Do Local and International Venture Capitalists Play Well Together? International Venture Capital Investments and the Development of Venture Capital Markets

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Abstract

We analyze the effectiveness of international versus local venture capitalists in adding value to entrepreneurial firms and the determinants of collaboration between the two types of venture capitalists. Entrepreneurial firms backed by syndicates composed of international and local venture capitalists are more successful than those backed by syndicates composed of purely international or purely local venture capitalists. International venture capitalists that are farther away from entrepreneurial firms are more likely to syndicate with local venture capitalists potentially to mitigate their deficiencies in local knowledge and their higher monitoring costs. Consistent with this, syndication with local venture capitalists weakens the negative association between the distance of the venture capitalist from the entrepreneurial firm and the successful outcome of the venture capital investment. All the above results are stronger for international venture capital investments in emerging nations than for those in developed nations, consistent with higher monitoring costs and deficiencies in the local knowledge of international venture capitalists being greater in emerging markets. Local venture capitalists that have a greater extent of prior syndication experience with international venture capitalists have higher success rates in making subsequent investments on their own and are less likely to syndicate again with international venture capitalists. Finally, we find that purely international venture capitalists syndicates are less likely to invest in early stage firms and more likely to stage their investments to a greater extent than purely local venture capitalists. Overall, our results indicate that the greater venture capital expertise of international venture capitalists and the superior local knowledge and lower monitoring costs of local venture capitalists are both important in obtaining successful investment outcomes.

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1 Introduction

In recent years, venture capital (VC) investments across national borders have started to trend upwards. Foreign or cross-border investment in venture capital markets has increased from 10 percent of all venture capital investments in 1991 to 22.7 percent in 2008 (based on number of venture capital investments). An important driver of this increase is the significant upward trend in international venture capital investments in emerging nations over this time period.[1] The number of venture capital investments by international investors as a fraction of total venture capital investments in emerging nations increased from 8.7 percent in 1991 to 56 percent in 2008. There has also been an increase, although more modest, in the number of international venture capital investments as a fraction of all venture capital investments in developed nations over the same time period (10.1 percent in 1991 to 20 percent in 2008). While the venture capital industry originated in the U.S., a number of non-U.S. economies have developed their own venture capital industries, with a significant number of local venture capitalists investing in entrepreneurial firms in their own countries. However, there has been little research on the effectiveness of international versus local venture capitalists in adding value to entrepreneurial firms and on the determinants of collaboration between the two types of venture capitalists. The objective of this paper is to fill this gap in the literature.

Our empirical analysis addresses the question of whether investments by purely international or purely local venture capitalists have a higher chance of a successful outcome, or whether both of the above types of investments are dominated by those of syndicates consisting of both international and local venture capitalists. In developing our analysis, we consider the following opposing effects that may affect the ability of local versus international venture capitalists in adding value to entrepreneurial firms. On the one hand, international venture capitalists are likely to have considerable expertise in helping entrepreneurial firms to become successful through better deal

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[1]Recent articles in the financial press suggest an acceleration of international investments in emerging nations. Recent examples of international venture capital investments include Accel Partners investing in the series A financing of a Brazilian e-commerce company called el07 in syndication with a local venture capitalist (See "Accel in Brazilian e-commerce Investment," New York Times Dealbook, Oct 11, 2011). Another example is San Francisco-based Redpoint Ventures investing $3 million in 55Social, a Brazilian social media marketing company, and $6 million in Grupo Xango, a Brazilian Company operating in the cloud, security, and e-commerce space (See "Redpoint and BV Capital form Brazilian V.C. Firm," New York Times Dealbook, March 5, 2012). There has also been an increase in fundraising activity by venture capitalists for international investments. For instance, in 2011, Accel closed two funds totaling $1.3 Billion for investing in China and Bessemer Venture Partners closed a $1.6 Billion fund which will invest in early stage companies across the world.

structure, providing product market support, professionalizing firm management, setting effective incentive schemes, and through monitoring firm management. On the other hand, international venture capitalists may lack knowledge of the local product markets of the entrepreneurial firms they invest in and may face significant costs in monitoring these firms. The above disadvantages may be exacerbated when the distance between their home country and that of the entrepreneurial firms is greater. In contrast, local venture capitalists, while potentially lacking in expertise in some of the areas discussed above where international venture capitalists are strong, may have significant strengths in areas where international venture capitalists are weak. In particular, local venture capitalists may enjoy a significant advantage in their home markets in terms of their information about local market conditions and investment opportunities. Further, local venture capitalists can monitor their investments more easily because of proximity. In summary, international and local venture capitalists have their own advantages and disadvantages when it comes to investing in entrepreneurial firms.[2]

The effects discussed above lead to a number of interesting questions that we address in this paper. First, how do international venture capitalists compare in effectiveness with local venture capitalists or syndicates consisting of both international and local venture capitalists? Second, how does the distance from the home country of the venture capitalist to that of the entrepreneurial firm affect the success of international venture capital investments? Third, how does the distance from the home country of the venture capitalist to that of the entrepreneurial firm determine the propensity of an international venture capitalist to syndicate with a local venture capitalist? A related question is how the syndicate structure of a venture capital investment affects the relation between international venture capitalist distance (i.e., distance from the home country of the international venture capitalist to that of the entrepreneurial firm) and the success of the venture capital investment. Early stage investments are characterized by high levels of uncertainty, information asymmetry, and the need for monitoring; all of which may exacerbate the proximity disadvantage of international venture capitalists. Thus, our fourth question is: how does the syndicate structure in

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[2]The difficulties in monitoring international investments by venture capitalists have been commented upon in the popular press. See, e.g., "Redpoint and BV Capital form Brazilian V.C. Firm," New York Times Dealbook, March 5, 2012. To quote, "For the last couple of years, Redpoint partners have frequently traveled to Brazil, often visiting for a full week each trip, saying the lack of direct flights from San Francisco to Brazil makes a weeklong stay the only efficient way to conduct business there." The news article goes on to quote U.S. venture capitalists as seeking to ease difficulties such as the need for excessive travel by teaming up with local venture capitalists. The article also comments on the nascency and resulting lack of experience of the local (Brazilian) venture capital industry.

international venture capital investments affect the choice to invest in early versus late stage firms? Staging venture capital over multiple rounds can mitigate the monitoring disadvantage of international venture capitalists. Thus, our fifth question is: how does the syndicate structure determine the staging of international venture capital investments? Finally, if local venture capitalists indeed lack venture capital skills, can they learn these skills through repeated interaction with international venture capitalists? We use the probability of successful exit as the main outcome variable in our analysis.

We expect significant differences between our results for developed versus those for emerging nations. The expertise of international venture capitalists may be more valuable for entrepreneurial firms located in emerging nations, where venture capital markets are underdeveloped and where local venture capitalists may not have significant venture capital skills. On the other hand, international venture capitalists may have greater experience in adding value to entrepreneurial firms located in developed nations than those located in emerging nations given the greater extent and longer history of cross-border investments between developed nations.[3] Further, the disadvantages of international venture capitalists in terms of their lack of knowledge of local product market conditions and difficulty in monitoring due to lack of proximity may be worse for investments in emerging nations, especially due to the worse infrastructure in emerging nations.[4] Thus, we differentiate our analysis by entrepreneurial firms located in emerging nations versus those located in developed nations.

Our results indicate that the probability of successful exit is higher when the syndicate consists of both local and international venture capitalists than when the syndicate consists of purely international or purely local venture capitalists. This result is consistent with the idea that the knowledge base and skill-sets of international and local venture capitalists are complements and that the combination of local and international venture capitalists can help them overcome their relative disadvantages. Our results are robust to controlling for the potential endogeneity that may

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[3]For instance, based on data from the World Bank, the average foreign direct investment (FDI) in developed nations was $6.86 billion in 1990, compared to $1.16 billion in emerging nations. As recently as 2008, the difference between these two groups was still substantial: the average FDI in developed nations was $39.3 billion and that in emerging nations was $27.9 billion.

[4]For instance, according to data obtained from the World Bank, the average per capita number of flights in developed nations was eight times greater than that in emerging nations in 2008. Another example is the average per capita number of mobile and fixed telephone subscribers, which was 64% greater in developed nations than in emerging nations in 2008. We are grateful to the International Telecommunication Union for making data on telephone subscriber usage available on the World Bank website.

arise from international venture capitalists selecting higher quality firms to invest in. We control for such potential endogeneity using an instrumental variables approach and also a natural experiment and thus show that international venture capitalists have a positive causal impact on the exit rates of the firms that they back. Further, our results are robust to the endogeneity of the choice of international venture capitalists to syndicate with local venture capitalists. In particular, we find that, after controlling for the endogenous nature of the choice of international venture capitalists to syndicate with local venture capitalists, entrepreneurial firms backed by syndicates of international and local venture capitalists have higher successful exit rates than those backed by syndicates of purely international venture capitalists. As a robustness check for our exit results, we analyze the post-IPO operating performance of venture capital-backed firms that subsequently go public. Consistent with our exit results, we find that investment by a combination of local and international venture capitalists in an entrepreneurial firm has a positive association with the firm's post-IPO operating performance relative to investments by purely international venture capitalists or by purely local venture capitalists. While the above results hold for emerging nations, we do not find similar results for developed nations, which is consistent with the notion that the difficulties in monitoring and the deficiencies in local knowledge faced by international venture capitalists and the lack of venture capital skills of local venture capitalists are much more important in emerging nations than in developed nations.

We further investigate whether our syndication results above indeed reflect a proximity disadvantage for international venture capitalists and a lack of venture capital skills for local venture capitalists. Thus, we relate the probability of successful exit with the geographic distance of the international venture capitalist from the entrepreneurial firm backed by it. Distance may exacerbate the disadvantages of international venture capitalists related to the lack of local market knowledge and to the inability to effectively monitor the entrepreneurial firm. Consistent with this argument, we find that the probability of exit is lower when international venture capitalists are farther away from the country of the entrepreneurial firm receiving venture capital financing. In addition, we find that the negative association between the distance of the international venture capitalist from the entrepreneurial firm and the probability of exit is mitigated by syndication with a local venture capitalist. Thus, international venture capitalists are able to overcome their distance disadvantage by syndicating with local venture capitalists. Consistent with this argument, we also find that

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the probability of syndication between international and local venture capitalists increases with the distance of the international venture capitalists' home country from that of the entrepreneurial firm receiving venture capital financing. As with our previous set of results, these results are stronger in the sample of emerging nations.

