

Internet Appendix: The Creation and Evolution of Entrepreneurial Public Markets

Shai Bernstein, Abhishek Dev, and Josh Lerner¹⁴

December 2018

¹⁴ Stanford University and National Bureau of Economic Research; Private Capital Research Institute; Harvard University and NBER. Please see the main paper for acknowledgements and disclosures.

Table of Contents

Appendix A: Case Study: EASDAQ

Appendix B: Case Study: ChiNext

Figure A1: Geographic Location of IPOs in Sample.

Figure A2: Median Number of IPOs on New Exchanges.

Figure A3: Mean Number of IPOs on New Exchanges.

Figure A4: Fraction of IPO Activity and Proceeds Raised in All New Exchanges.

Figure A5: Fraction of IPO Activity and Proceeds Raised in All New Exchanges, Defining New Exchanges as Those Five Years Old or Less.

Table A1: The Sample of New Exchanges.

Table A2: Description of the Requirements for Companies to List on Exchanges.

Table A3: Construction of IPO Sample.

Table A4: Construction of Venture Capital Activity by Country and Year.

Table A5: Breakdown of Countries by Region.

Table A6: Legal Origins and the Introduction of Second-Tier Exchanges.

Table A7: Listing Characteristics in the First-Tier Exchanges after the Introduction of a New Second-Tier Exchange

Table A8: Legal Origins and the Performance of New Second-Tier Exchanges.

Table A9: Shareholder Protection and the Performance of New Second-Tier Exchanges for Domestic and Foreign Companies

Table A10: Innovation and the Performance of New Second-Tier Exchanges for Domestic and Foreign Companies

Table A11: Financial Development and the Performance of New Second-Tier Exchanges for Domestic and Foreign Companies

Appendix A: Case Study: EASDAQ¹⁵

1. What were the motivations for creating the exchange?

After the October 1987 decline in world equity prices, IPO activity in Europe dried up, as it did in the United States. But unlike the United States, which recovered with a “hot” IPO market beginning in 1991, in Europe there was no quick recovery. In 1992-93, there were 432 IPOs on the NASDAQ; on European second-tier markets (with 30% of the number of listed firms), there were only 31. In some countries, the decline in IPO activity was even more extreme: only five companies listed in Germany’s two second-tier stock markets in 1992-93, and none listed in Denmark’s between 1989 and 1993.

Trading volume in European markets for small-capitalization firms had also lagged. The ratio of total transaction volume to end-of-year market capitalization was 21% in European second-tier markets in 1992; for the NASDAQ, the corresponding ratio was 138%. The lack of new issues and diminishing trading in existing shares contributed a general decline of interest in these markets. A number of second-tier markets, such as the Dutch Parallelmarkt, closed; others suffered precipitous declines.

With the reduction of activity at these second-tier exchanges, small firms and their venture backers were left with few options. The most promising firms could list on the NASDAQ in the U.S. But for the vast majority of firms, the only option was staying private. The poor state of the IPO market had led to an inability by venture capitalists to exit these investments other than through acquisitions at often-unattractive valuations. The EVCA estimated that in mid-1994, European venture capitalists held 15,000 private companies in their portfolios.

2. What were the key design choices made in setting up the exchange?

The designers of EASDAQ were motivated by the failure of the Unlisted Securities Market (USM) in the United Kingdom. This exchange had been created in 1980 by the London Stock Exchange (LSE) as a home for small-capitalization stocks that could not meet the strict capitalization and profitability requirements for inclusion on its primary market, the “Official List.” At the close of 1989, the USM had 420 listed companies with a market capitalization of \$13.5 billion. But by May 1994, the number of companies listed on USM had fallen to 250, with a total capitalization of \$9 billion. (During the same time, the NASDAQ composite index had increased by 55%.) The number of IPOs on the USM fell from 103 in 1988 to 12 in 1992 and 1993 combined. In December 1992, the LSE announced its intention to phase out the USM by 1997.

To the British venture capital community and other small business advocates, the decline of the USM was attributable to a number of factors. Some were issues over which Exchange officials had little control, such as the persistent recession in Great Britain. But other factors were direct consequences of actions by LSE officials, such their willingness to list companies of dubious

¹⁵ This note is based on Josh Lerner, “The European Association of Securities Dealers: November 1994,” Harvard Business School Case 9-295-116, 1995, and Josh Lerner, “European Association of Securities Dealers,” Harvard Business School Teaching Note 5-298-158, 1998; and assorted interviews and press accounts.

quality (which had the effect of deterring many institutional investors) and their failure to promote the new exchange. Furthermore, the LSE had responded to the USM's problems not by heightening efforts to attract new firms to the exchange, but rather by facilitating small firms' inclusion on the main LSE exchange. (As in many other countries, the second-tier market was run by the organization responsible as well for the primary market, the LSE.) The number of years of operations required for firms on the Official List was reduced from five to three years; and the profitability and sales requirements for science-based research firms (primarily biotechnology companies) were relaxed.

Other problems could be attributed to the lack of specialized institutions focusing on serving smaller firms. This lack of dedicated institutions also may have explained the speed with which the British investment banks abandoned market making in, and research on, small companies. There was not a well-developed set of investment banks that made the bulk of their money working with smaller firms. In the United States, by contrast, a number of investment banks—e.g., Robertson, Stephens & Co., Hambrecht & Quist, and Alex. Brown & Sons—specialized in smaller firms. These institutions consequently had powerful incentives to ensure the vitality of the small-capitalization stock market, even during periods when investor interest was not strong.

The decision to close the USM led to protests by the venture capital community, which catalyzed the decision to champion EASDAQ. The key principles that emerged from the planning effort were:

- First, the European Venture Capital Association sought to create a pan-European market, rather than a national one. This market would (hopefully) achieve a larger scale, with more listed firms and greater trading volume. It was hoped that this choice would translate into lower transaction costs, and lead to yet greater liquidity. The international structure, however, introduced a variety of additional problems, as discussed below.
- Second, the EASDAQ founders foresaw and sought to manage the challenging relationships with more established exchanges in a more sophisticated manner than earlier designers of second-tier exchanges had done. Many earlier markets geared to small-capitalization stocks were actually established by the major stock exchanges. In many cases—as the experience of London's USM makes clear—the major exchanges were not committed to the success of these markets. For instance, the more successful firms on the smaller markets were encouraged to list on the main exchange, reducing the trading volume and attractiveness of the second-tier market. The EASDAQ market, like NASDAQ, was established as a completely independent entity. At the same time, they sought to forestall (or at least soften) outright competition from the major exchanges by enlisting their participation as equity investors in EASDAQ.
- Finally, the EASDAQ founders raised much of the financing for the exchange from investors with a real success in the success of the new exchange, the U.S. high-technology investment banks. This group had found it difficult to break into the underwriting of offerings on the various national exchanges in Europe. As a result, they had much to gain from the new exchange's success.

3. **What were the major challenges with the exchange's design?**

Before EASDAQ was formally established, however, there were numerous design issues to address. The first was ensuring that the market conformed to the appropriate government standards. While the European Commission (EC) had stipulated minimal standards for disclosure, insider trading, and other requirements, each country had the right to set a more stringent standard. For instance, the equity stake that led to an investor being considered an insider (and hence subject to reporting and trading restrictions) varied widely, between 3% in Great Britain to 10% in Germany and Italy. It was unclear whether the legislation of the nation in which the company, the shareholder, or the exchange was located would take priority. A partial solution to this problem to employ a structure akin to the depository rights that European companies often used to trade on the U.S. exchanges. These were to be fully convertible into shares on a one-to-one basis, but to allow the shareholders to avoid some—but not all—of the administrative difficulties associated with actual share ownership. These were to be called European Depository Rights (EDRs).

A related problem was posed by differences in tax policies across nations. European governments differed sharply in their tax treatment of securities transactions. For instance, many nations offered reduced capital gains tax rates for certain classes of firms. (In some cases, these preferential rates applied only to private firms; in other cases, to firms quoted on second-tier markets; in yet other cases, to firms that passed certain solvency tests.) Several nations had transactions taxes, and the treatment of dividends varied widely across nations. The taxation of depository rights in some countries was at a higher rate than other securities, while in other cases it was at lower rates. It was ambiguous which nation's tax rate would apply in many international transactions.

A second set of problems related to the appropriate design of the exchange. Even if compliance with all governmental regulations could be assured, the EASDAQ faced several choices regarding the appropriate rules and structure. The first related to reporting requirements for companies on the exchange. Europe did not have an accounting standard like the Generally Accepted Accounting Principles (GAAP) in the United States. If companies only complied with its own national accounting requirements, there would be widespread differences in how such items as R&D, depreciation, and inventory were treated across firms. A lack of common accounting standard could make it easier for substandard firms to be listed. They sought to avoid the experience of the American Stock Exchange, which had set up an Emerging Company Marketplace in 1992 to compete with NASDAQ for new issues. It failed to carefully scrutinize the initial firms that it listed. The questionable background of several of the initial firms listed generated a wealth of unfavorable publicity, and the new exchange proved unsuccessful in attracting a significant number of listings by growth firms.

A second issue related to the choice of currency. To be a true exchange, the founder felt that trades had to be denominated in a single currency. If pounds, francs, or some other national currency was chosen, it might be perceived as giving too much power to a particular country. But if the EC's currency basket, the European Currency Unit (ECU), was chosen, the liquidity of the market would be affected. For instance, only four dozen banks exchanged ECUs into other currencies. The cost of converting pounds-to-ECU-to-pounds at a British bank was three times the cost of going from pounds-to-francs-to-pounds. Related problems included the choice of a primary language and headquarters location for the EASDAQ.

Third, the settlement process was problematic. (A trade is settled when the seller has delivered the shares that have been sold, and had received the proceeds from the sale.) If there was not a rapid settlement of trades, the liquidity of the market could be impaired. In 1994, many European exchanges took weeks to clear cross-border trades, and there was little coordination of the settlement process between nations. This imposed a substantial cost on foreigners who traded in European markets. The EASDAQ hoped to introduce from the start an efficient international clearing system. At the same time, they acknowledged that this was an ambitious goal.

A final design issue was the nature of the market itself. NASDAQ assigned several market-makers to each stock, who actively took positions in the firms that they specialized in. This helped assure liquidity for these stocks. The LSE and many other European systems, as well as the New York and American Stock Exchanges, instead employed specialists, whose primary role was to match orders to buy and sell securities. In many cases, the specialists had inadequate incentives to devote much attention to the smaller firms that they were responsible for, since their primary compensation was a fee based on the volume of transactions that they handled. In contrast, NASDAQ market-makers tended to be the investment banks who had previously underwritten these firms' securities and whose analysts covered these stocks. Ideally, the EASDAQ system would handle both trading through market-makers and through order matching, in order to maximize the acceptance of the market throughout Europe.

