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The Creation and Evolution of Entrepreneurial Public Markets

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How does finance contribute to economic growth? Empirical evidence suggests that one important channel through which financial development enables growth is the funding of innovative and entrepreneurial projects, activities long recognized as particularly hard to finance with outside capital. Well-developed public equity markets have proven instrumental in filling this financing gap, allowing young and fast-growing companies to fund research and development (R&D) activities.

Financial policymakers around the world recognize the importance of entrepreneurial finance and have been focused on the creation of new stock exchanges for young and small-capitalization companies, often characterized by less-restrictive listing requirements. Such exchanges, termed second-tier exchanges or junior markets, have been heralded as a way to promote the creation, financing, and retention of job-creating new ventures. The creation of these markets has been a major focus, for instance, of officials at the European Commission. The European Commission noted that by encouraging such exchanges, it "hopes to strengthen the IPO market in Europe, . . . [as] the sluggish IPO market is particularly worrisome in Europe." Recent initiatives to create such markets have been led by nations as diverse as China, India, Saudi Arabia, and Trinidad and Tobago. While there have been some highly successful second-tier markets (such as Nasdaq in New York, Alternative Investment Market in London, and ChiNext in Shenzhen), there have been many more failures (such as Easdaq).

Despite the energy devoted by securities regulators to these efforts, there have been very few systematic empirical explorations of the determinants of the creation and evolution of new exchanges geared toward entrepreneurial firms. The sparseness of this evidence is particularly striking in light of the trends in global equity markets.

We seek to understand the drivers of the creation and success of new second-tier markets, focusing specifically on the role of countries' legal provisions for shareholder protection. Second-tier markets typically allow small-market-cap entrepreneurial firms to raise capital by lowering their listing requirements, as we show below. However, lower listing requirements increase adverse selection concerns and the risk that investors may be expropriated by the entrepreneur. We hypothesize that when minority-shareholder rights are better protected by the law, investors should be more willing to provide capital to firms on exchanges with low listing requirements, as the risk of expropriation will be mitigated. Thus stronger shareholder protection may increase the willingness of shareholders to invest in new listings and the valuations that they assign to these firms. This greater willingness will, in turn, attract more entrepreneurs to list their companies in the market. We hypothesize that stronger shareholder protection may attract more entrepreneurs and investors

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to a newly formed second-tier exchange and thus increase the likelihood of market introduction and ultimate success.

To explore this hypothesis, we construct a novel data set that covers 285 stock exchanges across 115 countries. Our analysis begins in 1990, reflecting the greater coverage of initial public offering (IPO) activity in that year and thereafter, and ends in 2013 to ensure that we have at least four years of data with which to evaluate the success of the exchanges. We gather information on the exchanges' formation and listing requirements as well as the details of any incumbent exchanges in these countries. Finally, we supplement these data with information on the exchanges' listed firms.

Using this unique data set, we first show the proliferation of second-tier stock exchanges around the world over the past three decades. We report that 77 second-tier stock exchanges were introduced in 48 countries between 1990 and 2013. They attracted a significant volume of IPOs (nearly 44 percent of those on all new exchanges), though much less in terms of value (23 percent, due to the smaller size of their listed firms), and appeared cyclically. We confirm that second-tier exchanges indeed had lower listing requirements than first-tier stock exchanges, with 1.57 fewer requirements out of 16 that we analyze. Finally, consistent with our hypothesis above, we find that second-tier exchanges were more likely to be introduced in countries with stronger shareholder protection.

These results raise a related question: Does a new second-tier exchange divert the existing flow of IPOs from any established stock exchanges in that country? In other words, does a new second-tier exchange serve a different segment of the market, or is there merely a substitution between the new market and the incumbent first-tier exchanges? We find no evidence of a substitution effect following the introduction of a second-tier exchange, either in terms of the flow or the composition of IPOs listed on any existing first-tier exchanges. The newly introduced exchanges seem to cater to a different segment of firms and investors in the economy.

Third, we explore the drivers of the success of second-tier exchanges. We find that shareholder protection strongly predicts a robust new market. Even in countries with high levels of venture capital activity, patenting, broad availability of private credit, and high stock market valuations (all of which are also associated with more successful new exchanges), we find that shareholder protection remains a key predictor of success.

Finally, we analyze the mechanisms behind the seeming importance of shareholder protection to the success of these second-tier exchanges. We find that new second-tier exchanges in countries with better shareholder protection allow younger and less-profitable companies to list and to raise more capital. This result is consistent with the notion that better shareholder protection mitigates the risk of expropriation, allowing investors to invest in riskier firms. For instance, the mean firm listed on a second-tier exchange in a nation with high investor protection was 23 percent younger than the average age of all IPOs on second-tier markets. Moreover, these companies subsequently grow more quickly. Interestingly, we find that the listing requirements of the new second-tier exchanges in nations with high and low shareholder protection were similar. Nevertheless, countries with better shareholder protections could attract offerings from younger firms, even though they did not have lower listing requirements.

These findings suggest the importance of institutions in enabling the provision of entrepreneurial capital to young companies. Second-tier markets in countries with weaker investor protection seem less able to attract investors in the kind of high-risk, high-growth firms that these markets are intended to promote. Anticipating these difficulties, fewer exchanges are created under these circumstances.

NOTE:

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