In order to tackle the inherent endogeneity in the choice of investments made by international venture capitalists (in terms of proximity), we use the signing of air service agreements (ASAs) between the country of the international venture capitalist and that of the entrepreneurial firm as a natural experiment. We find that international VC investments made in countries which subsequently sign an ASA with the international venture capitalist's country perform better than those international VC investments where there is no ASA between the respective countries. Since ASAs effectively make travel easier between countries (thus reducing the disadvantage due to lack of proximity), we interpret these results as supporting the idea that international venture capitalists' lack of proximity is an important impediment to their success.

We then investigate how the propensity of local venture capitalists to syndicate with international venture capitalists relates to their prior syndication experience with international venture capitalists. We find that local venture capitalists who have syndicated with international venture capitalists over a greater number of prior investments (i.e., with the number of syndications with international venture capitalists above the sample median) are less likely to syndicate with them again, indicating a greater extent of learning by local venture capitalists during earlier syndications. Further, the success rate of entrepreneurial firms backed by purely local venture capitalists is higher when they have a greater extent of prior syndication experience with international venture capitalists. These results hold for both emerging and developed nations. Moreover, we find that local VCs are more successful in countries that have a greater extent of investing experience by local VCs. The above results are consistent with local venture capitalists being disadvantaged in terms of their venture capital skills, and overcoming this disadvantage through learning these skills over time by syndicating with international venture capitalists and through a greater extent of investment experience.

In order to further investigate the disadvantages of international venture capitalists arising from difficulties in monitoring and lack of local knowledge, we delve deeper into the characteristics of investments made by international versus local venture capitalists. We find that syndicates com-

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posed of purely international venture capitalists are less likely to invest in early stage entrepreneurial firms than those composed of either purely local or a combination of local and international venture capitalists. This result holds in both emerging and developed nations, although its economic significance is greater in emerging nations. The above results are consistent with the idea that early stage investments, which are characterized by higher information asymmetry, greater uncertainty, and a greater need for monitoring, exacerbate the disadvantages of international venture capitalists since local knowledge and ability to monitor investments are likely to be even more important when making early stage investments.

It has been argued that staging of venture capitalist investment is one way to mitigate difficulties in monitoring (see, e.g., Gompers (1995) or Tian (2011)). If this is the case, then one would expect the number of rounds over which an entrepreneurial firm receives venture capital financing to be lower when purely local venture capitalists invest in the firm than when purely international venture capitalists invest in the firm, since local venture capitalists face lower costs of monitoring due to their proximity. Consistent with this notion, we find that the extent of staging (i.e., number of rounds of investment) by local venture capitalists is lower than that by international venture capitalists.

Overall, our results support the idea that the investments that are more likely to succeed are the ones that combine the greater expertise and knowledge of international venture capitalists and the local knowledge and proximity-advantage of local venture capitalists. Distance seems to exacerbate disadvantages related to lack of local knowledge and makes monitoring more difficult for international venture capitalists. To mitigate the above disadvantages, international venture capitalists that are farther away syndicate more with local venture capitalists. Further, international venture capitalists are less likely to invest in early stage entrepreneurial firms and stage their investments to a greater extent than local venture capitalists. On the other hand, local venture capitalists are able to mitigate their disadvantage related to their lack of venture capital expertise by learning these skills from international venture capitalists by syndicating with them.

What do our results tell us about venture capital investing in general? Our results indicate that both expertise in venture capital and knowledge of local firms and markets are important in enabling venture capitalists to add value to the entrepreneurial firms they invest in. Our results further indicate that syndicates consisting of different kinds of venture capitalists allow an exchange

of information across venture capitalists and also enable the syndicate to overcome the deficiencies of individual venture capitalists. Our results provide empirical support for the idea that greater distance between a venture capitalist and an entrepreneurial firm results in larger monitoring costs. Finally, our results suggest that younger and early stage entrepreneurial firms require a locally available venture capital industry, since international venture capitalists are less likely to invest in such firms. From the perspective of policy, this suggests that, in addition to attracting investments from venture capitalists from other geographic regions, national and local governments need to consider policies that would help build a local venture capital industry in order for local start-ups to get greater early stage support. The fact that our results are stronger in emerging nations than in developed nations indicates that the deficiencies of international venture capitalists may be overcome by the better infrastructure available in a given market and the greater experience of international venture capitalists in investing in these markets.

The rest of the paper is organized as follows. Section 2 discusses the related literature. Section 3 develops our hypotheses and section 4 describes the data and important variables used in our analysis. Section 5 discusses our empirical tests and results. Section 6 discusses some additional robustness checks of our empirical analyses. Section 7 concludes.

2 Literature Review

Our paper is related to several strands of the empirical corporate and entrepreneurial finance literature. The first literature our paper is related to is that on the local availability of financing from intermediaries on the development of entrepreneurial firms: see, e.g., Kerr and Nanda (2009). Our paper contributes to this literature by analyzing the role of local venture capital industry in the development of entrepreneurial firms. Second, it is related to the literature on venture capital deals across various countries. See, e.g., Jeng and Wells (2000), who analyze the determinants of venture capital deals for a sample of 21 countries, and find that the development of IPO markets affect the level of venture capital investments in various countries.[5] Bottazzi, Da Rin, and Hellmann (2011) analyze the role of trust in investment decisions and contracting for cross-border venture deals in Europe. They find that trust between two countries, measured by survey data asking citizens of one

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[5]Our paper is also related to the literature on the contracting of private equity deals in various countries (e.g., Kaplan, Martel, and Stromberg (2007), Lerner and Schoar (2005), and Bottazzi, Da Rin, and Hellmann (2009)).

country about their trust in citizens of another country, is positively related to cross-border venture capital investments between the countries. In contrast to their paper, we analyze how and why international VCs choose to invest with local VCs and how this combination can affect successful outcomes of the entrepreneurial firms receiving venture capital. Further, our paper uses a broader sample of emerging and developed nations in our analysis, emphasizing the increasing importance of emerging nations in the context of cross-border venture capital investments. Balcarcel, Hertzel, and Lindsey (2010) find that U.S. venture capital investments made abroad are staged to a lower extent if the country of the entrepreneurial firm has fewer legal protections. In contrast to the above paper, our focus is on comparing investments made by international VCs to those made by local VCs; we find that local VCs invest over fewer rounds than international VCs.

Hazarika, Nahata, and Tandon (2009) analyze the role of cultural dissimilarities between the country of the VC and the country of the entrepreneurial firm in determining the success of the venture. They find that the success of a venture capital investment is positively related to the extent of cultural dissimilarity between the country of the VC and that of the entrepreneurial firm. While, we control for cultural differences in our analysis below, the effect of culture is not the main focus of our paper. Further, our results on culture are opposite that of Hazarika, Nahata, and Tandon (2009): we find that greater cultural distance between the country of the entrepreneurial firm and that of the VC (using the same Hofstede distance measure as Hazarika, Nahata, and Tandon (2009)) reduces the success probability of the entrepreneurial firm. This is possibly because, unlike their paper, we explicitly control for unobserved entrepreneurial country-specific heterogeneity using entrepreneurial firm country fixed effects in our analysis.

Third, it is related to the literature on geography and corporate finance: for example, Tian (2011) studies, in the US context, the relationship between entrepreneurial firms and their distance to the VC backing them. Bengtsson and Ravid (2009) analyze the relationship between the location of an entrepreneurial firm and the structure of the contracts between the entrepreneurial firm and the VCs investing in them.[6] Our paper extends this literature by being the first one to study the relative effectiveness of international versus local VCs and syndicates consisting of the above in creating value for entrepreneurial firms.

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[6] Kedia and Rajgopal (2009) and Uysal, Kedia, and Panchapagesan (2008) study the effect of geography on option compensation and acquisitions, respectively.

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The fourth literature our paper is related to is the broader literature on venture capital. Our paper is related to the literature on venture capital syndication (see, e.g., Lerner (1994) and Brander, Amit, and Antweiler (2002)). It is also related to the literature on venture capital staging (see, e.g., Gompers (1995) and Tian (2011)), and to the literature showing that VCs create "extra-financial" value for entrepreneurial firms and the relationship between this value added and the characteristics of VCs and other early stage investors (see, e.g., Chemmanur, Krishnan, and Nandy (2011), Kerr, Lerner, and Schoar (2011), and Hsu (2004)).[7] Fifth, it is related to the emerging literature on the economics of entrepreneurship in the international context: see, e.g., Ghani, Kerr, and O'Connell (2011). Finally, our paper is also broadly related to the theoretical literature on value addition by VCs and other private financiers (e.g., Fulghieri and Sevilir (2009)) and the effect of the availability of private financing to a firm on its going public decision (e.g., Spiegel and Tookes (2008)).

3   Development of Hypotheses

The first question that we are interested in examining is the relative importance of expertise in venture capital investing versus knowledge of local markets and the monitoring advantage of proximity. On the one hand, international VCs, by virtue of their greater experience in investing in their home countries, are likely to have greater expertise in venture capital investing. On the other hand, local VCs are likely to be more knowledgeable about their local markets and the nature and quality of entrepreneurial firms in these markets. In addition, the proximity of local VCs to entrepreneurial firms they invest in will make it easier for local VCs to monitor their investments. Thus, if venture capital expertise is the most important factor affecting the success of venture capital investment in an entrepreneurial firm, then we would expect entrepreneurial firms backed by syndicates consisting of purely international VCs to be more successful than those consisting of purely local VCs or a combination of local and international VCs (H1A). If, however, local knowledge and effective monitoring due to proximity are the most important factors in determining the success of venture capital investments, then we would expect entrepreneurial firms backed by syndicates of purely local VCs to be the most successful (H1B). Finally, if venture capital expertise, local knowledge,

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[7]Our paper is broadly related to the home bias literature (see, e.g., Coval and Moskowitz (1999), Coval and Moskowitz (2001), and the survey article by Karolyi and Stulz (2003)), which finds that local investors perform better than investors farther away because of advantages of proximity such as a more comprehensive knowledge of local markets.

and the monitoring advantage of proximity are complements, in the sense that all these factors are essential in determining the success of a venture capital investment, then we would expect entrepreneurial firms backed by syndicates of both international and local VCs to be the most successful (H1C).

Geographic distance can exacerbate the difficulty in monitoring and the lack of local knowledge facing international VCs. Thus, greater geographic distance between the international VC and the entrepreneurial firm would be associated with a lower likelihood of success (H2). Further, if syndication with local VCs allows international VCs to mitigate their disadvantages of greater difficulty in monitoring and lack of local knowledge (arising from the lack of proximity), then we would expect the following. First, international VCs that are farther away from entrepreneurial firms they invest in are more likely to syndicate with local VCs (H3). Second, the negative association between the distance of the international VC from the entrepreneurial firm and the probability of a successful outcome will be mitigated by syndicating with local VCs (H4).