Even if these problems could be overcome, and an optimal exchange designed, there remained the problem of implementation. There were several powerful institutional barriers to success. For instance, the LSE controlled a large fraction of international European equity trading through its SEAQ International system. Furthermore, many promising British firms that otherwise might list on the LSE might opt for EASDAQ. Consequently, LSE could view EASDAQ as a threat. Furthermore, the committee members, as experienced observers of the European scene, knew that there was a need to maintain cohesion among themselves. In past joint initiatives, as success appeared more probable, there was sometimes a tendency to fragment. Each group might begin neglecting the overall goal of achieving success, and instead push for their own ends.

4. What were the outcomes?

The EASDAQ market officially opened in September 1996. As planned, the key regulations and structures were modeled after that of NASDAQ. The first public offering, Dr. Solomon's Group (a British software concern), followed shortly thereafter in an IPO underwritten by Hambrecht and Quist. In one deviation from the original design, this and other securities were valued in a variety of national currencies, rather than in the pan-European monetary units.

The experience of EASDAQ in its first few years was rather mixed. A total of 25 firms were listed in the first two years, with a market capitalization of \$5.1 billion. But the exchange struggled to generate substantial trading volumes. Many of the firms are cross-listed on NASDAQ, where the bulk of the trading took place due to the lower transaction costs. Many of the firms that were not cross-listed had modest market capitalizations and are very thinly traded. A single firm (Immogenetics) accounted for the bulk of the EASDAQ volume.

Meanwhile, the EASDAQ faced intensive competition from new national markets. The French Nouveau Marche opened in early 1996, and as of the spring of 1998, had attracted 19 firms (almost all French) with a combined market capitalization of \$1.1 billion. The lightly regulated Alternative Investment Market in London had 240 firms with a market capitalization of \$8 billion, but a single British underwriter accounted for the bulk of the offerings. Meanwhile, competing efforts were launched in Amsterdam, Brussels, and Frankfurt exchanges. Many of these exchanges had lower listing requirements, which managed to attract many firms that EASDAQ was uninterested in. They also generated bad publicity when some of these firms turned out to be fraudulent, particularly in France and Germany. This publicity paradoxically also harmed EASDAQ's luster (because it raised questions about the validity of small-capitalization exchanges in general.)

A much more formidable potential competitor emerged in early 2000, when NASDAQ announced its intention to set up a European offshoot in 2001, backed by Softbank, News Corp, and Vivendi. In May 2000, LSE and Deutsche Börse announced their intention to merge and to support the NASDAQ effort.

In addition to the country-specific exchanges, the European financial institutions that benefited from the lack of a dynamic market also subtly opposed the exchange. One example may be Deutsche Bank (as well as other major German banks). Small German firms historically had few alternatives except to raise private financing through these banks. Not only did the banks dominate lending activity, but they played a key role in underwriting public equity issues for small firms: for instance, Deutsche Bank alone accounted for 69% of German IPOs in 1997. The new market might be a real threat to these banks' control over the financing choices of small European firms, as they naturally feared increased competition from U.S. institutions for the lucrative underwriting arrangements.

Ultimately, the exchange experienced a sharp decline in listings and trading in the wake of the dot.com crash of 2000-01. EASDAQ was purchased by NASDAQ in 2001 and became NASDAQ Europe. Operations were shut down soon thereafter, however, as a result of the continuing tech downturn.

Appendix B: Case Study: ChiNext¹⁶

1. What were the motivations for creating the exchange?

The evolution of what became the ChiNext exchange was gradual, and its rationales evolved over time. In the late 1990s, China was negotiating its way into the World Trade Organization, which stipulated a further opening of China's capital markets. The dot-com bubble was also evident in China as numerous domestic Internet firms were listed on the NASDAQ. In 1999, the State Council announced a policy to strengthen the country's innovation capabilities. Soon afterward, various parties, including the China Securities Regulatory Commission (CSRC), the Shanghai and Shenzhen (SZSE) bourses, academics, and practitioners, took up the issue of capital market liberalization.

The initial thought was to create a board specifically for "high-tech" companies. However, the designers realized that it would be difficult to define what "high-tech" meant. Finally, it was named the "Growth Enterprise Board" (GEB) to cater to companies that offered enough growth potential. As the GEB was about to launch in 2000, the dot-com bubble burst. The demand for listings dropped sharply. Exchange officials and regulators also realized that many of the pre-IPO companies were not entirely trustworthy. The investor community was calling for more stringent supervision over issues such as earnings manipulation, insider trading, and the proliferation of shareholder fraud. In light of these concerns, the decision was made to postpone the launch of the GEB.

Then, in a move that reflected the gradual pace of state-directed development, a new board emerged at the SZSE in 2004. In February, the State Council promulgated a policy to create a multi-tier capital market in China. On May 27, the Small and Medium Enterprise Board (SME Board) was established at the SZSE, under the so-called "Two Remain" and "Four Separate" principles. "Two Remain" meant that the existing securities laws and regulations and the IPO listing requirements governing the main board companies would remain unchanged for those listing on the SME Board. "Four Separate" indicated that the SME Board would have separate trading systems, supervisory mechanisms, stock coding, and price indexes.

Despite the "Four Separate" principle, the SME board was basically the same as the Main Board with the same set of listing requirements. Yet the SME board hosted mainly companies that were "smaller" in terms of revenues or assets or that operated in certain high-tech industries such as information technology or biotechnology, unlike the Main Board, where large, state-owned enterprises dominated.

In December 2008, right after the outbreak of the global financial crisis, China's State Council called for the establishment of "the Second Board at a good time." The CSRC then issued a document in March 2009 to lay down rules for the second board. Most of the proposed listing requirements were lower than on the Main Board. At the same time, various measures were taken

¹⁶ This profile is based on Josh Lerner and Keith Chi-Ho Wong, "Oriental Fortune Capital: Building a Better Stock Exchange," Harvard Business School Case 9-811-105, 2011, and assorted press accounts, as well as the ChiNext website.

to safeguard investors' interests and to attract companies with greater growth prospects than those that typically listed on the SME Market.

2. What were the key design choices made in setting up the exchange?

There were several areas where the new exchange made critical design decisions.

The first decision was where the board should be located. Both Shanghai and Shenzhen wanted the new exchange, but over-competition would result if both were granted second-tier exchanges. Most of the multi-tier capital markets overseas, such as the NYSE and the NASDAQ, or Tokyo and Osaka, were formed by market forces. Here, the government segmented the markets for each of the exchanges. Shanghai specialized in state-owned firms and blue-chip companies, following the route of the NYSE. Since its inception in 1990, the Shenzhen Stock Exchange (SZSE) had been smaller than its counterpart in Shanghai and targeted a different niche than the Shanghai and Hong Kong exchanges. The Shenzhen special economic zone where the SZSE was located was dominated by small- to medium-sized enterprises in sectors such as information technology, biotechnology, and pharmaceutical research, and SZSE became the main listing venue for these companies. This tradition, as well as the success of the SME Board, led to the selection of the SZSE to host ChiNext.

The SME Board had introduced a variety of governance protections that would be replicated in ChiNext. First, once a company was listed, a huge amount of money was often raised. The controlling shareholders might be tempted to appropriate the money for their private uses. To contain this problem, the SME Board created a separate bank account specifically for depositing all the money raised from an IPO. Second, the Chinese underwriting system was far from mature. While all new IPO issuers needed to have a sponsor to underwrite their stocks, the sponsor finished the job once the company was listed. In the SME Board, the sponsors were responsible for the ongoing monitoring of the performance of a newly listed company for an extended period of time. Lastly, SZSE tightened control of the disposal of shares by the majority shareholders. The SME Board introduced a lock-up period during which insiders were not allowed to sell their shares in the open market.

The major difference between the listing requirements for ChiNext on the one hand and the Main Board on the other was the "profit test." To qualify for listing on the Main and SME Boards, the issuer had to be profitable for the previous three years consecutively, while listing on ChiNext only required two years. Accumulated profits over the three-year period had to be at least RMB 30 million (US\$4.6 million) for the Main and SME Boards, but only RMB 10 million (US\$1.6 million) for ChiNext. A company could also list on ChiNext if it had been profitable only in the most recent year, with a minimum net profit of RMB 5 million (US\$0.76 million), provided that it attained no less than RMB 50 million (US\$7.6 million) in revenues and achieved more than 30% revenue growth over the last two years prior to the IPO.

The CSRC also tightened information disclosure standards for ChiNext. All prospectuses for ChiNext shares had to include a statement that disclosed the "high investment risks" involved, including operation risks, delisting risks, and the subsequent market risks. Additionally, SZSE established its own market risk warning system and set up a continuing investor education program

The ChiNext listing rules also stipulated measures to enhance market efficiency. A one-year “lock-up period” was imposed during which the directors, supervisors and senior management of a ChiNext-listed company could not dispose of their shares. At the expiry of the lock-up period, they could sell only 25% of their shares every 12 months. If they left the company, they were not allowed to trade shares within six months of their resignation. After the six months were up, they could sell half of their shares within the next 12 months, and all the remaining shares thereafter.

Sponsors of ChiNext-listed stocks had to agree to “continuous supervision and guidance” for three full fiscal years after the listing. The “supervision” period for the Main Board stock was only two years. During this period, the sponsor was required to compile a follow-up report within 15 days of the issuer’s release of annual and interim reports. The follow-up report consisted of the sponsor’s analysis and independent opinion on the issuer’s financial performance.

Delisting conditions on ChiNext were also stricter than on the Main Board. If a company recorded audited negative net assets for the most recent fiscal year, or the company’s auditor issued an adverse opinion or a disclaimer of opinion on the annual results, a delisting warning would be issued. If the company was unable to publish the annual or interim report two months after missing the statutory deadline, trading in its shares would be suspended. This happened after six months on the Main Board. To ensure adequate liquidity on ChiNext, a delisting warning would be issued to a company if the cumulative trading volume of its shares dropped below one million shares over 120 trading days.

Another key design feature was expediting the review process (at least on the part of exchange officials, though regulators were also a critical gating feature), in order to allow capital-hungry firms a chance to access funds more quickly. The creation of ChiNext, therefore, provided a timely exit for the domestic venture capital firms who previously had limited options to recoup their investments other than going to markets such as NASDAQ, Hong Kong, or London. The emergence of ChiNext also meant that local entrepreneurs did not need to deal with legal and regulatory hurdles overseas, as well as language, cultural, and distance factors that often complicated efforts to raise capital on foreign exchanges.

3. What were the major challenges with the exchange’s design?

The ChiNext encountered several issues that led to a reform of a number of its rules in its first years of operation, as well as to the discussion of other changes.

One of the problems common to ChiNext-listed companies was an “equity glut” from founders or top management. A lock-up period limited a company’s founding shareholders and top management from selling their shares for a year, but the rule could be circumvented if they resigned their positions. After resigning, they could not sell any shares within the next six months but were allowed to sell half of their shares in the twelve months after the IPO. As a result, more than 60 senior executives from 37 ChiNext-listed companies had resigned from their posts by October 2010, just one year after ChiNext was launched.

