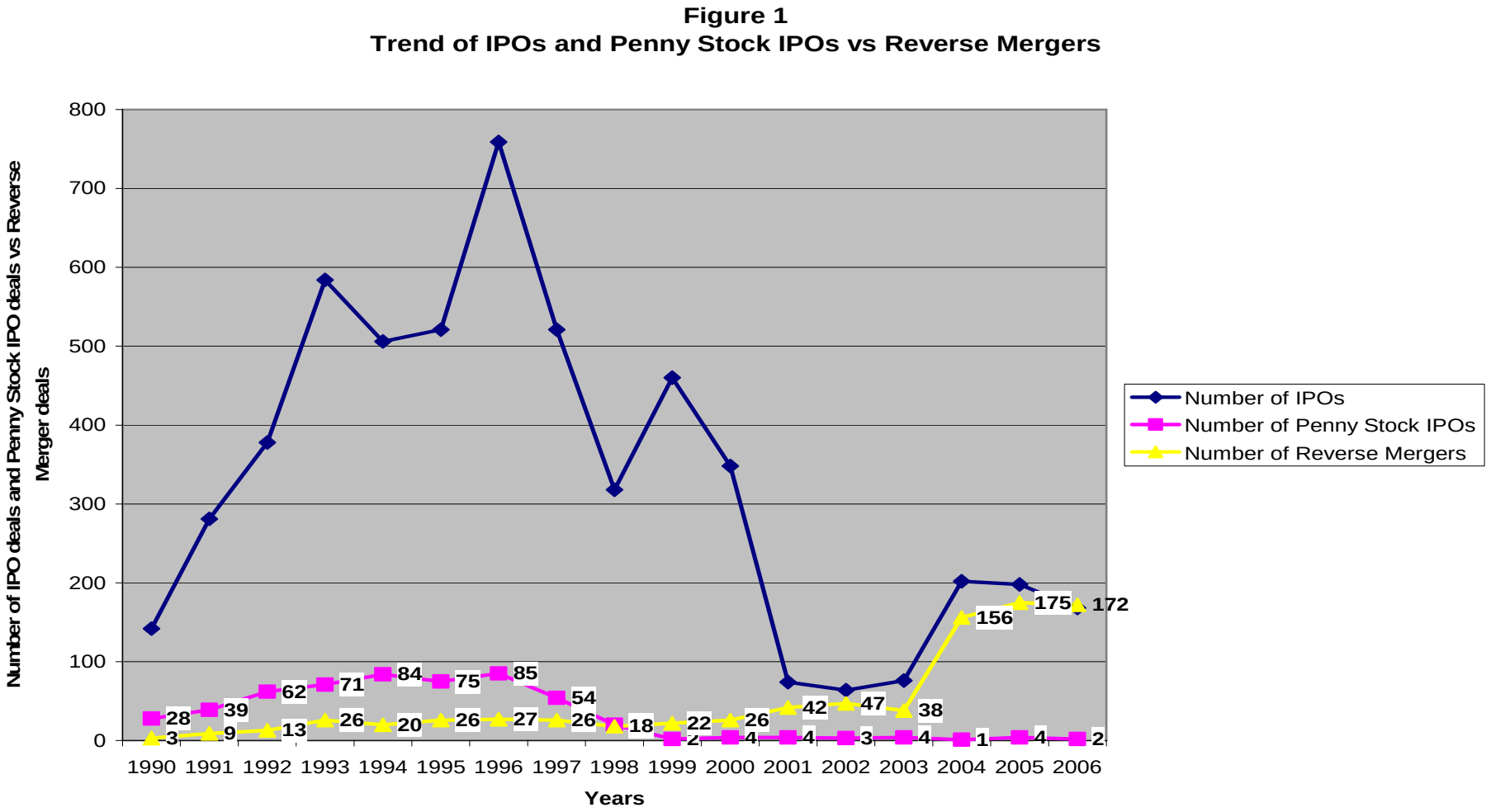

Figure 2: Time-Series of Total Assets of Domestic Reverse Mergers and Penny Stock Initial Public Offerings from 1990 to 2006
A time-series plot of the median annual total assets values of penny stock initial public offerings (PSIPOs) and domestic reverse mergers (RMs) over the period starting January 1990 and ending December 2006. The information on PSIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database while that for domestic RMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) Reverse Merger Report.