While the above conjectures are related to the international VCs' disadvantage due to lack of proximity, we are also interested in the local VCs' disadvantage in terms of lack of venture capital skills. Thus, we are interested in examining how local VCs' prior syndication experience with international VCs affects their choice to syndicate again with international VCs. Local VCs can potentially gain venture capital expertise and skills by interacting with international VCs through a greater extent of syndication with them. If this is the case, we would expect local VCs with a greater extent of prior syndication experience with international VCs to have developed greater venture capital expertise and thus be less likely to syndicate again with international VCs (H5). Further, we expect local VCs who have a greater extent of prior syndication experience with international VCs to be more successful when they invest alone (compared to local VCs that have a lesser extent of prior syndication experience with international VCs) (H6).

The conjecture that international VCs may have difficulty screening and monitoring the entrepreneurial firms that they invest in can have implications for the stage at which international VCs will fund entrepreneurial firms as well as the number of investment rounds (i.e., staging). Early stage firms are considered to be the hardest to screen and monitor, due to the high extent of information asymmetry and uncertainty about them. Thus, we expect that syndicates of purely international VCs, due to their lack of local knowledge and monitoring disadvantage will be the

least likely to invest in early stage entrepreneurial firms, compared to either purely local VCs or combination of local and international VCs (H7). Moreover, purely international VC syndicates are likely to stage their investments over more rounds than purely local VC syndicates, again to mitigate the international VCs' disadvantages arising from their lack of proximity to the entrepreneurial firm (H8).

4   Data, Sample Selection, and Construction of Variables

We draw our original sample of venture capital backed firms from the VentureXpert database over the twenty year period from 1989 to 2008. Prior to this period, there was almost no cross-border venture capital investment in emerging nations. We exclude buyouts and private equity investments from our sample. The VentureXpert database contains information about the nation of the VC as well as the nation of the entrepreneurial firm receiving venture financing which allows us to classify the VC as local or international. We exclude entrepreneurial firm nations with fewer than 10 venture capital backed entrepreneurial firms over the entire sample period in order to exclude outlier nations. The final sample includes 30,071 venture backed firms from 45 countries.

4.1   Summary Statistics and Description of Variables

Table 1 reports to country distribution of entrepreneurial firms based on the emerging nation classification of the country. Nations are classified as emerging or developed using the World Bank classification of high income nations based on the 2008 real GNI per capita.[8] We find that, while the majority of venture capital backed entrepreneurial firms in our sample are in the US, there are a significant number of venture capital backed entrepreneurial firms in other countries. Not surprisingly, the BRIC countries (Brazil, Russia, India, and China) constitute the largest share of venture capital backed entrepreneurial firms in emerging nations. India and China have the highest levels of venture capital investment with roughly 46 percent and 21 percent of the total emerging nation venture capital investments, respectively. Other emerging nations with significant venture capital investments are Poland, Thailand, and Malaysia. Among developed nations, the US is

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[8] The World Bank classifies economies according to the GNI per capita, calculated using the World Bank Atlas method. According to this definition, high income nations are those that had a 2008 GNI per capita of $11,906 or more. We classify all high income nations (as defined above) as developed nations and non-high income nations as emerging nations.

the largest venture capital market followed by UK (5.84 percent of all developed nation venture capital investments), South Korea (4.99 percent), France (2.96 percent), Canada (2.8 percent), and Australia (2.17 percent).

Panel A of Table 2 reports the distribution of the year of first round of VC financing for entrepreneurial firms in the various emerging and developed nations in our sample. The figures in this panel indicate the following. First, there is considerable disparity in the level of investments in developing and emerging nations. In 2008, 1563 entrepreneurial firms in developed nations received venture capital financing compared to just 116 entrepreneurial firms in emerging nations. Second, the rate of growth in venture capital investments in emerging nations is considerably higher compared to that in developed nations. In particular, the growth of venture capital investments in emerging nations over the time period from 1998 to 2008 is 59 percent compared to the almost 2 percent decline for developed nations over the same time period. Given the differences in the level of venture capital activity between emerging and developed nations, the higher growth rate in emerging nations is expected. Overall, these patterns suggest that there may be significant unsatisfied demand in emerging nations for venture capital financing and venture capital in these nations may have significant room to grow. Panel B of Table 2 reports the industry distribution of entrepreneurial firms at the time of their first round of venture capital financing within our sample. We find a large extent of venture investment in computer software and services and internet specific industries in both emerging and developed nations. However, firms in the biotechnology industry form a smaller fraction of the venture-backed firms in emerging nations than in developed nations (potentially due to their greater capital and R&D-specific expertise requirements).

Panel C of Table 2 reports the summary statistics for our sample of venture capital backed firms. We create various dummy variables to identify the location of VCs and their syndication choice. The *Local VC dummy* is one if only local VCs invest in the entrepreneurial firm in all rounds, and zero otherwise.[9] Similarly, *Local and international VC dummy* is one if at least one local and one international VC invest in the entrepreneurial firm, and zero otherwise. The table indicates that purely local and local-international combination syndicates are more common for venture capital investments in developed nations, suggesting that investments by purely international VCs is more

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[9]We also conduct our analyses with only the first round data and find qualitatively similar results to the ones reported in the paper.

common in emerging nations (since purely international venture capital investment is the complement of the sum of the local and local-international dummies). This is consistent with the idea that emerging markets may not have many local investors with sufficient experience in venture capital investing, potentially since venture capital investing requires providing extra-financial support to the entrepreneurial firm such as management support, board monitoring, and development of relationships with customers and suppliers (e.g., Hellmann and Puri (2000) and Chemmanur, Krishnan, and Nandy (2011)). *US VC dummy* and *UK VC dummy* are variables that are one if there is a US or a UK VC, respectively, investing in the entrepreneurial firm, and zero otherwise. We find that US and UK VCs are more likely to invest in entrepreneurial firms located in developed nations than those in emerging nations.

The *Average international VC distance* is the average distance between the country of all international VCs and the country of the entrepreneurial firm receiving venture financing, in thousands of miles. Distance between countries is measured as the distance between the capitals (or the most populated cities if the capital is sparsely populated) of the respective countries using the great circle formula.[10] The distance between a VC and an entrepreneurial firm in the same country is zero. We find that the average international VC distance is higher in emerging nations than in developed nations. The table also provides data on *VC investment amount*, which is the total amount of venture financing received by a firm; number of VCs investing in the firm; *VC age*, which is the average age of all VCs investing in the firm; and the *Number of rounds,* which is the number of rounds of venture funding the firm obtains. We find that venture capital backed entrepreneurial firms in emerging nations get smaller investments, involve fewer and younger VCs, and have fewer investment rounds than venture capital backed firms in developed nations.

Given that our database is obtained from a North American company, a potential concern is whether our sample is representative of venture-backed firms in non-US countries, particularly emerging nations. We therefore compare the distribution of our sample relative to prior studies in the international venture capital and private equity literature. For instance, we compare the distribution of the number of emerging nation venture-backed firms in our sample to that reported in Lerner and Schoar (2005) (over the same set of countries and over a similar sample period as their sample). We find that the correlation between our distribution and theirs is 64%, which is

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[10] We obtain these distances from the CEPII website. Please see http://www.cepii.fr/anglaisgraph/bdd/distances.htm.

statistically significant at the 5% level. In terms of developed nations, we compare our distribution of the dollar value of investments with that reported in Jeng and Wells (2000) and find a correlation of 72% which is statistically significant at the 1% level. These statistics suggest that our data does not undersample non-US developed and emerging nation VC-backed firms, thus mitigating concerns of potential sample selection biases in our data.[11]

5   Empirical Results

5.1   Syndication Between Local and International VCs

5.1.1   Syndication Between Local and International VCs and Successful Exit

We conduct logit regressions to analyze the exit probability of venture capital backed firms through initial public offerings (IPOs) and acquisitions. Venture capital exit is the common metric of success used in the venture capital literature. Successful exits of portfolio firms are the primary value generator for VCs since, in most cases, they are the primary and most significant liquidity event during the time in which the VCs are invested in the firm. Table 3 reports the results of the logit regressions separately for emerging nations, developed nations not including US, and all developed nations. We show a separate regression for developed markets without including the US since the venture capital industry in the US is significantly larger and more mature than those in other developed nations.[12] In addition to the variables described in Table 2, we also control for the *Firm country GDP*, which is the GDP of the nation of the entrepreneurial firm obtaining venture capital financing; *Stock market development*, which is the stock market capitalization of the nation of the firm receiving venture capital financing; entrepreneurial firm country fixed effects to control for country specific characteristics such as legal structure (see, e.g., La Porta, López de Silanes, Shleifer, and Vishny (1997), La Porta, López de Silanes, Shleifer, and Vishny (1998)); year of first round of venture capital financing fixed effects; industry fixed effects using VentureXpert industry

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[11]In addition, we obtain the number of VC investments made between 2004 and 2008 in India from a database of Indian venture-backed firms called TSJ Venture Intelligence. Our sample of VentureXpert VC-backed firms from India over the same time period (i.e., 2004 to 2008) constitutes 82 percent of the number of Indian venture backed firms from TSJ Venture Intelligence. This provides additional support that our sample for emerging markets is representative (particularly for Indian VC-backed firms).

[12]While our analysis uses the entire dataset, we repeat the exit analysis using the set of firms that obtain their first round of venture capital financing prior to 2005 to ensure that our analysis is not biased by the venture investments that do not have sufficient time to mature and exit. Our results are qualitatively similar.

classifications; and fixed effects for the firm development stage at the time of the first round of venture capital financing (i.e., early, late, startup/seed, expansion, or other).[13] We also include dummies for VCs being from US and UK, since VCs from these countries have the largest fraction of venture capital investments in the world, and may be better at adding value to their investments because of their significant experience.

We find that the coefficient on the *Local and international VC dummy* is positive and significant for exits in the emerging nations sample but not in the developed nations samples. Using a Wald test, we also find that the coefficient of the *Local and international VC dummy* is significantly larger than that of the *Local VC dummy* for exits in emerging markets. Thus, the combination of international and local VCs is associated with a higher probability of exit, consistent with the idea that combining international VCs' venture capital skills and local VCs' local market knowledge and proximity to the investment leads to the most favorable outcome, particularly in emerging nations. This result is also consistent with the idea that local VCs in emerging nations may be weaker in terms of venture capital skills than international VCs. Economically, combined investment by local and international VCs is associated with an 8.6 percentage point increase in the probability of exit in emerging nations. Thus, consistent with hypothesis (H1C), our results indicate that venture capital investments by local and international VCs dominate those by purely local or purely international VCs investing in emerging nations.