Shortly thereafter, the rules were changed so that officers leaving a company were prohibited from selling shares within eighteen months from their departure day. Meanwhile, limits on the controlling shareholders became even more stringent than they were at ChiNext's inception. Controlling shareholders had to promise that they would not transfer the companies' shares issued prior to the IPO within three years of the listing. They could, however, sell their shares one year after the listing, provided that the transaction was between a parent and a subsidiary and was approved by the SZSE.

Second, while the high price/earnings multiples on ChiNext led to favorable valuations for both the owners looking for extra funding and the early stage investors seeking a favorable exit, the sponsors faced difficulties determining the issuance prices. Among the first 36 listed companies, most share prices immediately jumped to twice as much as their initial offering price. Seeing share prices skyrocket on the opening trades often left the majority shareholders with a feeling that the sponsors had failed to maximize the potential proceeds. On the other hand, regulators were concerned about the excessive funds raised from the IPOs, fearing possible embezzlement by the majority shareholders. In response, the SZSE added more restrictive rules on companies' disposal of IPO proceeds. The exchange stipulated that a maximum of 20% of the proceeds could be used for repaying debts or as working capital. The use of more than RMB 50 million or 20% of the proceeds for these purposes would be subject to shareholders' approval.

These steps, however, did not succeed in dampening the volatility of this market. The ChiNext market—and Chinese growth companies more generally—mirrored the volatility of Chinese equity markets in somewhat exaggerated form. For instance, between June 2014 and June 2015, the ChiNext index increased three-fold, only to drop by 56% in the ensuing three months (see the graph of the ChiNext index at the end of the write-up).

This volatility stimulated discussion whether ChiNext should adjust its listing requirements. On the one hand, some internet companies were losing money or lacking an adequate operational history to get listed on ChiNext or other Chinese exchanges, so instead opted for NASDAQ or NYSE. But on the other, the concern was whether the lowering the standards would degrade the quality of the listed firms and the reputation of the exchange. As of mid-October 2018, the listing requirements remained very similar to those at the exchange's inception.

Another area of early concern was its mechanism for delisting underperforming stocks. Despite the provision for a delisting warning, there was no specific rule governing how exactly a stock would be delisted. As a result, there was a sense that companies on ChiNext would not be delisted, and as a result prices could diverge from fundamentals. Observers worried investor expectations that the government or the state would always bail out failed businesses, not necessarily with cash, but through "administrative procedures." In particular, local government officials often regarded these IPOs as one of their major achievements (which directly linked to their performance appraisals). Rather than having firms being delisted, they provided pressure to undertake restructurings. Moreover, there were few rights for minority shareholders once firms delisted, which could lead to these investors being wiped out and to demonstrations and social unrest. As a result, there was a real likelihood of extensive numbers of restructuring "zombie" companies. Moreover, the restructuring process had the potential to lead to insider trading and other activities.

Before formalizing the delisting mechanism, the listing requirements were tightened, not by changing the rules, but rather by more vigorous enforcement of the existing rules. In 2010, more than 60 IPO applications to the ChiNext board were rejected by the CSRC.

Measures that have been under consideration were either to delist underperformers directly or to demote them to the OTC market running in Beijing's Zhongguancun Science Park and available exclusively to institutional investors. It appears that this change has not been implemented as of late 2018. Another proposed rule change would be to require more thorough information disclosure: in particular, that ChiNext-listed companies be required to report not only all information to the exchange, but also on its own website or via other direct channels to investors.

4. What were the outcomes?

ChiNext's opening in October 2009 was at a propitious time: as China's economy recovered steadily in late 2009 and 2010 due in part to a RMB 4 trillion (US\$586 billion) economic stimulus program, China also started to lead the world in IPOs. In 2010, a total of 476 Chinese companies were listed across various exchanges worldwide, representing about 62% of all newly listed firms and 58% of the total funds raised in IPOs during the year.

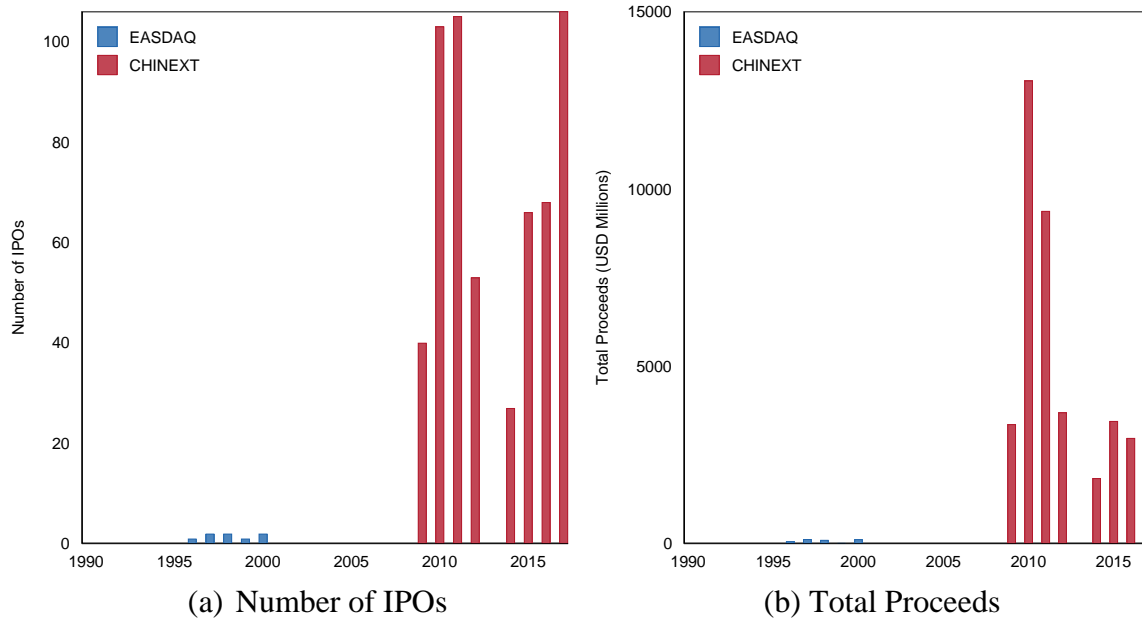
Among the first batch of 28 ChiNext companies, 23 were backed by venture capital firms. The initial 28 stocks closed on average 76.5% higher than their issue prices at the end of their first trading day. The average IPO Price/Earnings multiple (P/E) stood at 56.6 times at the end of the first trading day, while the overall average for the A-share markets in Shenzhen and Shanghai was 25.

By October 2010, the VCs who had taken their companies public on ChiNext had attained outstanding returns. One measure of success was the ratio of the capital gain achieved by the venture investor via the IPO (the valuation of the VC's stake at the IPO price minus the investment amount) to the amount invested. Newly listed ChiNext companies had an average multiple of 12.1, while the overall multiple of IPOs on China's two stock markets was 10.4, and Chinese companies that conducted their IPOs on NASDAQ only recorded an average multiple of 2.8.

At year-end 2010, 153 companies with a total market capitalization of RMB 736 billion (US\$ 111 billion) had listed on ChiNext, raising RMB 117 billion (US\$18 billion). Most of these were high-tech companies belonging to one of the seven "strategic emerging industries" designated by China's central government, such as clean energy, semiconductors, chemical engineering and pharmaceuticals, alternative materials, and new-generation IT services. During the first three-quarters of 2010, the profits for all ChiNext-listed companies grew an average of 26.9% on a year-on-year basis, and revenues increased by 36.5%.

As of October 2018, ChiNext had 734 listed firms with an aggregate market capitalization of 3.9 trillion RMB. (IPO activity is contrasted with that of EASDAQ below in the figure below). The daily trailing volume was 53 billion RMB (\$7.6 billion). Both the market capitalization and volume were down somewhat from the highs in the mid-2010s, reflecting the reduction in valuations of many of the growth firms: the average price-earnings ratio of ChiNext listed firms has fallen from

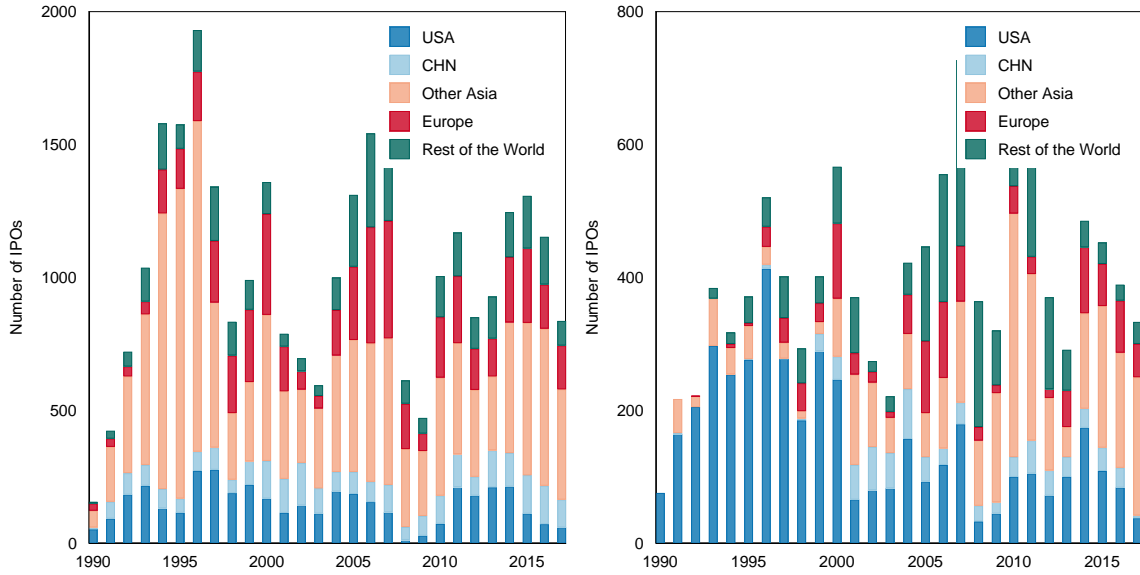
146 in June 2015 to 31 in mid-October 2018. The ChiNext price index compiled by Bloomberg is also illustrated below.



IPO activity in ChiNext and EASDAQ. This figure shows the number of IPOs and total proceeds raised in IPOs (in millions of 2010 U.S. dollars) in EASDAQ and ChiNext.

Figure A1: Geographic Location of IPOs in Sample.

This figure shows the total number of IPOs listed on all exchanges between 1990 and 2017. Panel A shows the distribution by region for IPOs in the first-tier exchanges. Panel B shows the distribution by region for IPOs in second-tier exchanges.



A. First-tier exchanges

B. Second-tier exchanges

Figure A2: Median Number of IPOs on New Exchanges.

This figure shows the median number of IPOs per active new first- and second-tier exchange in a given year.