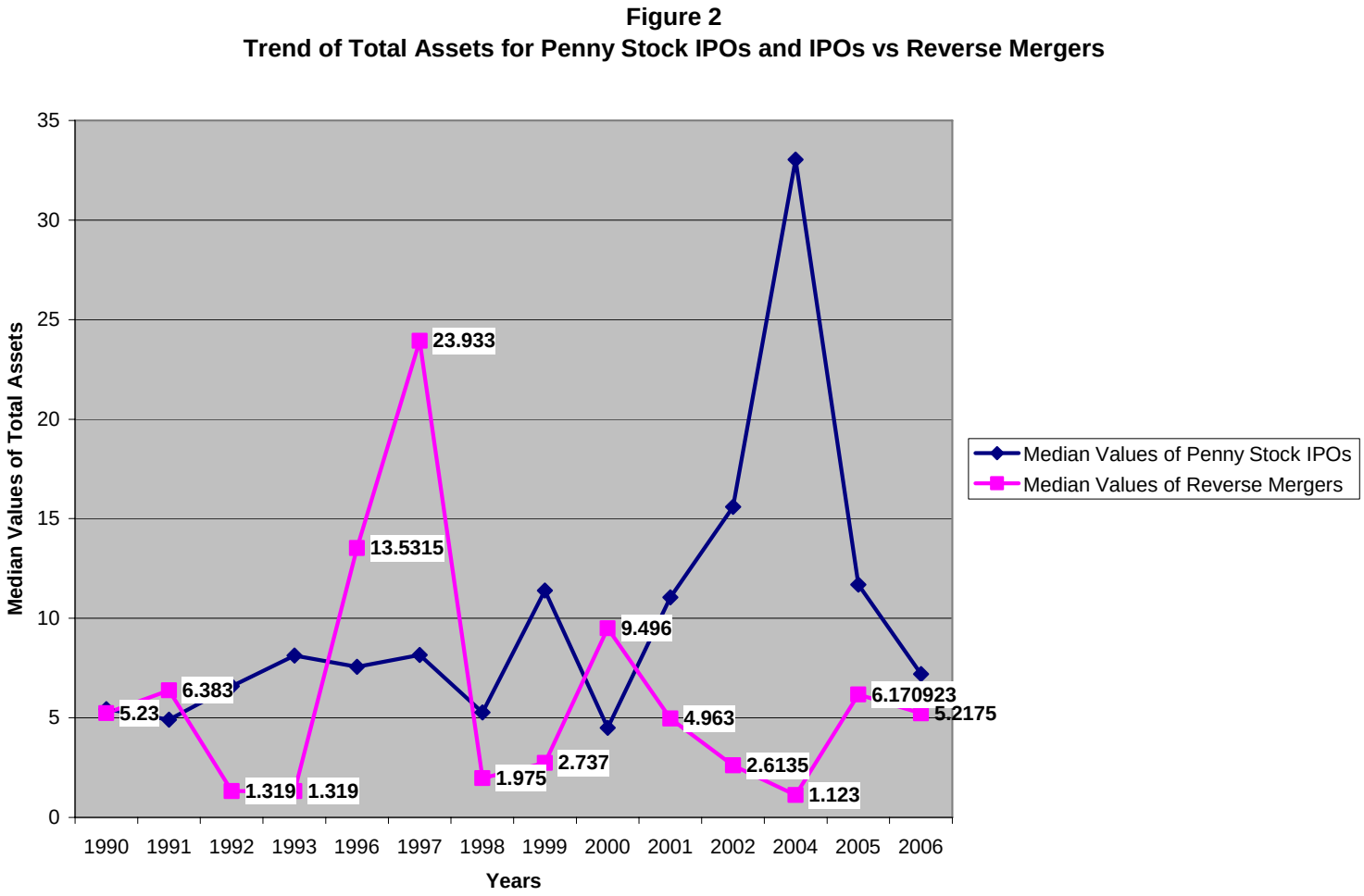

Figure 3: The Time-Series Frequency of Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs from 1985 to 2005

A time-series plot of the annual number of foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs) over the period starting January 1986 and ending December 2005. The information on FIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database, on capital-raising (Level III) ADRs from Citibank's Capital Raising Events database while that for FRMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) database.\