We also find that investment amount and total number of investing VCs have a positive association with exit probability. Entrepreneurial country GDP at the first round of venture investment has a negative association with exit probability. Since we are controlling for entrepreneurial country fixed effects and year fixed effects, the GDP variable essentially captures the economic cycle of a particular country. This suggests that venture investments made during better times in the economic cycle of a country perform worse (i.e., have a lower probability of eventual successful exit).[14]

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[13]Data on stock market capitalization is obtained from Beck, Demirguc-Kunt, and Levine (2000) and Beck, Demirguc-Kunt, and Levine (2009). We are grateful to the authors for making this data available.

[14]Consistent with this, when we run our analysis without the entrepreneurial country fixed effects, we find that the negative relation between GDP and exit does not exist. In other words, when our analysis does not account for between-country differences, we find that country GDP (which now also reflects cross-sectional variation in the economic development between various countries) is either positively related to exit probability or is statistically insignificant. In addition, when we replace GDP levels with GDP growth rates in the above regression (i.e., with country fixed effects), our results remain the same, i.e., GDP change at the time of the venture investment is negatively related to the probability of successful exit.

To check the robustness of our results, we conduct our analysis with three different additional specifications. First, we redefine successful exit as IPO exits and see whether our results above (for the emerging nations sample) hold with this alternative definition.[15] The IPO exit logit regression results for the emerging nations sample are reported in column (1) of Table 4. Consistent with the results in Table 3, the probability of IPO exits is higher when the firm is backed by both local and international VCs and is significantly greater than when the firm is backed by only local or only international VCs. As an additional robustness check, in column (2) of Table 4, we report the results of the logit analysis of exit outcomes for the emerging nations sample using round level data. Here, the *Local VC dummy* is one if only local VCs invest in a particular round, and zero otherwise. Other variables are similarly defined. We find that the results for the round level regressions are similar to those in Table 3.

One concern with the results above may be that cultural differences between the country of the entrepreneurial firm and that of the international VC may drive our results. Thus, we also conduct an additional exit regression after controlling for differences in culture between the country of the entrepreneurial firm and that of the international VC. Specifically, we obtain data on whether the major religion, language, and legal origin (civil or common law) are different for the entrepreneurial firm's country and the VCs' country. Data on religion, language, and legal origin is obtained from the CIA World Factbook. Using this data, we define dummy variables that equal one if these culture proxies (i.e., religion, language, and legal origin) are different for the entrepreneurial firm's country from the country of at least one international VC that backs the firm.

Finally, we use *International VC cultural distance* as another proxy for cultural distance between the country of the entrepreneurial firm and that of the international VC.[16] This measure, based on Hofstede (1980), uses four dimensions of cultural differences between countries: Power distance focuses on the degree of equality, or inequality, between people in the country's society. Societies with strict hierarchies (e.g., Japan) exhibit greater power distance. Individualism refers to the extent the society reinforces the individual versus the collective achievement and interpersonal

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[15] Prior literature and practitioner data indicates that IPO exits are considerably more profitable for venture capitalists, on average, than a private sale of the entrepreneurial firm to an existing firm (e.g., Gompers (1995)).

[16] This measure has been used in the Management, International Business, and Psychology literatures extensively (see, e.g., Kirkman, Lowe, and Gibson (2006) and Chakrabarti, Gupta-Mukherjee, and Jayaraman (2009)). Researchers have used the Hofstede measures to calibrate the different dimensions of a society's culture and then used the difference in these measures to capture the idea of "cultural distance." This measure is based on Hofstede (1980).

relationships. The US, for instance, is more individualistic than Italy. Masculinity reflects the degree to which the society reinforces, or does not reinforce, the traditional masculine-work role model of male achievement, control, and power. If a society rewards assertiveness and aggressiveness more, it is a more masculine society. It also relates to the strictness of the gender role. Japan, for example, is one of the most "masculine" countries in this regard while Scandinavian countries are the least "masculine." Uncertainty Avoidance captures the society's attitude towards uncertainty and ambiguity (i.e., unstructured situations). The cultural distance measure is then calculated as:

Cultural distance $= \frac{\sqrt{\sum_{i=1}^{4}(C_{VC,i}-C_{firm,i})^2}}{4}$, where

$C_{VC,i}$ is the cultural score on dimension i for the VC's country, and $C_{Firm,i}$ is the cultural score on dimension i for the entrepreneurial firm's country. The *International VC cultural distance* is thus measured as the average cultural distance of all international VCs investing in the firm. Column (3) of Table 4 reports the results of the exit regression after controlling the aforementioned cultural difference measures. Our results on syndication are consistent with those in Table 3 for emerging nations. That is, entrepreneurial firms backed by the combination of international and local VCs are more successful than those backed by purely local or purely international VCs even after controlling for cultural differences. Further, we find that the Hofstede cultural distance measure is negatively related to the probability of successful exit of the entrepreneurial firm.

Overall, the results in this section indicate that international and local VCs experience higher exit rates in emerging nations when they syndicate with each other, suggesting that the skills and expertise of local VCs and international VCs can complement each other (particularly in emerging nations).

5.1.2 Endogeneity of International VC Participation: Instrumental Variables Analysis

An important concern about our prior results is whether international VCs actually add value to their investments or whether they simply select higher quality entrepreneurial firms (that are more likely to succeed) or more able local VC partners . In particular, there may be unobservable factors that affect both the likelihood of investment by international VCs in an entrepreneurial firm as well as the probability of a successful outcome of the investment. Thus, we use an instrumental variables approach to establish the causal effect of international VC backing on investment success. Given that our dependent variable is categorical (exit probability), standard two-stage methods are not

sufficient to address this concern. Rather, we use the fact that the likelihood function of a bivariate probit model can be used to estimate models with binary dependent variables and endogenous binary variables (See, e.g., Greene (2003), p. 715). Maddala (1983) (p. 120 & 123) argues that, to identify this system, we need an exogenous variation in the binary endogenous variable (i.e., international VC participation) that does not affect exit probability.

We use two instruments for this purpose. The first instrument we use is the extent of foreign ownership and investment regulations that restrict investments by international investors in a country or limits their ownership stakes in an investment. Such regulations may either prevent an international VC from investing in a country or require them to co-invest with local VCs. The second instrument is the extent of capital market controls placed by a country which may restrict the ability of international VCs to invest in a country. The data for these variables comes from the data in World Economic Forum Global Competitiveness reports and the International Monetary Fund annual reports on exchange arrangements and exchange restrictions (compiled and aggregated in the 2009 Economic Freedom of the World Annual Report). We create dummy variables which are one if the country has higher than median ratings for foreign investment and ownership regulations and capital market controls (higher ratings imply less restrictive regulations), and zero otherwise.[17] Since we control for country fixed effects and time varying country GDP, which together capture the effect of the overall economic development of the entrepreneurial firm's country over time as well as non-time varying country characteristics, it is unlikely that the above instruments directly reflect the success probability of any individual firm that the VC may invest in. We carefully examine whether our instruments indeed have sufficient time variation to be valid instruments (since we control for country fixed effects) and find that the extent of time series variation in these instruments is substantial and as much if not greater than the cross section variation.[18]

The dependent variables in the bivariate probit model are thus: the propensity of investment

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[17]The data in the Economic Freedom of the World annual report are created as rating variables from 1 to 10 where 1 represents the most restrictive and 10 represents the least restrictive regulatory regime. We do not expect the individual ratings changes to linearly impact the ability of international venture capitalists to invest in a firm, and thus use a binary version of the instruments.

[18]In particular, we decompose the variation in each instrument (call it x_{it}, where i indexes the country) into cross-sectional ($\overline{x}_i$) and time-series ($x_{it} - \overline{x}_i + \overline{\overline{x}}$) components, the global mean $\overline{\overline{x}}$ being added back in make results comparable. We find that, for the low capital control dummy, the cross-sectional standard deviation is 0.338 and the times-series standard deviation is 0.403. Further, for the low ownership or investment regulation dummy, the cross-sectional standard deviation is 0.342 and the time-series variation is 0.404. Thus, we have substantial time-series (or within-country) variation in our instruments to identify the system.

by an international VC and the propensity of exit. Further, since our syndication results are stronger for emerging nations, and since our instruments do not exhibit significant variation in developed nations, we restrict our analysis to our sample of emerging nations. Since regulations on international invetments can also affect fundraising by local VCs, we also control for the number of local VC funds raised in the prior five years. Columns (1) and (2) of Table 5 report the results of this analysis. We find that, after controlling for the potential selection of firms by international VCs, firms backed by international VCs in emerging nations are more likely to experience exits. The *Low capital control* instrument is significantly and positively related to the propensity of being backed by international VCs.[19] In addition, the correlation between the error terms of the two equations is statistically significant, suggesting that there are unobservable factors that determine investment by international VCs and also affect the outcome of their investments. However, even after accounting for such unobservable factors, there is a positive causal effect of participation by international VCs on the propensity of entrepreneurial firms to succeed.

5.1.3 Endogeneity in the Syndication Choice of International VCs: Instrumental Variables Analysis

Note that the above analysis accounts for endogenous choice of entrepreneurial firm *and* the endogenous choice of local VC partners by international VCs, since we are controlling for any unobservables that may affect the choice of the international VC to invest in a firm and the probability of successful exit. We also specifically address the concern that the syndication choice of international VCs in a country (i.e., the choice to invest alone or to syndicate with a local VC) may be endogenous. In particular, the choice of an international VC to co-invest with a local VC may be correlated with unknown factors that may also predict the success of the entrepreneurial firm.

Thus, we analyze the extent of success of international and local VC syndicates by instrumenting the choice of syndication of the international VC with a local VC. We use the same instruments as in the previous section. We expect that restrictions on foreign ownership and investments as well as capital controls will increase the need for international VCs to syndicate with local VCs. Columns (3) and (4) of Table 5 report the results of this analysis. We find that, after control-

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[19]Since the US and UK VC dummy variables predict success perfectly in the first stage (i.e., participation by international venture capitalists), we exclude them from the first stage regression in specification (1). Unlike a two stage least squares model, the ML bivariate model allows us to exclude certain exogenous variables in the first stage.

ling for any potential endogeneity in the syndication choice of international VCs, entrepreneurial firms backed by syndicates of local and international VCs in emerging nations are more likely to experience successful exits than those backed by purely international VC syndicates. The *Low foreign investment/ownership regulation* instrument is negatively and significantly related to the propensity of co-syndicating with local VCs. Thus, even after accounting for potential endogeneity in international VC syndication propensity, we find a positive effect of the choice of international VCs to syndicate with local VCs on the success of entrepreneurial firms.