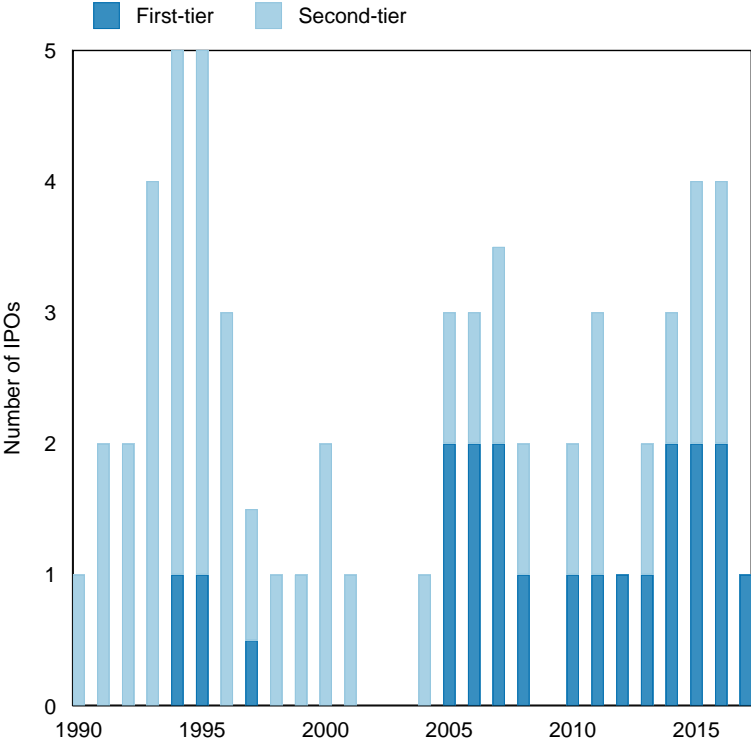


Figure A3: Mean Number of IPOs on New Exchanges.

This figure shows the mean number of IPOs per active new first- and second-tier exchange in a given year.

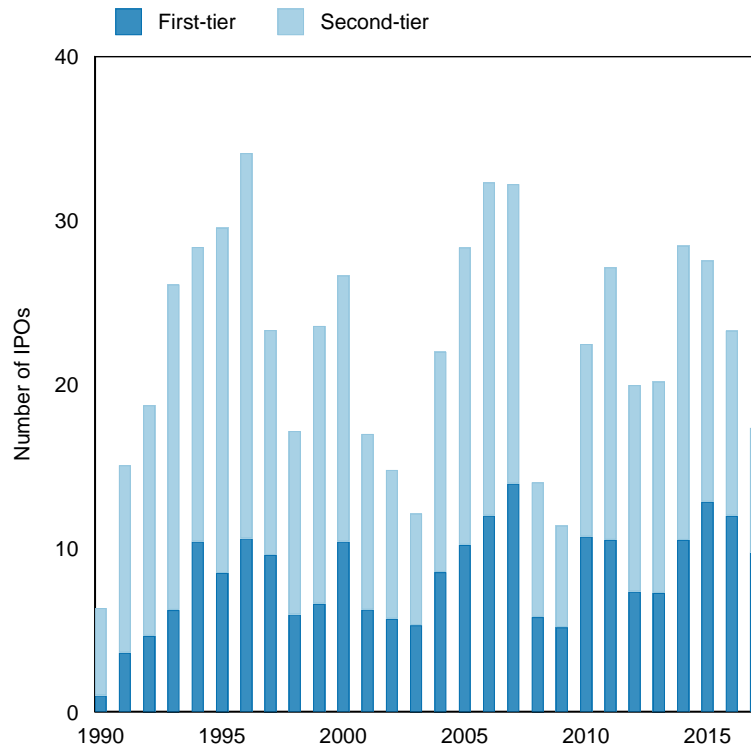


Figure A4: Fraction of IPO Activity and Proceeds Raised in All New Exchanges.

This figure shows the fraction of total IPOs and proceeds raised in a given year in all new exchanges created between 1990 and 2013. Panel A shows the fraction of total IPO activity in new exchanges for first and second-tier exchanges. Panel B shows the fraction of total proceeds raised in new first and second-tier exchanges.

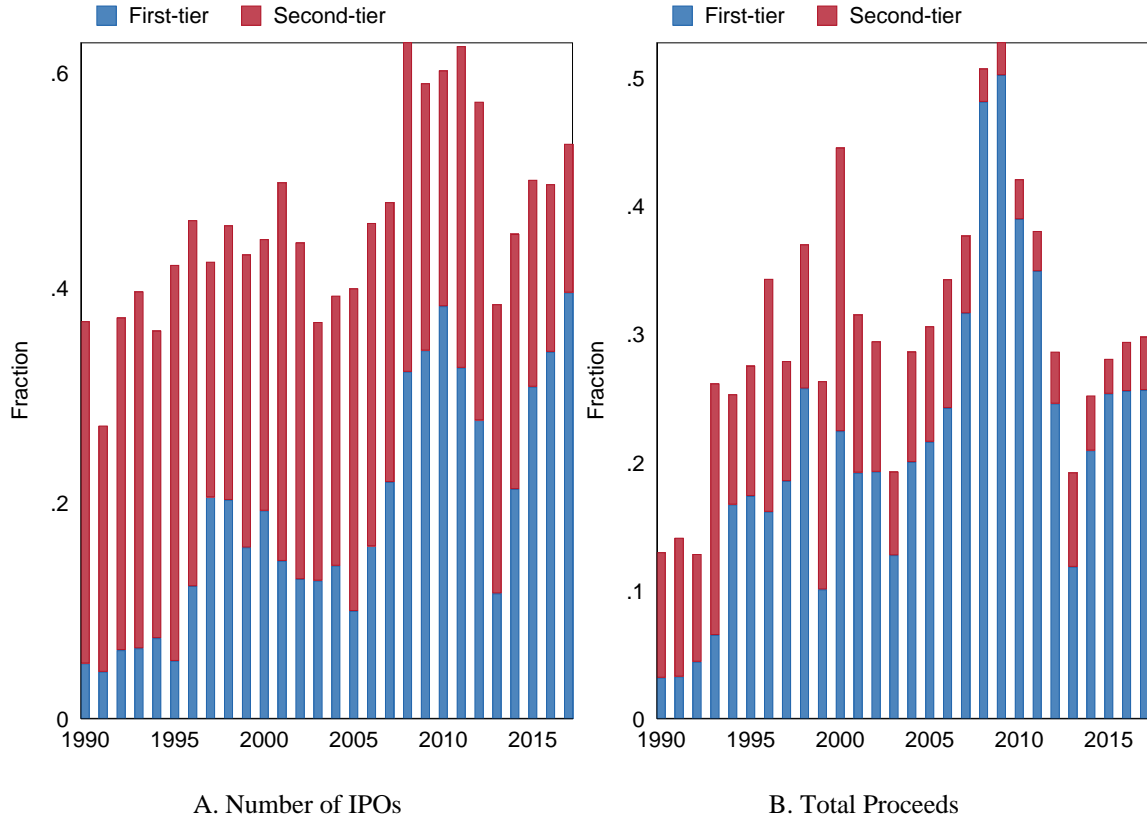


Figure A5: Fraction of IPO Activity and Proceeds Raised in All New Exchanges, Defining New Exchanges as Those Five Years Old or Less.

This figure shows the fraction of total IPOs and proceeds raised in a given year in all new exchanges, now defining new exchanges as those in their first five years of operation. Panel A shows the fraction of total IPO activity in new exchanges for first and second-tier exchanges. Panel B shows the fraction of total proceeds raised in new first and second-tier exchanges.

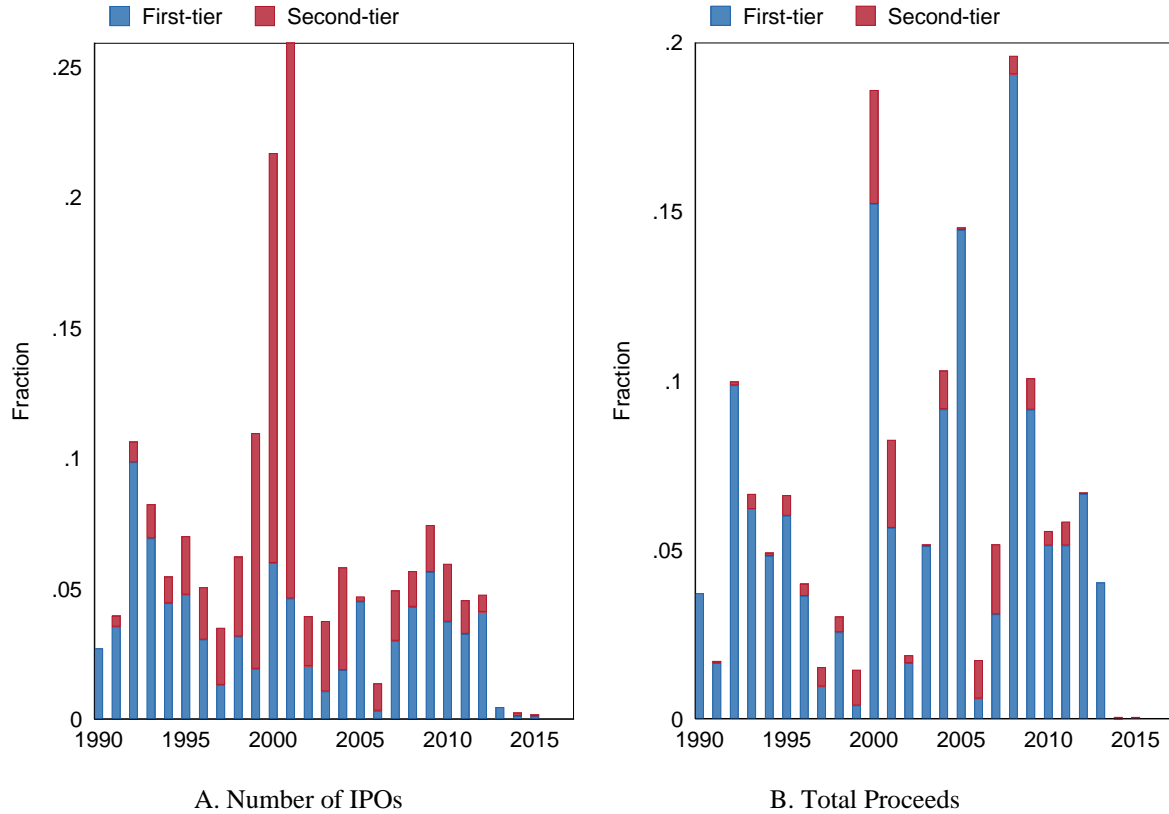


Table A1: The Sample of New Exchanges.

This table reports the country, name, entry year, exit year, and tier of the new exchanges in the sample created between 1990 and 2013. The table also reports the exchanges that were consolidated due to mergers and acquisitions and name changes.