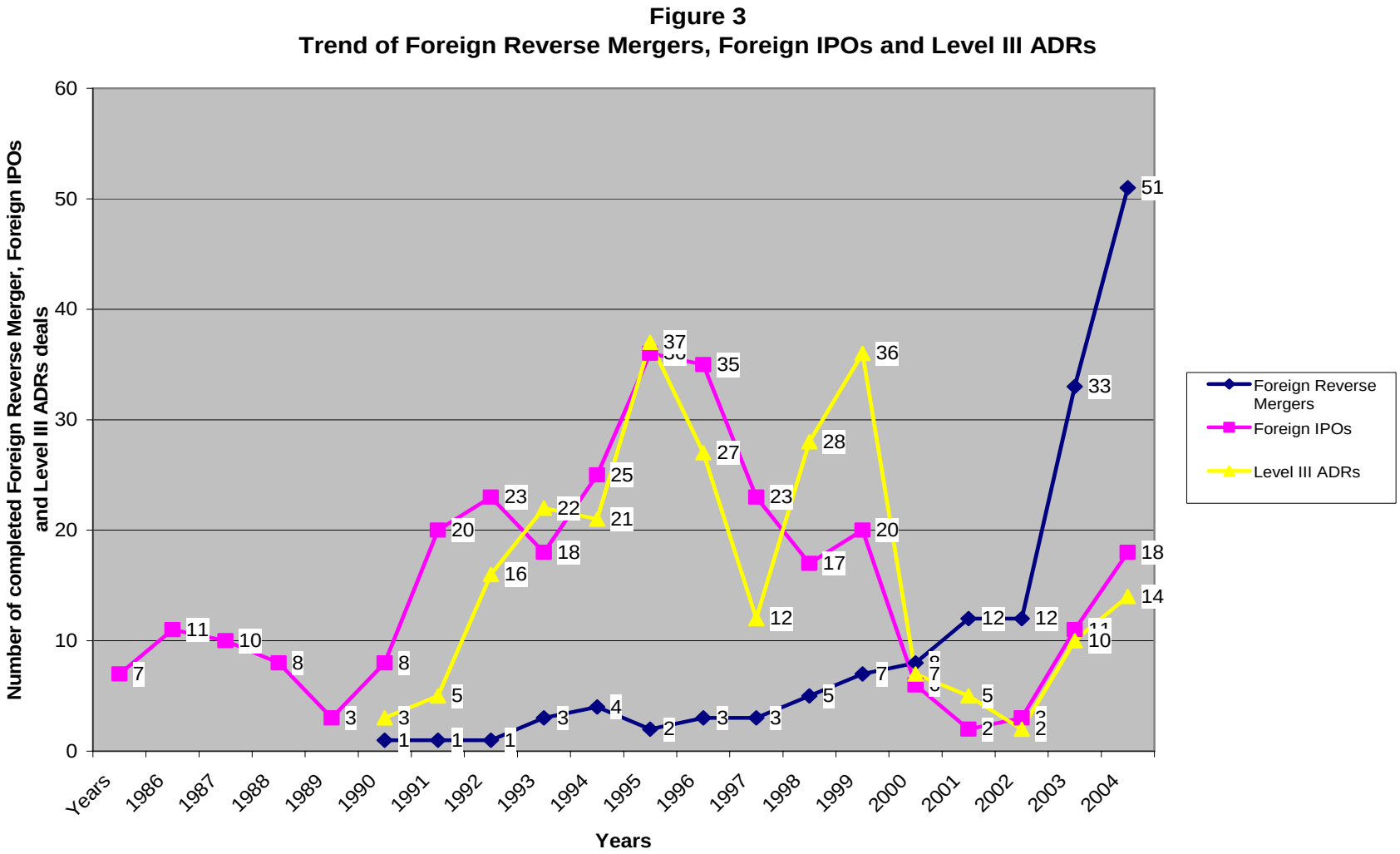

Figure 4: The Time-Series of Offer Size of Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs from 1986 to 2005

A time-series plot of the annual median size of foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs) over the period starting January 1986 and ending December 2005. The information on FIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database, on capital-raising (Level III) ADRs from Citibank's Capital Raising Events database while that for FRMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) database.