5.1.4 Endogeneity: Natural Experiment

As an alternative to our instrumental variables analyses, we use terror activities in India as natural experiments to establish the causal impact of international VC participation on entrepreneurial firm exit rates. In our sample of emerging nations, India has the largest extent of venture capital investments and also has a history of significant terrorist activity. Prior literature has found that terrorist activity has a negative effect on foreign direct investment (e.g., Enders and Sandler (1996), Abadie and Gardeazabal (2008)). Abadie and Gardeazabal (2008) argue that terror attacks reduce international investment by increasing uncertainty and reducing the expected rate of return. Further, corporate investors rate terrorism as an important factor in their decision to invest abroad (e.g. A.T. Kearney (2004)). Thus, we use five terror attacks on major Indian cities: one on New Delhi (on October 29, 2005), three on Mumbai (on March 12, 1993; August 25, 2003; and July 11, 2006), and one in Jaipur (May 13, 2008), each of which had greater than 50 casualties, as natural experiments to assess the effect of international VC participation on entrepreneurial firm success rates. We focus on these events because relatively large attacks on major cities in a country are likely to have the greatest impact on foreign investment and receive wider media coverage. However, these events did not substantially impact the overall economic activity in India. In fact, in the years following each of these attacks, India's real GDP per capita increased. This provides support to our identification strategy since these attacks did not seem to substantially affect long-term domestic economic activity.[20]

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[20]India provides a natural laboratory for thie experiment. As shown in the summary statistics, a large extent of emerging market VC investments take place in India. Further, multiple terror attacks in India related to its geo-political problems during our sample period provides sufficient variation in the instrument. Moreover, focusing on terror attacks in one country allows us to restrict our sample time period of analysis in the manner described below, which in turn allows us to rule out the effect of other events that might take place during this time period.

To further sharpen our identification, we restrict our sample to the set of emerging nation venture-backed firms and to a time period within six months prior to the attack dates and seven months after the attack dates. The sample period restriction ensures that macroeconomic factors that affect the success of entrepreneurial firms at the time of venture capital financing are similar before and after the attack periods. We thus define a post-attack dummy variable as one for the six month period starting one month after the attack date. We add a one month buffer period since venture deals already in place or close to finalizing are likely to get funding even in the immediate aftermath of terror attacks.[21] We then conduct our exit analysis in a differences-in-differences setting by using the *Post-attack period dummy* and the interaction between the *Post-attack period dummy* and the *India dummy* as independent variables in our exit regressions. The *India dummy* is one if the entrepreneurial firm is located in India, and zero otherwise. Recall that we use country fixed effects in our estimations, so the *India dummy* is present in the regression by itself as well. Further, in order to control for any changes in the demand for venture capital, we also include a control variable that measures the change in the number of firms obtaining venture capital financing from before to after the terror-attack period.

Column (2) of Table 6 reports the results of our logit exit regression. In this analysis, we pool all countries in our sample. Thus, the control group in our sample is the set of all countries other than India in the time period immediately before the terror attacks in India. Given the empirical evidence in the literature mentioned above (that international investor participation decreases after terror attacks), we expect that entrepreneurial firms receiving venture capital financing in the immediate post-terror attack period in India will have a lower chance of success. Our results are consistent with this expectation: the *Post-attack period dummy* interacted with the *India dummy* has a negative and significant coefficient estimate. Further, in order to assess whether our identifying assumption is valid, we conduct a logit analysis of international venture capital participation using the *Post-attack period dummy* and the interaction between the *Post-attack period dummy* and the *India dummy* as independent variables. Consistent with our expectations, we find, in column (1) of Table 6, that the *Post-attack period dummy* interacted with the *India dummy* is negatively associated with international VC participation.

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[21] Our results do not change qualitatively if we classify the post-attack period immediately after the attack date. Further, our results are similar if we use three months, eight months, or one year cut-off dates.

We also demonstrate that the decrease in exit propensity as a result of terror attacks in India are indeed linked to international VC participation. Thus, we ascertain whether the decrease in exits related to terror attacks in India is greater in industries that are more dependent on international VC participation. We define dummy variable for industries with high international VC participation if, in the prior five years in a given industry and country, the fraction of VC deals getting international VC investments is greater than the sample median. If terror attacks in India indeed affect successful exit outcomes by diminishing international VC participation, then industries with greater dependence on international venture capital should be more affected by such attacks. We find that this is indeed the case. In Column (3) of Table 6, the coefficient on the triple interaction term is negative and statistically significant at the one percent level. This result provides assurance that the relation between terror attacks in India and exit rates is indeed driven by industries that depend to a greater extent on international VC participation.

Our exclusion restriction assumption can draw criticism if the quality of firms that seek venture capital financing is lower immediately after terror attacks in India. This can happen for two reasons. First, higher quality entrepreneurial firms may feel that international VCs can add more value (i.e., a monitoring effect) and thus stop seeking venture financing if international VCs are less willing to participate in the aftermath of terror attacks. However, since this concedes our argument of causality of international venture backing on performance, it is not damaging to our interpretation. A more important concern would be that higher quality entrepreneurial firms may feel that international VCs are better at screening them (i.e., understanding that they are indeed of higher quality) and thus stop seeking venture funding until the point that international VCs re-enter the market after the terror attacks. To address this, we control for the change in the number of firms getting venture capital from before to after the terror attack period in our regressions. We do not find that the change in number of firms receiving venture capital financing removes the effect of terror attacks on entrepreneurial firm success. We also do not find that the number of entrepreneurial firms getting financing is significantly lower from immediately before to immediately after the terror attack periods in India within our short window around the terror attacks. Thus, firms dropping out of the pool of firms seeking venture financing do not explain our results.

In summary, our results in the previous two sections provide support to the conjecture that international VCs have a causal impact on the success of entrepreneurial firms that they back.

We approach the question of endogeneity of international VC participation using two different identification strategies. The fact that the impact of international VCs on entrepreneurial firm success survives both tests makes us more confident about the causal effect of international VCs on the success of entrepreneurial firms.

5.1.5 Syndication Between Local and International VCs and Post-IPO Operating Performance of Entrepreneurial Firms

We also analyze the post-IPO operating performance of firms obtaining venture capital investments as an alternative measure of performance. Our dependent variable is the post-IPO operating income to assets of the entrepreneurial firm that obtained venture capital financing and went public in their local markets (we restrict our analysis to four years after the IPO date). Thus, we now have a panel data at the firm-year level for firms that go public. We obtain our data on operating performance from various data-sources including the Bureau Van Dijk's Osiris, Global Compustat, and CMIE Prowess databases. Since only a subset of entrepreneurial firms actually exit through IPOs, and since not all entrepreneurial firms exiting through IPOs have data in our data sources (data had to be hand-matched to the various data sources using firm names), the sample for this analysis is significantly smaller than the sample used in previous analyses.

Table 7 reports OLS regressions of the post-IPO operating performance on the independent variables similar to those in the exit regressions in Table 3 in the paper. To control for entrepreneurial firm size, we use lagged value of assets, which is the one year prior value of log of the assets of the entrepreneurial firm in US Dollars. We also use time-varying lagged values of country GDP and stock market development, as well as dummy variables for IPO year, year of the first round of venture capital financing, and the number of years between the IPO and VC financing in addition to the various other controls that we use in our exit regressions. Standard errors are clustered at the firm level in these regressions.

We find that our results mirror those in Table 3; i.e., syndicates composed of both international and local VCs in emerging nations are associated with better post-IPO operating performance of the entrepreneurial firms they back. Economically, the presence of local and international VCs is associated with a 17.4 percentage point increase in the post-IPO operating performance of entrepreneurial firms in emerging markets relative to those backed by purely international VCs. Further,

the coefficient on the *Local and international VC dummy* is significantly different from that on the *Local VC dummy,* suggesting that entrepreneurial firms backed by the combination of local and international VCs have the most positive outcomes. The economic magnitude of the *Local and international VC dummy* coefficient is also greater than that of the local VC dummy. This result is consistent with the idea that the combination of local VCs' location-specific skills and proximity advantage and international VCs' venture capital skills has a long-lived impact on the firm obtaining venture financing. Note that these results are similar in the sample of developed nations, although there is no statistically significant difference between the *Local and international VC dummy* and the *Local VC dummy* in these nations.

5.2 Channels Through Which Syndication between Local and International VCs Improves Exit Probability

5.2.1 International VCs and Geographic Proximity: The Effect of International VC Distance on Syndication between Local and International Venture Capital Investors and Successful Exit

In this section, we analyze how geographic proximity affects the probability of international VCs to syndicate with local VCs and the effect of such syndication on exit rates. If the lack of proximity drives the disadvantages of international VCs, then syndicating with local VCs should be more valuable for international VCs that are farther away from the country of the entrepreneurial firm.

We first analyze the association between the distance of the country of the international VC from that of the entrepreneurial firm and the probability that the international VC will syndicate with a local VC. We use the sample of entrepreneurial firms that obtain investment from at least one international VC and conduct logit regressions with the local and international syndicate dummy as the dependent variable and the log of the average distance of international VCs and other controls as our independent variables. We also include a squared log distance term in these regressions to account for any potential non-linear relation between international VC distance and local syndication probability. Such a non-linear relation may exist if the benefit of syndicating with a local VC is tempered by difficulties of coordinating with them as the distance between local and international VCs increases. Our data for this analysis is at the round level, i.e., the unit of data

is firm-round. We reshape our data into this form to explicitly account for an international VC's choice of syndication with a local VC at each round.

Table 8 reports the results of our logit regressions. The positive and significant coefficient estimate on *International VC distance* in Table 8 supports the idea that farther away international VCs are more likely to syndicate with local VCs. This result holds in the sample of emerging nations as well in the sample of all developed nations. Further, we find a negative coefficient estimate on the distance squared term, suggesting that the benefit of syndicating with local VCs increases at a lower rate as the distance between the international VCs and the entrepreneurial firm increases.

We also find that US VCs are more likely to syndicate with local VCs in both emerging and developed nations. This is true for UK VCs as well, but the results are weaker in this case. This result is consistent with the idea that VCs in US and UK are sophisticated enough to understand their disadvantages of investing in international markets, specifically their lack of local market knowledge and proximity. As a result, they will be more likely to seek partnerships with local VCs.