Africa

Country	Exchange	Entry Year	Exit Year	Tier	Consolidated Exchanges
Algeria	Algiers Stock Exchange	1997	present	first	
Botswana	Botswana Venture Capital Market	2001	present	second	
Egypt	Nile Stock Exchange	2010	present	second	
Ivory Coast	Bourse des Valeurs Mobilieres	1998	present	first	
Libya	Libya Stock Exchange	2007	present	first	
Libya	Libyan Stock Market B Market	2007	present	second	
Malawi	Malawi	1996	present	first	
Morocco	Casablanca Development Market	1997	present	second	
Morocco	Casablanca Growth Market	1997	present	second	
Mozambique	Mozambique Stock Exchange	1998	present	first	
Namibia	Namibian Stock Exchange	1992	present	first	
Rwanda	Rwanda Stock Exchange	2011	present	first	
Tanzania	Dar es Salaam	1998	present	first	
Tanzania	Dar es Salaam Enterprise Growth Market	2013	present	second	
Uganda	Uganda Stock Exchange	1997	present	first	
Zambia	Lusaka Stock Exchange	1994	present	first	
Zimbabwe	Zimbabwe secondary market	1996	present	second	

Americas

Country	Exchange	Entry Year	Exit Year	Tier	Consolidated Exchanges
Barbados	Barbados Junior Market	1999	present	second	
Brazil	Brazil OTC	1994	present	second	
Brazil	Sociedade Operadora Mercado Ativos	1996	present	second	
Brazil	Novo Mercado Brazil	1998	present	second	
Canada	TSX Venture Exchange	1990	present	second	Winnipeg (1990-2000), Canadian Dealers OTC (1993-2000), Canadian Venture Exchange (1999-2001)
Canada	NEX Board	2001	present	second	
Canada	Canadian National Stock Exchange	2003	present	second	
Canada	Aequitas Neo Exchange	2015	present	first	
Ecuador	Bolsa de Valores de Guayaquil	1993	present	first	

Jamaica	Jamaica Stock Exchange Junior Market	2009	present	second
Panama	Bolsa de Valores de Panama, S.A.	1990	present	first
United States	Emerging Company Mktplace of AMEX	1992	1995	second
United States	NYSE Arca	2006	present	second
United States	BATS Global Markets	2007	present	first
United States	NYSE Alternext US LLC	2008	present	second

Asia

Country	Exchange	Entry Year	Exit Year	Tier	Consolidated Exchanges
Armenia	NASDAQ OMX Armenia Second List	1997	present	second	
Armenia	OMX Armenia	1997	present	first	
Azerbaijan	Baku Stock Exchange	2000	present	first	
Cambodia	Cambodia Stock Exchange	2011	present	first	
China	Shanghai Stock Exchange	1990	present	first	
China	Shenzhen Stock Exchange	1990	present	first	
China	Shenzhen Small & Medium Enterprise	2004	present	second	
China	Shenzhen ChiNext	2009	present	second	
Cyprus	Cyprus Stock Exchange	1996	present	first	
Cyprus	Cyprus Stock Exchange Emerging Companies Market	2000	present	second	
Georgia	Georgian Stock Exchange	1999	present	first	
Hong Kong	Hong Kong Growth Enterprise Market	1999	present	second	
India	The Delhi Stock Exchange Assoc Ltd	1990	2017	first	
India	The Hyderabad Stock Exchange Ltd	1990	2007	first	
India	The OTC Exchange of India	1990	2015	second	
India	Vadodara{Baroda}	1991	2015	first	
India	National Stock Exchange of India	1992	present	first	
India	Metropolitan Stock Exchange	2008	present	first	
Iraq	Iraq Stock Exchange	2004	present	first	
Japan	TSE JASDAQ	1991	present	second	
Japan	NASDAQ Japan Standard	1996	present	second	Nippon New Market Hercules-Standard (2000-2010)
Japan	Osaka New Market Section	1996	present	second	Jasdaq Growth (1996-), Jasdaq NEO (1996-), NASDAQ Japan Growth (2000-2002), Nippon New Market Hercules Growth (2000-2010)
Japan	Mothers	1999	present	second	
Japan	Nagoya Stock Exchange Centrex	1999	present	second	
Japan	Sapporo Ambitious	1999	present	second	
Japan	Fukuoka-Q Board	2000	present	second	
Japan	Tokyo Aim	2009	present	second	

Japan	Japan OTC	2013	present	second	
Jordan	Amman Stock Exchange	1999	present	first	
Jordan	Amman Bourse Second Market	1999	present	second	
Kazakhstan	Kazakhstan Stock Exchange	1993	present	first	
Korea	KOSDAQ	1996	present	second	
Korea	Korea Freeboard Market	2010	present	second	
Kyrgyzstan	KSE Kyrgyz Stock Exchange	1994	present	first	
Laos	Lao Securities Exchange	2011	present	first	
Lebanon	Beirut (Second Market)	2016	present	second	
Malaysia	Kuala Lumpur Second Board	1991	present	second	
Malaysia	ACE Market	1997	present	second	Mesdaq (1997-2009)
Maldives	Maldives S E	2008	present	first	
Mongolia	Mongolian Stock Exchange	1991	present	first	
Nepal	Nepal Stock Exchange	1994	present	first	
Palestine	Palestine Securities Exchange	1995	present	first	
Palestine	Palestine Securities Exchange Second Market	1995	present	second	
Qatar	Doha Securities Market {DSM}	1997	present	first	
Saudi Arabia	Saudi Arabian Stock Exchange	1994	present	first	Tadawul (2007-)
Singapore	Singapore Second Market	1990	1999	second	
Singapore	Singapore SESDAQ	1999	2008	second	
Singapore	Singapore Exchange	1999	present	first	
Singapore	Singapore Exchange Catalist Market	2008	present	second	
Syria	Damascus Securities Exchange	2003	present	first	
Syria	Damascus Growth Market	2009	present	second	
Taiwan	Taiwan OTC	1994	present	second	
Thailand	Thailand MAI	1998	present	second	
United Arab Emirates	Saadiyat Market	1996	1999	second	
United Arab Emirates	Abu Dhabi Securities Exchange	2000	present	first	
United Arab Emirates	Dubai Financial Market PJSC	2000	present	first	
United Arab Emirates	Dubai Stock Exchange	2000	present	first	
United Arab Emirates	NASDAQ Dubai Limited	2005	present	second	
Vietnam	Ho Chi Minh Stock Exchange	2000	present	first	
Vietnam	Hanoi Stock Exchange	2005	present	first	
Vietnam	Unlisted Public Company Market	2009	present	second	

Europe

Country	Exchange	Entry Year	Exit Year	Tier	Consolidated Exchanges
Belarus	Belarusian Currency and Stock Exchange	1998	present	first	
Belgium	Euro Assoc of Sec Dealers Auto Quot	1996	present	second	
Belgium	Alternext Brussels	2005	present	second	
Bulgaria	Bulgaria Stock Exchange	1991	present	first	
Czech Republic	The Stock Exchange Prague Co. Ltd.	1993	present	first	
Denmark	Copenhagen Share Market II	1990	2005	second	
Denmark	GXG Markets	1998	2015	second	
Denmark	First North Copenhagen	2006	present	second	
Estonia	OMX Nordic Exchange Tallinn	1996	present	first	
Estonia	First North Tallin	2007	present	second	
Finland	Finnish First North	2007	present	second	
France	Paris Reglement Mensuel	1991	1998	first	
France	Euronext Paris Premier Marche	1996	2005	first	Paris Premier Marche (1996-2000)
France	Euronext Paris Marche Libre	1996	2000	second	
France	Euronext Paris Nouveau Marche	1996	2000	second	
France	Paris OTC	1996	2000	second	
France	Paris Second Market	1996	2000	second	
France	Alternext Paris	2005	present	second	
France	Euronext Paris Second Marche	2005	present	second	
Germany	Frankfurt Neuer Market	1996	2003	second	
Germany	XETRA Trading Platform	1997	present	first	
Germany	German NM	1997	2002	second	
Germany	Smax	1999	2003	second	
Greece	Athens Alt	2007	present	second	
Iceland	First North Iceland	2006	present	second	
Ireland	Irish Enterprise Securities Market	1995	present	second	
Italy	Milan Star	1999	present	second	Milan Expandi (2002-2009)
Italy	Nuovo Mercato	1999	2008	second	Italian Second Market (1993-2003), Nuovo Mercato (1999-2008)
Italy	Mercato Alternativo del Capitale	2012	present	second	
Latvia	OMX Nordic Exchange Riga	1993	present	first	Riga (1993-2014)
Lithuania	OMX Nordic Exchange Vilnius	1993	present	first	Vilnius (1993-2003)
Malta	Malta Stock Exchange	1992	present	first	
Norway	Oslo-OTC	1999	present	second	
Norway	Oslo Axess	2007	present	second	
Poland	Warsaw Stock Exchange	1991	present	first	

Poland	Warsaw Parallel Market	1991	present	second	
Poland	Warsaw Unregulated Market	1991	present	second	
Poland	New York OTC	2007	present	second	
Portugal	Euronext Lisbon Second Market	1990	present	second	Lisbon Second Market (1990-2002)
Portugal	Alternext	2005	present	second	
Russia	Moscow Exchange MICEX-RTS	1992	present	first	Russian Trading System (1995-2011), Moscow Interbank Currency Exchange (1992-2011)
Slovakia	Bratislava Stock Exchange	1993	present	first	
Slovakia	Bratislava Junior Market	1993	present	second	
Spain	Madrid Second Market	1997	present	second	
Spain	Mercado Alternativo Bursatil	2008	present	second	
Sweden	NASDAQ OMX Stockholm OTC Market	1996	present	second	Stockholm OTC-List (1996-1998), OMX Stockholm OTC (1998-2008)
Sweden	Aktietorget	1997	present	second	
Sweden	First North Stockholm	1997	present	second	
Switzerland	Switzerland New market	1999	2002	second	
Ukraine	PFTS Stock Exchange	1996	present	first	
Ukraine	Kiev Stock Exchange	2008	present	first	
United Kingdom	Seaq International	1991	present	second	
United Kingdom	London Stock Exchange AIM Market	1995	present	second	
United Kingdom	International Stock Exchange	1998	present	first	Channel (1998-2013)
United Kingdom	London techMARK	1999	present	second	
United Kingdom	Stock Exchange Automated Quotations	1999	present	second	
United Kingdom	Chi-X Europe	2007	present	first	
United Kingdom	Specialist Fund Market	2010	present	second	

Oceania

Country	Exchange	Entry Year	Exit Year	Tier	Consolidated Exchanges
Australia	SIM VSE	2010	present	second	
New Zealand	New Zealand Alternative Market	2007	present	second	
Papua New Guinea	Port Moresby (Papua New Guinea)	1999	present	first	

Table A2: Description of the Requirements for Companies to List on Exchanges.