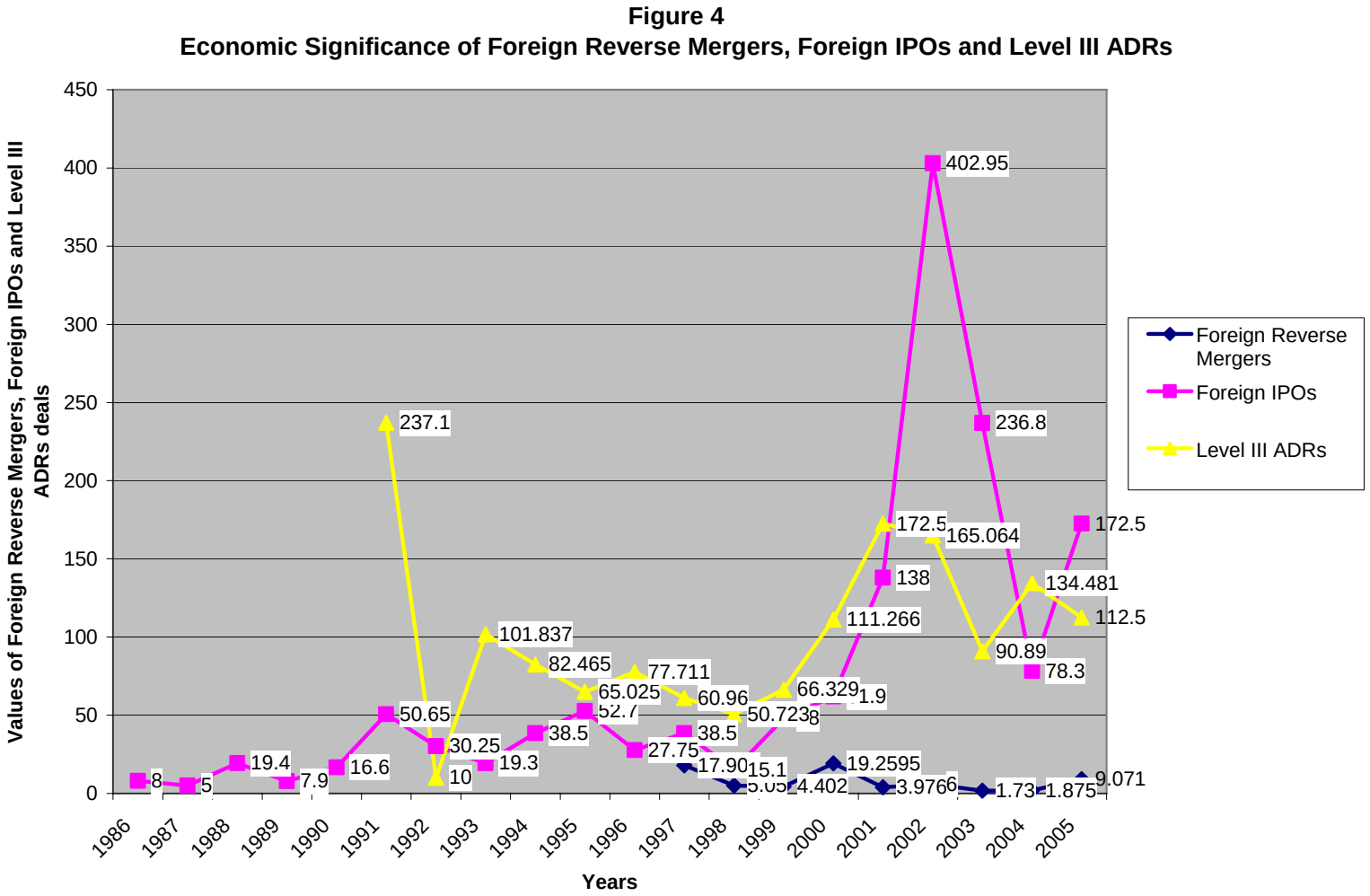

Figure 5: The Legal Origin Distribution of Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs
A distribution plot of the legal origins of foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs). The information on FIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database, on capital-raising (Level III) ADRs from Citibank's Capital Raising Events database while that for FRMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) database. For the mapping of the countries of all three datasets to the legal origins, LLSV [1998] was used.