We then analyze whether the syndication of international VCs with local VCs is indeed more valuable when international VCs are located further away from the entrepreneurial firm that they back. We conduct logit eixt regressions using the sample of firms with at least one international VC investing in the entrepreneurial firm and add the following variables: *International VC distance*, *International VC distance*^{2}, *Local and international VC dummy*, the interaction variable between the *International VC distance* variable and the *Local and international VC dummy*, and the interaction variable between the *International VC distance*^{2} variable and the *Local and international VC dummy*.

Table 9 reports the result of this analysis. The results indicate that, consistent with expectations, international VCs that are farther away are less successful than international VCs that are closer to their investments. Importantly, we find that the coefficient on the interaction term between distance and the *Local and international VC dummy* is positive in emerging nations. Thus, our results indicate that international VCs syndicate with local VCs to increase their chances of success, particularly when they are farther away from the country of the firm in which they invest. We also find that the interaction term between *International VC distance*^{2} and *Local and international VC dummy* has a negative coefficient estimate for the emerging nations sample, consistent with the idea that the mitigation effect of local syndication on the negative relation between *International*

VC distance and exit probability decreases as the distance between the international VC and the entrepreneurial firm increases.

Thus, the empirical results in this section are consistent with hypothesis (H3). That is, international VCs are more likely to syndicate with local VCs when they are farther away from the nation of the entrepreneurial firm. We also find that, consistent with hypothesis (H2), there is a negative relation between international VC distance and exit probability. Consistent with hypothesis (H4), the negative association between the distance of the international VC and the probability of a successful outcome is mitigated by syndication between the international VC and local VCs. However, the above effects are non-linear. In particular, the benefit of syndicating with local VCs increases at a lower rate as the distance between the international VCs and the entrepreneurial firm increases. This non-linearity may indicate that international VCs may also have more difficulties coordinating with local VCs as the distance between local and international VCs increases.

5.2.2 International VCs and Geographic Proximity (Endogeneity): Natural Experiment Using Bilateral Air Service Agreements

A natural concern about the results relating distance to how local and international VC syndication can affect successful exit outcomes is that the choice of the international VC to invest in a country is endogenous, and thus the VC can choose whether or not to invest in a country that is far away. We thus analyze whether an exogenous shift in "effective" distance in the form of more and easier travel options can affect exit outcomes of syndicates backed by international VCs. Clearly, faster and easier travel options between the country of the VC and that of the entrepreneurial firm can facilitate monitoring by the international VC.

We use the establishment of air service agreements (ASAs) between countries in our sample to proxy for the ease of travel. Various countries established bilateral air service agreements during our sample period, which helped facilitate expansion of faster, easier, and cheaper travel options between those countries. Such bilateral treaties can increase travel options by allowing direct travel between the two countries, by increasing the number of landing points in a country by an airline of the other country, deregulate the number of seats or flights that can be operated between two countries, deregulate fare restrictions for flights between the two countries, and deregulate ownership and other operational restrictions (e.g. code sharing, various "doing business" issues

such as repatriation of currencies, the ability to select handling agents at foreign airports, and the use of computer reservations systems). A report commissioned by the air trade group international air transport association (IATA) finds that liberalisation of ASAs have "generally fostered greater competition, resulting in lower fares for travellers, greater numbers of people travelling, greater choice of airlines and routes and improved service levels (higher frequencies, etc.)" We obtain data on the date of ASAs from various government websites of the countries in our sample and news articles.[22]

We select a sample for this analysis that keeps the choice of investment by international VCs exogenous to the liberalization of travel between the country of the international VC and that of the entrepreneurial firm. In particular, we take the set of venture rounds that either had only local VC investments, or had international VC investments and no bilateral ASA between the country of the entrepreneurial firm and that of the international VC, or had international VC investments and the ASA between the country of the international VC and that of the entrepreneurial firm was signed within a three year period after the international VC investment.[23] For this subsample, we can reasonably charactarize the investment by international VCs as exogenous to the signing of the ASA.

The analysis is designed to test how the perofrmance of international VC backed firms changes in countries that sign an ASA after the international VC investment relative to countries that do not sign an ASA with the country of the international VC. Thus, we conduct our logit exit regressions with interaction terms between a dummy variable for the establishment of an ASA between the country of the international VC and that of the entrepreneurial firm (*ASA*) and the *Local and International VC dummy* as well as the *International VC dummy*. If international VCs indeed face costs that are related to the lack of geographic proximity, we expect to see that international VCs will perform better if an ASA is signed after they invest in the entrepreneurial firm.

The results of this analysis are reported in Table 10. As before, the *Local and International VC dummy* is positive and statistically significant in the sample of emerging nations. More importantly, the interaction term between the *International VC dummy* (which reflects only international VCs

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[22]Another advantage of using such bilateral agreements is that their timing is made exogenous due to the politics and bureaucracy involved in negotiations of such treaties.

[23]We also conduct this analysis using a two year cutoff and our results are qualitatively similar to those reported here.

investing in a round) and *ASA* is positive and statistically significant in the emerging nations sample. Since the base group is the set of VC rounds where only international VCs invest and there is no ASA, this result indicates that international VCs are more likely to be successful if there are enhanced travel options between their country and the country of the entrepreneurial firm that they invest in.

Thus, the results in this section supports the idea that international VCs' lack of proximity is an important disadvantage that drives them to choose local syndication. When barriers to travel are decrease exogenously, international VC backed investments are more likely to be successful. By itself, this result suggests that improvements in infrastructure can enhance outcomes in the context of entrepreneurial finance. Further, this result rules out the possibility that our geographic proximity results are driven by endogeneity between the international VC's choice to invest in a firm located in a particular country and successful exit outcomes of those investments.

5.2.3 Local VCs and VC Expertise: Learning by Local VCs and Local and International VC Syndication

In this section, we test the conjecture that local VCs need to syndicate with international VCs to mitigate their lack of VC skills. We start by analyzing whether local VCs benefit from syndicating with international VCs because they are able to mitigate their lack of venture capital skills and expertise through such collaboration. We test this conjecture by analyzing how the choice between investment by purely local VCs versus local and international venture capital syndication depends on the extent of prior interaction of the local VC with international VCs. Specifically, if local VCs indeed lack venture capital skills and can learn such skills through multiple interactions with international VCs, then local VCs with a greater extent of prior syndication experience with international VCs will be less likely to co-invest again with international VCs. Our main analysis variable is a dummy variable, called high prior syndication, which is one if the number of rounds in which the local VCs syndicated with international VCs is greater than the sample median, and zero otherwise. We use a dichotomous variable since learning by the local VC is unlikely to be linear in the number of interactions, but rather a process that takes multiple interactions.

In Table 11, we report logit regression results for the choice in a particular round between purely local and local-international VC syndication. Thus, the dependent variable is one if the round has

both local and international VCs, and zero if it has only local VCs. Thus, the sample excludes purely international venture capital investments. Here, as in the previous section, the data is analyzed at the round level since syndication choices are made at the round level.[24] We find that the coefficient on the *High prior syndication dummy* is negative and statistically significant, suggesting that local VCs that have had a greater extent of prior interaction with international VCs are less likely to syndicate (again) with international VCs. This result suggests that a potential benefit of syndicating with international VCs, which is their expertise in venture capital investing, is greater for local VCs that have syndicated to a lesser extent with international VCs in the past. The results are statistically and economically significant for both emerging and non-US developed nations. In particular, local VCs that have a greater extent of prior syndication experience with international VCs are associated with a 10 percentage point reduction in the probability of syndication with international VCs in emerging nations and with a 19.1 percentage point reduction in the probability of syndication with international VCs in non-US developed nations. In the sample of developed nations including the US, however, prior syndication experience of local VCs does not seem to affect future syndication probability. This is expected because US VCs (that may be driving the results) are conceivably more sophisticated and less likely to need syndication with international VCs to learn venture capital skills.

We also analyze whether the relation between investment by purely local VCs and successful exit outcomes depends on the extent of prior syndication experience of local VCs with international VCs. We thus conduct logit regressions with exit outcome as the dependent variable and the *High prior syndication dummy*, interaction between the *Local VC dummy* and the *High prior syndication dummy*, *Local VC dummy*, and other controls as independent variables. The results, reported in Table 12, show a negative coefficient on the *Local VC dummy* in the emerging nations sample, indicating that investments by purely local VCs underperform those by syndicates of local and international VCs, consistent with prior results. We find a positive coefficient on the interaction term suggesting that investments made by purely local venture capital syndicates are more likely to be successful if they have had greater syndication experience with international VCs in the past.

In summary, the results in this section indicate that the probability that a local VC will syndi-

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[24] The US and UK venture capitalist dummies are dropped in these regressions because of collinearity (they predict the outcome variable perfectly).

cate with international VCs is negatively related to the extent of the local VC's prior syndication experience with international VCs, consistent with hypothesis (H5). Further, local VCs that syndicate with international VCs to a greater extent are also more likely to be successful investing on their own (H6). Our results are significant for both emerging and developed nations. These results suggests that local VCs that have a lesser extent of prior syndication experience with international VCs may be more disadvantaged in terms of their venture capital skills, and thus need to syndicate with international VCs to overcome this disadvantage.

5.3 The Development of Local Venture Capital Markets and Successful Exit of Local VC Backed Firms

We also consider how a greater extent of local venture capital market development (in the sense of greater extent of investments made by local VCs) can affect the performance of local VC backed firms. We create a dummy variable called *Developed local VC market* that is one if the number of entrepreneurial firms receiving VC investment from local VCs is greater than the sample median, and zero otherwise. We then interact this measure with our dummy variables for *International VC dummy*, *Local VC dummy*, and *Local and International VC dummy* in the entrepreneurial firm level logit exit regressions.

The results of this analysis is reported in Table 13. We find that the *Local and International VC dummy* has a positive and statistically significant association with successful exit as before, and this result holds for both emerging and developed nations. Further, the interaction term between the *Local VC dummy* and the *Developed local VC market dummy* is also positive and significant, suggesting that local VCs are more successful in countries with a greater extent of local VC experience. Note that this interaction term, as well as the interaction term between international VC dummy and developed local VC market dummy are positive and statistically significant in the developed nations (including the US sample). Since these results do not show up in the sample of developed nations excluding the US, we interpret these results as being driven by US based entrepreneurial firms.

An interesting policy implications of the results in the two sections above is that state and national governments need to promote policies that seed a local VC industry as well as welcome international VCs in their markets. Over time, local VCs gain experience by investing more and

syndicating with international VCs and are capable of being successful on their own.