Listing requirement	Units	Description
Number of listing requirements	Count	An index of 16 listing requirement described below. Each requirement was weighted equally and the index ranges from 0 (not having any requirement across all the categories) to 16 (having an explicit requirement for all categories). If a requirement is not specified, we assumed that the exchange did not have that requirement and assign it a value of zero.
Market capitalization	USD 2010 millions	The minimum global market capitalization before they can list in the exchange. If an exchange had no explicit market capitalization requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Paid-up capital	USD 2010 Millions	The minimum amount of money a company must have received from shareholders in exchange for shares of stock to list on the exchange. If an exchange had no explicit paid-up capital requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Free float	Percent	The minimum percentage of the company's total common shares outstanding that has to be freely floated on the stock exchange to list on the exchange. If an exchange had no explicit such requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Shareholders' equity	USD 2010 Millions	The minimum net worth of the company to list on the exchange. If an exchange had no explicit minimum shareholder's equity requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Number of shareholders	Count	The minimum number of shareholders that the company must have before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Profitable years	No. of years	The minimum number of years that the company should be profitable before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Years in Operation	No. of years	The minimum number of years that the company should be operational for before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Value of shares traded	USD 2010 Millions	The minimum value of shares that must be traded after listing on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Listing Fee	USD 2010	The annual listing fee charged by exchange to list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.

Asset size	USD 2010 Millions	The minimum value of total assets that a company must have before they can list on an exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Annual income	USD 2010 Millions	The minimum annual income that the company must be earning in the latest fiscal year before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Annual profit	USD 2010 Millions	The minimum annual profit that the company must be earning in the latest fiscal year before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Owner's capital	USD 2010 Millions	The minimum value of total shares owned by the owner's promoters, company officers, or controlling-interest investors before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Board members	Count	The minimum number of board members that a company must have before they can list on the exchange. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Publicly traded shares outstanding elsewhere	USD 2010 Millions	The minimum market value of publicly traded shares outstanding in a different exchange before they can list on the exchange. This requirement is generally applicable when companies cross-list the shares. If an exchange had no such explicit requirement, we assumed that the exchange did not have this requirement and assign it a value of zero.
Disclosure	Count	Encodes whether the exchange had a requirement to disclose financial statements.

Table A3: Construction of IPO Sample.

This table describes the specifics of the construction of the sample of IPOs used in the analysis.

Steps	Sample	SDC		Bloomberg		Capital IQ	
		Dropped	Remaining	Dropped	Remaining	Dropped	Remaining
	Offerings (1960-2018)		255,312	-	54,928		30,485
1	Secondary Offerings	187,249	68,063	11,098	43,830	-	30,485
2	IPOs that were withdrawn/rejected/postponed /pending/rumored/mandated/ unknown	-	68,063	6,871	36,959	-	30,485
3	ADRs	1,008	67,055	506	36,453	1,400	29,085
4	Offers with warrants	805	66,250	-	36,453	4,841	24,244
5	Unit offerings	1,720	64,530	2,620	33,833	-	24,244
6	Closed-end (including REIT)	1,494	63,036	1,857	31,976	4,522	19,722
7	Limited partnership	284	62,752	-	31,976	-	19,722
8	Special acquisition	10	62,742	-	31,976	-	19,722
9	Spin offs	6,763	55,979	-	31,976	-	19,722
10	ETFs	-	55,979	98	31,878	2,200	17,522
11	Investment trusts	5,396	50,583	13	31,865	1,759	15,763
12	Private placements	42	50,541	-	31,865	-	15,763
13	Financial firms	7,922	42,619	4,912	26,953	2,407	13,356
14	Non-common shares	1,187	41,432	560	26,393	-	13,356
15	Missing ISIN/Cusip/Issuer	10	41,422	25	26,368	-	13,356
16	Dropping IPOs from same firm after 30 days from initial IPO	-	41,422	-	26,368	-	13,356
17	Consolidating domestic tranche proceeds when the date is within 30 days	7,461	33,961	230	26,138	-	13,356
18	Missing or zero Proceeds	346	33,615	6,523	19,615	-	13,356
	Sample for Merging		33,615		19,615		13,356

Merging Databases	Sample
<i>Matching Bloomberg & Capital IQ data</i>	
Capital IQ sample	13,356
Bloomberg sample	19,615
Unmatched Capital IQ	2,700
Unmatched Bloomberg	8,959
Matched	10,656
Bloomberg + Capital IQ sample	22,315
<i>Matching Bloomberg + Capital IQ & SDC</i>	
Bloomberg + Capital IQ	22,315
SDC Sample	33,615
Unmatched Bloomberg + Capital IQ	10,015
Unmatched SDC	20,965
Matched	12,650
Bloomberg + Capital IQ + SDC	43,630
Bloomberg + Capital IQ + SDC (1990-2017)	40,123

Table A4: Construction of Venture Capital Activity by Nation and Year.

This table describes the specifics of the construction of the sample of venture capital activity from Thomson Reuters used in the analysis, which is used in conjunction with the data from national and regional venture capital associations.

	Deals	Deal Investors	
		Dropped	Remaining
Starting Sample	315,310		679,740
Missing investment	67,338	97,610	582,130
Zero investment	99	227	581,903
Buyouts	90,072	132,666	449,237
Fund of Funds	4,424	4,882	444,355
Generalist Private Equity	27,802	32,479	411,876
Mezzanine	2,016	2,144	409,732
Other Investor (Non-Private Equity)	502	632	409,100
Other Private Equity	1,129	1,177	407,923
Real Estate	1,788	1,850	406,073
Final Sample (VC)	156,165		406,073

Table A5: Breakdown of Countries by Region.

This table summarizes the assignment of countries to regions for the 113 countries with at least one active exchange between 1990 and 2013.

Country	ISO3C	Continent	Region
United States	USA	Americas	USA
China	CHN	Asia	China
Hong Kong	HKG	Asia	China
Taiwan	TWN	Asia	China
Armenia	ARM	Asia	Other Asia
Azerbaijan	AZE	Asia	Other Asia
Bahrain	BHR	Asia	Other Asia
Bangladesh	BGD	Asia	Other Asia
Cambodia	KHM	Asia	Other Asia
Cyprus	CYP	Asia	Other Asia
India	IND	Asia	Other Asia
Indonesia	IDN	Asia	Other Asia
Iran	IRN	Asia	Other Asia
Iraq	IRQ	Asia	Other Asia
Israel	ISR	Asia	Other Asia
Japan	JPN	Asia	Other Asia
Jordan	JOR	Asia	Other Asia
Kazakhstan	KAZ	Asia	Other Asia
Kuwait	KWT	Asia	Other Asia
Kyrgyzstan	KGZ	Asia	Other Asia
Laos	LAO	Asia	Other Asia
Lebanon	LBN	Asia	Other Asia
Malaysia	MYS	Asia	Other Asia
Mongolia	MNG	Asia	Other Asia
Nepal	NPL	Asia	Other Asia
Oman	OMN	Asia	Other Asia
Pakistan	PAK	Asia	Other Asia
Philippines	PHL	Asia	Other Asia
Qatar	QAT	Asia	Other Asia
Saudi Arabia	SAU	Asia	Other Asia
Singapore	SGP	Asia	Other Asia
South Korea	KOR	Asia	Other Asia
Sri Lanka	LKA	Asia	Other Asia
Syria	SYR	Asia	Other Asia
Thailand	THA	Asia	Other Asia
United Arab Emirates	ARE	Asia	Other Asia
Vietnam	VNM	Asia	Other Asia

West Bank and Gaza	PSE	Asia	Other Asia
Austria	AUT	Europe	Europe
Belarus	BLR	Europe	Europe
Belgium	BEL	Europe	Europe
Bulgaria	BGR	Europe	Europe
Croatia	HRV	Europe	Europe
Czech Republic	CZE	Europe	Europe
Denmark	DNK	Europe	Europe
Estonia	EST	Europe	Europe
Finland	FIN	Europe	Europe
France	FRA	Europe	Europe
Germany	DEU	Europe	Europe
Greece	GRC	Europe	Europe
Hungary	HUN	Europe	Europe
Iceland	ISL	Europe	Europe
Ireland	IRL	Europe	Europe
Italy	ITA	Europe	Europe
Latvia	LVA	Europe	Europe
Lithuania	LTU	Europe	Europe
Luxembourg	LUX	Europe	Europe
Malta	MLT	Europe	Europe
Netherlands	NLD	Europe	Europe
Norway	NOR	Europe	Europe
Poland	POL	Europe	Europe
Portugal	PRT	Europe	Europe
Romania	ROU	Europe	Europe
Russia	RUS	Europe	Europe
Serbia	SRB	Europe	Europe
Slovakia	SVK	Europe	Europe
Slovenia	SVN	Europe	Europe
Spain	ESP	Europe	Europe
Sweden	SWE	Europe	Europe
Switzerland	CHE	Europe	Europe
Ukraine	UKR	Europe	Europe
United Kingdom	GBR	Europe	Europe
Algeria	DZA	Africa	Rest of the World
Botswana	BWA	Africa	Rest of the World
Egypt	EGY	Africa	Rest of the World
Ghana	GHA	Africa	Rest of the World
Ivory Coast	CIV	Africa	Rest of the World
Kenya	KEN	Africa	Rest of the World
Libya	LBY	Africa	Rest of the World
Malawi	MWI	Africa	Rest of the World

Mauritius	MUS	Africa	Rest of the World
Morocco	MAR	Africa	Rest of the World
Namibia	NAM	Africa	Rest of the World
Nigeria	NGA	Africa	Rest of the World
Rwanda	RWA	Africa	Rest of the World
South Africa	ZAF	Africa	Rest of the World
Tanzania	TZA	Africa	Rest of the World
Tunisia	TUN	Africa	Rest of the World
Uganda	UGA	Africa	Rest of the World
Zambia	ZMB	Africa	Rest of the World
Zimbabwe	ZWE	Africa	Rest of the World
Bermuda	BMU	Americas	Rest of the World
Argentina	ARG	Americas	Rest of the World
Barbados	BRB	Americas	Rest of the World
Bolivia	BOL	Americas	Rest of the World
Brazil	BRA	Americas	Rest of the World
Canada	CAN	Americas	Rest of the World
Chile	CHL	Americas	Rest of the World
Colombia	COL	Americas	Rest of the World
Costa Rica	CRI	Americas	Rest of the World
Dominican Republic	DOM	Americas	Rest of the World
Ecuador	ECU	Americas	Rest of the World
Guatemala	GTM	Americas	Rest of the World
Jamaica	JAM	Americas	Rest of the World
Mexico	MEX	Americas	Rest of the World
Panama	PAN	Americas	Rest of the World
Peru	PER	Americas	Rest of the World
Trinidad and Tobago	TTO	Americas	Rest of the World
Uruguay	URY	Americas	Rest of the World
Venezuela	VEN	Americas	Rest of the World
Australia	AUS	Oceania	Rest of the World
New Zealand	NZL	Oceania	Rest of the World
Papua New Guinea	PNG	Oceania	Rest of the World

Table A6: Legal Origins and the Introduction of Second-Tier Exchanges.