Figure 5
Legal Origin Distribution of Foreign Reverse Mergers, Foreign IPOs and Level III ADRs

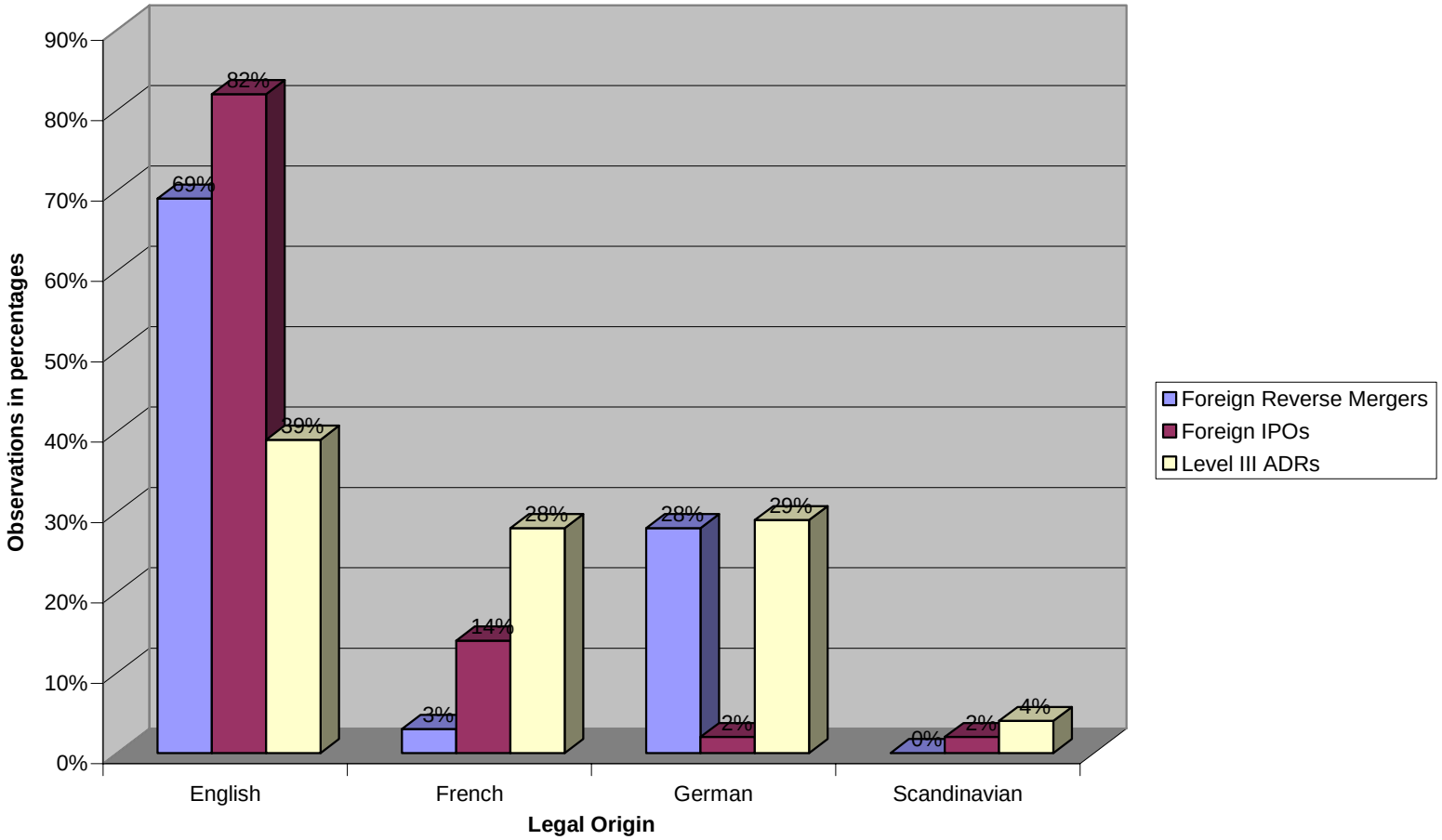

Figure 6: The Countries Distribution of Foreign Reverse Mergers, Foreign Initial Public Offerings and Capital-Raising ADRs
A distribution plot of the originating countries of foreign initial public offerings (FIPOs), capital-raising ADRs (CRADRs) and foreign reverse mergers (FRMs). The information on FIPOs is obtained from Securities Data Corporation's (SDC) Global Initial Offering database, on capital-raising (Level III) ADRs from Citibank Capital Raising Events database while that for FRMs is from SDC's Mergers and Acquisitions database and DealFlow Media's (DFM) database.

Figure 6
Countries Distribution for Foreign Reverse Mergers, Foreign IPOs and Level III ADRs