5.4 Early Stage Investments in International Venture Capital

In this section, we analyze whether and to what extent the syndicate structure of international venture investments are associated with the probability of venture capital investment in early stage entrepreneurial firms. In Table 14, we report the results of logit regressions where the dependent variable is an early stage investment dummy which is one if the investment is in a "Startup" or "Seed" stage entrepreneurial firm, and zero otherwise. Such firms face a greater extent information asymmetry and uncertainty than firms that are in later stages. Since the decision to invest in early stage firms takes place in the first round of financing, we run our analysis using only first round observations and variables.

We find that syndicates composed of purely international VCs are less likely to invest in early stage firms than those composed of purely local or combined local and international VCs. This result is significant not only for entrepreneurial firms in emerging nations but also for those in developed nations. Further, the economic significance of the *Local VC dummy* is higher for entrepreneurial firms in emerging nations than those in developed nations. The presence of a purely local VC is associated with an 8.2 percentage point increase in the probability of investment in an early stage entrepreneurial firm in emerging nations compared to purely international VCs. This figure is 3.65 percentage points for entrepreneurial firms in developed nations (excluding the US) and 4 percentage points for entrepreneurial firms in developed nations including the US.

The economic significance of the *Local and international VC dummy* is also higher in emerging nations than in developed nations. The presence of local and international VCs is associated with a 6.9 percentage point increase in the probability of early stage investment in emerging nations, and with a 4.12 percentage point increase in developed nations (excluding the US). When we include the US in the developed nation sample, the probability of early stage investment increases by 3.22 percentage points when the syndicate consists of local and international VCs compared to when the syndicate consists of only international VCs. Thus, we can estimate that the presence of purely international syndicates reduces the probability of early stage venture capital investment by 15.1, 7.77, and 7.22 percentage points in emerging nations, developed nations excluding the US, and developed nations including the US, respectively. That is, purely international VC syndicates are

the least likely to invest in early stage firms, consistent with hypothesis (H7). Further, this effect is stronger in emerging nations than in developed nations. These results are consistent with the idea that international VCs face significant disadvantages related to lack of proximity, in particular lower local market knowledge and difficulties in monitoring. Since these disadvantages are greater for early stage entrepreneurial firms, international VCs are less likely to invest in such firms.

5.5 Staging in International Venture Capital Investments

In this section, we analyze staging patterns in international venture investments. In particular, we analyze the effect of syndicate structure on staging over multiple rounds. We use the number of rounds over which the entrepreneurial firm receives venture capital financing as our measure of staging. Since this is a count variable, we conduct Poisson regressions.

In Table 15, we analyze the extent of staging by syndicates composed of purely local, purely international, or the combination of local and international VCs. As in the previous section, we define our independent variables using the first round data to predict the extent of staging. We find that purely local VCs in emerging nations are likely to stage venture investments over fewer rounds than purely international VCs, consistent with hypothesis (H8). Economically, entrepreneurial firms with investment by purely local VCs in emerging nations are associated with 7.36% fewer rounds than those with investments made by purely international VCs. This result is consistent with the idea that local VCs do not need to produce information about their investments through staging since they already have better information about the entrepreneurial firm and market in which the firm operates.

5.6 Additional Robustness Checks

We also conduct additional robustness checks of our results. It may be argued that our results on the efficacy of syndicates of international and local VCs in creating value for entrepreneurial firms are driven primarily by the nature of the lead VC (i.e., whether the lead VC is local or international). In unreported tests, we do not find that the lead VC designation has any significant impact on the effect of syndication type on exit. Further, in unreported tests, we also run our analysis after excluding the internet bubble period (1998 to 2000), and find that our results are statistically and economically consistent with the results that we report in the paper. Thus, our

results are not driven by internet bubble period investments made by VCs.

6   Conclusion

We analyze the effectiveness of international versus local VCs in adding value to entrepreneurial firms. Our findings are as follows. Venture capital investments by syndicates composed of international and local VCs are more successful than venture capital investments by syndicates composed of purely international or purely local VCs. This result holds even after controlling for the potential endogenous selection of entrepreneurial firms by international VCs. Farther away international VCs are more likely to syndicate with local VCs, potentially to mitigate their deficiencies related to the lack of knowledge of local markets and higher monitoring costs. Consistent with this, we find that syndication with local VCs mitigates the negative association between international VC distance and the successful outcome of the venture capital investment. However, the benefit of syndicating with local VCs increases at a lower rate as the distance between the international VCs and the entrepreneurial firm increases. The above results are stronger for venture capital investments in emerging nations than for those in developed nations, which is consistent with the notion that the difficulties in monitoring and the deficiencies in local knowledge faced by international VCs are more important in emerging markets. We also find that the signing of an air service agreement between the country of the international VC and that of the entrepreneurial firm increases the probability successful exit of firms receiving international VC backing prior to the signing of the ASA. Thus, an exogenous shift in effective travel ease (through the ASA) enhances the success of international VCs, supporting the idea that international VCs disadvantages arise in large part due to their lack of proximity to their investments.

We find that local VCs that have a greater extent of prior syndication experience with international VCs have higher success rates (when they invest alone) than local VCs that have a lesser extent of syndication experience with international VCs. Further, local VCs that have a greater extent of prior syndication experience with international VCs are less likely to syndicate again with international VCs. We also find that local VCs are more likely to be successful investing by themselves in markets where local VCs have had substantial prior investment experience. These results suggest that an important motivation for local VCs to syndicate with international VCs is

to overcome their lack of venture capital investing skills.

Finally, we find that syndicates composed of purely international VCs are less likely to invest in early stage firms compared to syndicates composed either of purely local or a combination of local and international VCs. Early stage investments are characterized by a greater extent of information asymmetry and uncertainty and thus can exacerbate the disadvantages faced by international VCs due to their lack of proximity to the entrepreneurial firm. Moreover, purely local VCs are associated with a lower extent of staging, consistent with the notion that purely local VCs face lower monitoring costs due to their proximity to the entrepreneurial firm.

Overall, our results indicate that the greater expertise of international VCs and the superior local knowledge and lower monitoring costs of local VCs are both important in obtaining successful outcomes and backing by syndicates consisting of the two kinds of VCs enable entrepreneurial firms to benefit from their strengths.

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Table 1: Venture Capital Investments in Emerging and Developed Nations

This table reports the distribution of venture capital financed firms by the venture capital backed entrepreneurial firm's nation. The frequencies and respective percentages are tabulated separately for emerging and developed nations. We categorize emerging nations as all non-high income nations and developed nations as all high income nations, as classified by the World Bank. The World Bank classifies economies according to the GNI per capita, calculated using the World Bank Atlas method. According to this definition, high income nations are those that had a 2008 GNI per capita of $11,906 or more.

Emerging Nations	Frequency	Percentage	Developed Nations	Frequency	Percentage
Argentina	15	0.79	Australia	611	2.17
Brazil	154	8.14	Austria	71	0.25
China	400	21.15	Belgium	180	0.64
India	878	46.43	Canada	790	2.80
Indonesia	22	1.16	Croatia	10	0.04
Malaysia	79	4.18	Czech Republic	31	0.11
Mexico	14	0.74	Denmark	151	0.54
Nigeria	12	0.63	Finland	166	0.59
Philippines	20	1.06	France	833	2.96
Poland	81	4.28	Germany	543	1.93
Romania	34	1.80	Greece	10	0.04
Russia	55	2.91	Hong Kong	138	0.49
South Africa	39	2.06	Hungary	58	0.21
Thailand	76	4.02	Iceland	19	0.07
Vietnam	12	0.63	Ireland	188	0.67
			Israel	389	1.38
			Italy	106	0.38
			Japan	433	1.54
			Luxembourg	18	0.06
			Netherlands	143	0.51
			New Zealand	72	0.26
			Norway	101	0.31
			Portugal	86	0.31
			Singapore	168	0.60
			South Korea	1,407	4.99
			Spain	271	0.96
			Sweden	317	1.12
			Switzerland	133	0.47
			United Kingdom	1,645	5.84
			United States	19,092	67.75

Table 2: Description of Data

This table reports summary statistics for venture capital backed entrepreneurial firms in emerging and developed nations. Panel A reports the year of first round of financing of VC-backed firms in our sample. Panel B reports the industry distribution of VC-backed firms in our sample. Panel C reports means and medians of the following variables used in our analysis: *Local VC dummy* is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy* is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *US VC Dummy* is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy* is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise; *Average Intl. VC distance* is the average distance, in thousands of miles, between the entrepreneurial firm's nation and the nation of each international venture capitalist investing in the entrepreneurial firm; *VC investment amount* is the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs* is the total number of venture capitalists that invest in the entrepreneurial firm; *VC age* is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds* is the number of the rounds of venture capital obtained by the entrepreneurial firm.

Panel A: Year Distribution of VC-Backed Firms				
	Emerging Nations		Developed Nations	
Year	Frequency	Percentage	Frequency	Percentage
1989	4	0.21	552	1.96
1990	3	0.16	388	1.38
1991	23	1.22	276	0.98
1992	35	1.85	405	1.44
1993	25	1.32	337	1.20
1994	42	2.22	398	1.41
1995	55	2.91	880	3.12
1996	86	4.55	1,314	4.66
1997	85	4.49	1,388	4.93
1998	73	3.86	1,599	5.67
1999	126	6.66	2,951	10.47
2000	354	18.72	5,075	18.01
2001	169	8.94	2,281	8.10
2002	123	6.50	1,299	4.61
2003	137	7.24	1,191	4.23
2004	121	6.40	1,343	4.77
2005	121	6.40	1,569	5.57
2006	94	4.97	1,643	5.83
2007	99	5.24	1,727	6.13
2008	116	6.13	1,563	5.55

Panel B: Industry Distribution of VC-Backed Firms

Industry	Emerging Nations		Developed Nations	
	Frequency	Percentage	Frequency	Percentage
Biotechnology	42	2.22	1,712	6.08
Communications and Media	143	7.56	2,590	9.19
Computer Hardware	77	4.07	1,082	3.84
Computer Software and Services	209	11.05	5,534	19.64
Consumer Related	212	11.21	1,810	6.42
Industrial/Energy	182	9.62	1,520	5.39
Internet Specific	333	17.61	6,029	21.39
Medical/Health	93	4.92	2,710	9.62
Other Products	468	24.75	3,308	11.74
Semiconductors/Other Elect.	132	6.98	1,885	6.69