This table explores the association between legal origins and the probability of introducing a new second-tier stock exchange. The sample is a country-level cross-section. The dependent variable *Second-Tier* equals one if a country introduced a new second-tier stock exchange between 1990 and 2013. The *Common Law* and *Civil Law* dummies equal one if the country's legal origin is in one of these two categories according to LLSV (1999). The variables *Log(GDP)* and *Log(Population)* are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in 1990. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions with robust standard errors. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

	(1)	(2)	(3)	(4)
	Second-tier	Second-tier	Second-tier	Second-tier
Common Law	-0.028 (0.119)	0.024 (0.115)	0.059 (0.138)	-0.022 (0.140)
Civil Law	-0.183 (0.112)	-0.184* (0.105)	-0.143 (0.129)	-0.138 (0.122)
Log(Population)		-0.058 (0.047)	-0.059 (0.055)	0.043 (0.074)
Log(GDP)		0.143*** (0.036)	0.144*** (0.045)	0.069 (0.063)
Region FE	No	No	Yes	Yes
Country Income FE	No	No	No	Yes
Observations	113	113	113	113
R-squared	0.028	0.165	0.178	0.237

Table A7: Listing Characteristics in the First-Tier Exchanges after the Introduction of a New Second-Tier Exchange

This table explores the change in characteristics of companies listing in first-tier exchange after the introduction of a new second-tier exchange in the country. The sample includes pairwise observations of all new second-tier exchanges with each first-tier exchange operating in the same country in the year of the introduction of the new second-tier exchange. The independent variables in all three panels are the mean characteristics of companies at the time of the IPO in the first-tier exchanges in the first five years after the introduction of the second-tier exchange. The characteristics are the mean age of companies at the time of IPO in Panel A, total assets of the companies in Panel B, and the ratio of EBITDA to assets of companies in Panel C. We require that there be at least one non-missing observation of each characteristic in the first-tier exchange before the introduction of the second-tier exchange and at least one after for the first-tier exchange to be in the sample. In the panels below, *Log(Age) - First-tier*, *Log(Assets) - First-tier* and *EBITDA/Assets First-tier* are the log of the mean age at the time of the IPO (years), log of total assets (in millions of 2010 U.S. dollars) at the time of the IPO and the ratio of EBITDA to Assets at the time of the IPO, respectively, for companies listing in first-tier exchange in the five years after the introduction of a new second-tier exchange. *Log # IPOs - Second-tier* and *Log Proceeds - Second-tier* are the logs of the total number of IPOs and the total proceeds (again in millions of 2010 U.S. dollars) raised across all IPOs in a second-tier exchange in its first five years of operation. The dependent variables *Log(Age) - First-tier - pre-period*, *Log(Assets) - First-tier - pre-period* and *EBITDA/Assets - First-tier - pre-period* are the log of the mean age at the time of the IPO (again in years), log of total assets (again in millions of 2010 U.S. dollars) at the time of the IPO and the ratio of EBITDA to Assets at the time of the IPO, respectively, for companies listing in first-tier exchange in the five years before the introduction of a new second-tier exchange. *High Shareholder Protection* equals one if the country's protecting minority investor index is above the median among all countries in the sample. The protecting minority investor index ranges from a score of 0 to 100, representing the lowest performing economy and highest score respectively. The variables *Log(GDP)* and *Log(Population)* are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in a given year. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions. Standard errors are clustered at the exchange level. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

Panel A: Age at the Time of the IPO

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log(Age)	Log(Age)	Log(Age)	Log(Age)	Log(Age)	Log(Age)	Log(Age)	Log(Age)
	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier
Log # IPOs - Second-tier	0.0446	0.0172			0.0923	0.0923		
	(0.0643)	(0.0724)			(0.115)	(0.153)		
Log Proceeds - Second-tier			0.0206	0.0117			0.0426	0.0542
			(0.0367)	(0.0433)			(0.0504)	(0.0697)
High Shareholder Protection					0.321	0.396	0.375	0.501
					(0.383)	(0.587)	(0.364)	(0.580)
High Shareholder Protection X Log # IPOs - Second-tier					-0.0861	-0.104		
					(0.116)	(0.155)		
High Shareholder Protection X Log Proceeds - Second-tier							-0.0515	-0.0791
							(0.0657)	(0.0840)
Log(Age) - First-tier - pre-period	0.368**	0.253	0.360*	0.254	0.371*	0.260	0.371*	0.246
	(0.179)	(0.242)	(0.178)	(0.231)	(0.203)	(0.280)	(0.199)	(0.276)
Log GDP	-0.233	-0.191	-0.257	-0.208	-0.354	-0.347	-0.397	-0.413
	(0.235)	(0.372)	(0.236)	(0.366)	(0.317)	(0.480)	(0.328)	(0.508)
Log Population	0.184	0.226	0.213	0.243	0.351	0.432	0.409	0.524
	(0.250)	(0.383)	(0.242)	(0.369)	(0.361)	(0.534)	(0.370)	(0.568)
Entry Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Income Group FE	N	Y	N	Y	N	Y	N	Y
Region FE	N	Y	N	Y	N	Y	N	Y
Observations	47	47	47	47	47	47	47	47
R-squared	0.591	0.622	0.590	0.623	0.609	0.640	0.610	0.647

Panel B: Total Assets

	(1) Log (Assets) First-tier	(2) Log (Assets) First-tier	(3) Log (Assets) First-tier	(4) Log (Assets) First-tier	(5) Log (Assets) First-tier	(6) Log (Assets) First-tier	(7) Log (Assets) First-tier	(8) Log (Assets) First-tier
Log # IPOs - Second-tier	0.0455 (0.380)	0.0897 (0.523)			0.204 (0.406)	0.352 (0.477)		
Log Proceeds - Second-tier			0.0646 (0.139)	0.129 (0.193)			0.131 (0.168)	0.250 (0.191)
High Shareholder Protection					1.291 (1.520)	2.081 (2.314)	1.273 (1.297)	2.225 (2.314)
High Shareholder Protection X Log # IPOs - Second-tier					-0.269 (0.657)	-0.421 (0.800)		
High Shareholder Protection X Log Proceeds - Second-tier							-0.125 (0.300)	-0.263 (0.409)
Log(Assets) - First-tier - pre-period	1.089*** (0.263)	1.141*** (0.342)	1.063*** (0.258)	1.131*** (0.332)	1.157*** (0.298)	1.144*** (0.397)	1.138*** (0.306)	1.172*** (0.379)
Log GDP	-1.158* (0.675)	-0.934 (0.989)	-1.209* (0.617)	-1.111 (0.959)	-1.714 (1.039)	-1.814 (1.422)	-1.722* (0.849)	-1.996 (1.389)
Log Population	1.123 (0.809)	0.870 (1.110)	1.146 (0.691)	1.000 (0.981)	1.776 (1.235)	1.964 (1.752)	1.760* (0.984)	2.133 (1.712)
Entry Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Income Group FE	N	Y	N	Y	N	Y	N	Y
Region FE	N	Y	N	Y	N	Y	N	Y
Observations	44	44	44	44	44	44	44	44
R-squared	0.691	0.707	0.695	0.719	0.708	0.732	0.712	0.746

Panel C: EBITDA/Assets

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	EBITDA	EBITDA	EBITDA	EBITDA	EBITDA	EBITDA	EBITDA	EBITDA
	/ Assets	/ Assets	/ Assets	/ Assets	/ Assets	/ Assets	/ Assets	/ Assets
	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier	First-tier
Log # IPOs - Second-tier	-0.00428 (0.00779)	-0.0119 (0.00847)			-0.0402 (0.0251)	-0.0342 (0.0283)		
Log Proceeds - Second-tier			-0.00125 (0.00497)	-0.00719 (0.00536)			-0.0156 (0.00950)	-0.0142 (0.0135)
High Shareholder Protection					-0.138 (0.0943)	-0.0798 (0.104)	-0.137 (0.0888)	-0.0699 (0.114)
High Shareholder Protection X Log # IPOs - Second-tier					0.0507 (0.0315)	0.0333 (0.0378)		
High Shareholder Protection X Log Proceeds - Second-tier							0.0242* (0.0135)	0.0136 (0.0196)
EBITDA/Assets - First-tier - pre-period	1.115*** (0.292)	1.070** (0.388)	1.116*** (0.307)	1.104*** (0.372)	1.264*** (0.294)	1.202** (0.454)	1.214*** (0.295)	1.185** (0.439)
Log GDP	-0.0124 (0.0360)	3.65e-05 (0.0525)	-0.0102 (0.0392)	0.0131 (0.0563)	0.0673 (0.0679)	0.0484 (0.0804)	0.0596 (0.0616)	0.0455 (0.0800)
Log Population	0.0178 (0.0391)	0.0124 (0.0521)	0.0147 (0.0410)	-0.000454 (0.0543)	-0.0643 (0.0740)	-0.0418 (0.0900)	-0.0611 (0.0676)	-0.0422 (0.0928)
Entry Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Income Group FE	N	Y	N	Y	N	Y	N	Y
Region FE	N	Y	N	Y	N	Y	N	Y
Observations	42	42	42	42	42	42	42	42
R-squared	0.819	0.896	0.818	0.897	0.860	0.908	0.862	0.904

Table A8: Legal Origins and the Performance of New Second-Tier Exchanges.

This table explores the association between legal origins and the performance of new second-tier stock exchanges. The sample has a panel structure, with observations for each country-year pair. Only years from the introduction of a second-tier stock exchange onward are included. In columns (1) and (2), the dependent variable is *Active*, which equals one if a second-tier stock exchange is still active in a given year, and zero otherwise. In columns (3) and (4), the dependent variable is the log number of IPOs in new second-tier exchanges in a given year. In columns (5) and (6), the dependent variable is the log of total proceeds of all IPOs in new second-tier exchanges in a given year, in 2010 U.S. dollars. The *Common Law* and *Civil Law* dummies equal one if the country's legal origin is in one of these two categories according to LLSV (1999). The variables *Log(GDP)* and *Log(Population)* are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in a given year. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions. Standard errors are clustered at the exchange level. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

	(1)	(2)	(3)	(4)	(5)	(6)
	Active	Active	Log # IPOs	Log # IPOs	Log proceeds	Log proceeds
Common Law	0.144*** (0.029)	0.374*** (0.034)	0.219*** (0.054)	0.188** (0.074)	0.316*** (0.105)	0.380*** (0.140)
Civil Law	-0.028 (0.030)	-0.111*** (0.030)	-0.159*** (0.057)	-0.060 (0.065)	-0.310*** (0.110)	0.057 (0.124)
Log GDP	0.118*** (0.015)	0.104*** (0.015)	0.174*** (0.028)	0.222*** (0.033)	0.379*** (0.053)	0.487*** (0.063)
Log Population	-0.064*** (0.016)	-0.011 (0.018)	-0.114*** (0.031)	-0.118*** (0.038)	-0.234*** (0.060)	-0.285*** (0.073)
Observations	1,426	1,426	1,426	1,426	1,426	1,426
R-squared	0.197	0.483	0.081	0.248	0.094	0.279
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes	No	Yes

Table A9: Shareholder Protection and the Performance of New Second-Tier Exchanges for Domestic and Foreign Companies

This table explores the association between shareholder protection and the performance of new second-tier stock exchange for domestic and foreign companies. If a company's country of incorporation is different from the country where it had its IPO, we regard that company to be foreign from the perspective of the exchange and domestic otherwise. If a country does not have the country of incorporation information, we use the country of headquarters to determine this. Panel A tabulates the performance of the exchange for domestic incorporated companies and Panel B tabulates the performance for foreign incorporated. In both panels, the sample has a panel structure, with observations for each country-year pair. Only years from the introduction of a second-tier stock exchange onward are included. In columns (1) and (2), the dependent variable is the log number of IPOs in new second-tier exchanges in a given year. In columns (3) and (4), the dependent variable is the log of total proceeds of all IPOs in new second-tier exchanges in a given year, in 2010 U.S. dollars. *High Shareholder Protection* equals one if the country's protecting minority investor index is above the median among all countries in the sample. The protecting minority investor index ranges from a score of 0 to 100, representing the lowest performing economy and highest score respectively. The variables *Log(GDP)* and *Log(Population)* are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in a given year. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions. Standard errors are clustered at the country level. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

Panel A: Domestic Companies

	(1)	(2)	(3)	(4)
	Log # IPOs	Log # IPOs	Log proceeds	Log proceeds
High Shareholder Protection	0.469** (0.225)	0.501** (0.217)	0.535* (0.309)	0.617* (0.317)
Log GDP	0.079 (0.067)	0.108 (0.099)	0.193** (0.094)	0.217 (0.133)
Log Population	0.036 (0.067)	0.007 (0.098)	0.026 (0.111)	0.013 (0.148)
Observations	1,479	1,479	1,479	1,479
R-squared	0.273	0.281	0.282	0.289
Year FE	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes

Panel B: Foreign companies

	(1)	(2)	(3)	(4)
	Log # IPOs	Log # IPOs	Log proceeds	Log proceeds
High Shareholder Protection	0.155* (0.081)	0.166** (0.078)	0.240 (0.172)	0.298 (0.185)
Log GDP	0.027 (0.026)	0.036 (0.037)	0.085 (0.056)	0.096 (0.080)
Log Population	0.027 (0.028)	0.018 (0.039)	0.036 (0.072)	0.037 (0.099)
Observations	1,479	1,479	1,479	1,479
R-squared	0.285	0.290	0.282	0.291
Year FE	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes

Table A10: Innovation and the Performance of New Second-Tier Exchanges for Domestic and Foreign Companies

This table explores the association between innovation measures and the performance of new second-tier stock exchanges for domestic and foreign companies. If a company's country of incorporation is different from the country where it had its IPO, we regard that company to be foreign from the perspective of the exchange and domestic otherwise. If a country does not have the country of incorporation information, we use the country of headquarters to determine this. Panel A tabulates the performance of the exchange for domestic incorporated companies and Panel B tabulates the performance for foreign incorporated. In both panels, the sample has a panel structure, with observations for each country-year pair. Only years from the introduction of a second-tier stock exchange onward are included. In columns (1) through (4), the dependent variable is the log number of IPOs in new second-tier exchanges in a given year. In columns (5) through (8), the dependent variable is the log of total proceeds of all IPOs in new second-tier exchanges in a given year, in millions of 2010 U.S. dollars. *High Shareholder Protection* equals one if the country index of protecting minority investor is above the median among all countries in the sample. The protecting minority investor index ranges from a score of 0 to 100, representing the lowest performing economy and highest score respectively. *Log(VC)-top quartile* equals one if the country level of VC funding is in the top quartile in the year. *Log(Patents)-top quartile* equals one if the number of patent applications filed by nationals is above the top quartile in the year. The variables *Log(GDP)* and *Log(Population)* are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in a given year. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions. Standard errors are clustered at the country level. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

Panel A: Domestic Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log #	Log #	Log #	Log #	Log	Log	Log	Log
	IPOs	IPOs	IPOs	IPOs	proceeds	proceeds	proceeds	proceeds
High Shareholder Protection	0.386*	0.411**	0.548***	0.580***	0.398	0.470	0.701***	0.791***
	(0.207)	(0.199)	(0.048)	(0.052)	(0.290)	(0.291)	(0.088)	(0.095)
Log(VC) – top quartile	0.327**	0.355**			0.542**	0.581**		
	(0.156)	(0.151)			(0.231)	(0.225)		
Log(Patents) – top quartile			0.416***	0.389***			0.871***	0.856***
			(0.067)	(0.069)			(0.122)	(0.126)
Log GDP	0.044	0.075	-0.008	0.021	0.135	0.163	0.011	0.025
	(0.060)	(0.089)	(0.029)	(0.033)	(0.082)	(0.120)	(0.054)	(0.061)
Log Population	0.034	-0.000	0.072**	0.049	0.023	0.002	0.102*	0.106*
	(0.059)	(0.096)	(0.030)	(0.035)	(0.099)	(0.141)	(0.054)	(0.064)
Observations	1,479	1,479	1,479	1,479	1,479	1,479	1,479	1,479
R-squared	0.290	0.301	0.293	0.297	0.295	0.304	0.307	0.312
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes	No	Yes	No	Yes

Panel B: Foreign companies

	(1) Log # IPOs	(2) Log # IPOs	(3) Log # IPOs	(4) Log # IPOs	(5) Log proceeds	(6) Log proceeds	(7) Log proceeds	(8) Log proceeds
High Shareholder Protection	0.113 (0.073)	0.121* (0.071)	0.197*** (0.023)	0.208*** (0.025)	0.147 (0.165)	0.197 (0.172)	0.368*** (0.059)	0.432*** (0.064)
Log(VC) – top quartile	0.219*** (0.032)	0.210*** (0.033)			0.673*** (0.082)	0.658*** (0.085)		
Log(Patents) – top quartile			0.416*** (0.067)	0.389*** (0.069)			0.871*** (0.122)	0.856*** (0.126)
Log GDP	0.009 (0.022)	0.019 (0.033)	-0.019 (0.014)	-0.011 (0.016)	0.045 (0.051)	0.059 (0.076)	-0.057 (0.036)	-0.052 (0.041)
Log Population	0.026 (0.024)	0.015 (0.037)	0.046*** (0.014)	0.041** (0.017)	0.035 (0.064)	0.029 (0.094)	0.095*** (0.037)	0.108** (0.043)
Observations	1,479	1,479	1,479	1,479	1,479	1,479	1,479	1,479
R-squared	0.304	0.311	0.308	0.310	0.296	0.307	0.316	0.321
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes	No	Yes	No	Yes

Table A11: Financial Development and the Performance of New Second-Tier Exchanges for Foreign and Domestic Companies

This table explores the association between financial development measures and the performance of new second-tier stock exchanges for domestic and foreign companies. If a company's country of incorporation is different from the country where it had its IPO, we regard that company to be foreign from the perspective of the exchange and domestic otherwise. If a country does not have the country of incorporation information, we use the country of headquarters to determine this. Panel A tabulates the performance of the exchange for domestic incorporated companies and Panel B tabulates the performance for foreign incorporated. In both panels, the sample has a panel structure, with observations for each stock exchange-year pair. Only years from the introduction of a second-tier stock exchange onward are included. In columns (1) through (4), the dependent variable is the log number of IPOs in new second-tier exchanges in a given year. In columns (5) through (8), the dependent variable is the log of total proceeds of all IPOs in new second-tier exchanges in a given year, in millions of 2010 U.S. dollars. High Shareholder Protection equals one if the country index of protecting minority investor is above the median among all countries in the sample. The protecting minority investor index ranges from a score of 0 to 100, representing the lowest performing economy and highest score respectively. Credit (% of GDP)-above median equals one if the country ratio of private credit to GDP is above the median in the sample in the year. Market Cap (% of GDP)-above median equals one if the country ratio of Market Capitalization to GDP is above the median in the sample in the year. The variables Log(GDP) and Log(Population) are the log of the PPP-adjusted GDP (in millions of 2010 U.S. dollars) and population respectively in a given year. More information on the variables is available in the Appendix. The coefficients are estimated using Ordinary Least Squares (OLS) regressions. Standard errors are clustered at the country level. *** denotes significance at the 1% level, ** at the 5%, and * at the 10%.

Panel A: Domestic Companies

	(1) Log # IPOs	(2) Log # IPOs	(3) Log # IPOs	(4) Log # IPOs	(5) Log proceeds	(6) Log proceeds	(7) Log proceeds	(8) Log proceeds
High Shareholder Protection	0.614*** (0.059)	0.636** (0.297)	0.452** (0.199)	0.507** (0.205)	0.760*** (0.110)	0.917** (0.419)	0.611** (0.302)	0.718** (0.324)
Credit (% of GDP) above median	0.339** (0.161)	0.326** (0.149)			0.509* (0.281)	0.489* (0.249)		
Market Cap (% of GDP) above median			0.073 (0.058)	0.021 (0.140)			0.227** (0.108)	0.177 (0.215)
Log GDP	0.143*** (0.046)	0.229 (0.168)	-0.063 (0.075)	-0.032 (0.073)	0.196** (0.084)	0.278 (0.204)	-0.027 (0.127)	0.020 (0.125)
Log Population	-0.016 (0.044)	-0.107 (0.149)	0.159** (0.078)	0.135* (0.079)	-0.005 (0.081)	-0.054 (0.195)	0.221 (0.143)	0.190 (0.148)
Observations	1,273	1,273	1,094	1,094	1,273	1,273	1,094	1,094
R-squared	0.311	0.321	0.293	0.304	0.290	0.299	0.313	0.324
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes	No	Yes	No	Yes

Panel B: Foreign companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log # IPOs	Log # IPOs	Log # IPOs	Log # IPOs	Log proceeds	Log proceeds	Log proceeds	Log proceeds
High Shareholder Protection	0.217*** (0.030)	0.235** (0.110)	0.158* (0.080)	0.174** (0.080)	0.376*** (0.077)	0.485* (0.258)	0.266 (0.175)	0.330* (0.194)
Credit (% of GDP) above median	0.127* (0.064)	0.122* (0.061)			0.298* (0.155)	0.269** (0.133)		
Market Cap (% of GDP) above median			0.067** (0.029)	0.047 (0.062)			0.189** (0.076)	0.142 (0.151)
Log GDP	0.054** (0.023)	0.087 (0.065)	-0.021 (0.033)	-0.009 (0.034)	0.107* (0.059)	0.157 (0.128)	-0.041 (0.082)	-0.009 (0.086)
Log Population	0.013 (0.022)	-0.019 (0.060)	0.070* (0.035)	0.059 (0.038)	0.045 (0.057)	0.023 (0.135)	0.148 (0.096)	0.129 (0.107)
Observations	1,273	1,273	1,094	1,094	1,273	1,273	1,094	1,094
R-squared	0.304	0.310	0.321	0.328	0.298	0.307	0.326	0.336
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entry Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes	No	Yes	No	Yes