Panel C: Summary Statistics for Important Variables

		Emerging Nations	Developed Nations	Difference
Local VC dummy	Mean	0.463	0.706	-0.242***
Local and international VC dummy	Mean	0.179	0.216	-0.036***
US VC dummy	Mean	0.390	0.813	-0.423***
UK VC dummy	Mean	0.037	0.098	-0.061***
Average Intl. VC distance	Mean	2.85	1.22	1.630***
(thousands of miles)	Median	0.729	0.000	0.729***
VC investment amount	Mean	12281.23	19881.70	-7600.47***
(thousands US$)	Median	2340.00	5999	-3659.00***
Number of VCs	Mean	1.617	3.278	-1.662***
	Median	1.000	2.000	-1.000***
VC age	Mean	6.561	9.211	-2.650***
	Median	5.500	9.000	-3.500***
Number of rounds	Mean	1.487	2.624	-1.137***
	Median	1.000	2.000	-1.000***
	Observations	1891	28180	

Table 3: Effect of International VC Syndication on the Probability of Exit

This table reports the results of logit estimation with a dummy as the dependent variable which equals one if the entrepreneurial firm has a successful exit (i.e., IPO or M&A) and zero otherwise. The independent variables are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the first round of financing, firm financing stage, the firm's industry, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
Local VC dummy	0.068	-0.156	0.084
	[0.093]	[0.138]	[0.092]
Local and international VC dummy	0.549***	0.174	0.008
	[0.130]	[0.144]	[0.124]
Firm country GDP	-2.085***	-0.390	-0.522***
	[0.388]	[0.692]	[0.166]
VC investment amount	0.293***	0.237***	0.308***
	[0.040]	[0.029]	[0.030]
Number of VCs	0.024	0.057**	0.040***
	[0.035]	[0.028]	[0.006]
VC age	0.000	-0.003	-0.005
	[0.032]	[0.017]	[0.006]
Number of rounds	0.001	-0.107***	-0.071***
	[0.030]	[0.024]	[0.014]
Stock market development	0.097	0.034	0.077**
	[0.352]	[0.127]	[0.035]
US VC dummy	-0.030	-0.064	0.136***
	[0.211]	[0.119]	[0.041]
UK VC dummy	0.495**	0.320***	0.203***
	[0.231]	[0.057]	[0.072]
Observations	1,872	9,065	28,157
Pseudo R-sq	0.127	0.160	0.168

Table 4: Effect of International VC Syndication on the Probability of Exit, Robustness checks

This table reports exit logit regressions for entrepreneurial firms located in emerging nations. The dependent variable in Column (1) is an IPO exit dummy, while those in Columns (2) and (3) are all exit (IPO or M&A) dummies. All independent variables are measured at the firm level in Columns (1) and (3), and at the round level in Column (2). The independent variables are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Round number*, which is the VC round number; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise; *Different Religion dummy,* which is a dummy variable that equals one if at least one international venture capitalists' home country major religion is different from that of the entrepreneurial firm's home country, and zero otherwise; *Different Language dummy,* which is a dummy variable that equals one if at least one international venture capitalists' home country major language is different from that of the entrepreneurial firm's home country, and zero otherwise; *Different Legal Origin dummy,* which is a dummy variable that equals one if at least one international venture capitalists' home country legal origin is different from that of the entrepreneurial firm's home country, and zero otherwise; and *Int. VC Cultural Distance*, which is the Hofstede cultural distance measure averaged across all international venture capitalists. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	Logit, IPO exits	Logit, Round level data	Logit, Culture controls
	(1)	(2)	(3)
	IPO	Exit	Exit
Local VC dummy	0.153	-0.041	0.016
	[0.155]	[0.128]	[1.224]
Local and international VC dummy	0.816***	0.240**	0.616***
	[0.176]	[0.115]	[0.140]
Different Religion dummy			-0.023
			[0.228]
Different Language dummy			0.390
			[1.146]
Different Legal Origin dummy			-0.155
			[0.243]
Int. VC Cultural distance			-0.031**
			[0.014]
Firm country GDP	-2.412***	-0.914***	-1.972***
	[0.426]	[0.303]	[0.356]
VC investment amount	0.285***	0.334***	0.254***
	[0.047]	[0.055]	[0.042]
Number of VCs	-0.036	0.010	0.010
	[0.038]	[0.038]	[0.040]
VC age	-0.010	0.000	0.004
	[0.037]	[0.032]	[0.033]
Number of rounds	0.109***		0.020
	[0.037]		[0.027]
Round number		0.060	
		[0.058]	
Stock market development	2.172***	-0.460	0.048
	[0.472]	[0.321]	[0.317]
US VC dummy	-0.111	-0.045	0.316
	[0.296]	[0.261]	[0.232]
UK VC dummy	0.538**	0.437	0.730***
	[0.210]	[0.362]	[0.220]
Observations	1,872	2,533	1,815
Pseudo R-sq	0.156	0.125	0.128

Effect of syndicate structure on exit probability (Emerging nations sample)

Table 5: The Causal Effect of International Venture Capitalist Syndication on the Probability of Exit in Emerging Nations: IV analysis

This table reports the results of bivariate probit estimations for VC-backed firms in emerging nations. The dependent variables in Columns (1) and (2) are, respectively, a dummy variable for successful exit (i.e., IPO or M&A) and *Intl. VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in a different nation than the entrepreneurial firm, and zero otherwise. The dependent variables in Columns (3) and (4) are, respectively, a dummy variable for successful exit (i.e., IPO or M&A) and *Local and intl. VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise. The independent variables are defined as follows: *Low foreign investment or ownership regulation,* which is a dummy variable that is one if country has higher than median rating for regulatory controls limiting international investment or ownership, and zero otherwise; *Low capital controls,* which is a dummy variable that is one if country has higher than the median rating for capital controls, and zero otherwise; *Number of local VC funds raised,* which is the total number of local VC funds raised in the five years prior to the VC investment in the entrepreneurial firm; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the first round of investment, firm financing stage, the firm's industry, and the firm's nation. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1) Intl. VC dummy	(2) Exit	(3) Local & Intl. VC dummy	(4) Exit
Intl. VC dummy		0.355*** [0.108]		
Local and Intl. VC dummy				0.772*** [0.256]
Low capital controls	0.323*** [0.118]		-0.038 [0.245]	
Low foreign inv. or Own. regulation	0.196 [0.180]		-0.244** [0.110]	
Number of local VC funds raised	0.036** [0.016]	0.007 [0.012]	-0.003 [0.015]	0.013 [0.011]
Firm country GDP	0.893** [0.387]	-1.338*** [0.205]	0.822*** [0.309]	-1.522*** [0.188]
VC investment amount	0.206*** [0.054]	0.143*** [0.017]	-0.027 [0.019]	0.169*** [0.022]
Number of VCs	1.277*** [0.087]	0.024 [0.023]	0.376*** [0.121]	-0.031 [0.034]
VC age	0.080*** [0.008]	-0.008 [0.019]	-0.038 [0.024]	0.004 [0.015]
Number of rounds	-0.208*** [0.072]	0.015 [0.025]	0.058* [0.032]	0.005 [0.025]
Stock market development	0.310 [0.452]	-0.021 [0.230]	-0.534** [0.232]	0.118 [0.214]
US VC dummy		-0.003 [0.121]	1.642*** [0.239]	-0.206* [0.109]
UK VC dummy		0.243 [0.155]	0.548*** [0.176]	0.175 [0.137]
Observations	1,747	1,747	1,747	1,747
Prob. > Chi sq.	0.000***		0.000***	

Table 6: The Causal Effect of International Venture Capitalist Syndication on the Probability of Exit: Natural Experiment

This table reports the results of logit regression where the dependent variable in Column (1) is *Intl. VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in a different nation than the entrepreneurial firm, and zero otherwise; and the dependent variable in Columns (2) and (3) is the dummy variable for successful exit (i.e., IPO or M&A). The sample is restricted to firms receiving venture capital financing in the six months before and seven months after terror attacks that have at least 50 casualties in major cities in India within our sample period. The independent variables are: *Post-attack period,* which is a dummy variable that is one for entrepreneurial firms whose first round of VC financing lies in the time period of six months starting from 30 days after the terror attack, and zero otherwise; *Post-attack period*India,* which is the interaction of the variable *Post-attack period* and *India*, which is a dummy variable for entrepreneurial firms located India; *Industry with high Intl. VC participation,* which is a dummy variable that is one if the prior five year number of VC deals involving international VCs in a given country and industry divided by the total prior five year number of VC deals in that country and year is greater than the sample median; *Post-attack period*India*Industry with high Intl. VC participation; Change in number of deals*, is the difference between the number of venture capital deals in a country in the post-attack period and the number of venture capital deals in the country in the pre-attack period; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the first round of investment, firm financing stage, the firm's industry, and the firm's nation. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Int. VC Participation	Exit	Exit
Post-attack period	0.137*	-0.096	-0.098
	[0.076]	[0.078]	[0.079]
Post-attack period*India	-0.434**	-0.475***	-0.256***
	[0.216]	[0.081]	[0.086]
Post-attack period*India *Industry with high Intl. VC part.			-0.722***
			[0.143]
Industry with high Intl. VC participation			-0.082
			[0.110]
Change in number of deals	-0.002**	0.000	0.000
	[0.001]	[0.001]	[0.001]
Firm country GDP	-0.332**	-0.975***	-1.021***
	[0.149]	[0.268]	[0.243]
VC investment amount	0.250***	0.264***	0.265***
	[0.040]	[0.037]	[0.038]
Number of VCs	0.303***	0.033**	0.033**
	[0.009]	[0.016]	[0.016]
VC age	-0.014	-0.007	-0.007
	[0.008]	[0.012]	[0.012]
Number of rounds	-0.055***	-0.119***	-0.117***
	[0.018]	[0.031]	[0.031]
Stock market development	0.073	0.171**	0.179**
	[0.050]	[0.083]	[0.079]
US VC dummy	4.166**	0.223*	0.234*
	[1.653]	[0.124]	[0.123]
UK VC dummy	2.697*	-0.011	-0.012
	[1.422]	[0.168]	[0.170]
Observations	6,569	6,566	6,531
Pseudo R-sq	0.455	0.221	0.221

Table 7: Effect of International VC Syndication on Post-IPO Operating Performance

This table reports the results of an OLS Regression with the post-IPO operating income to assets as the dependent variable. The independent variables are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Firm country GDP*, which is the one year lagged value of GDP of the entrepreneurial firm's country in trillions of dollars; *Assets*, which is the one year lagged value of the log of the US dollar amount of assets in the IPO year; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Stock market development*, which is the one year lagged value of the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, number of years from IPO year, IPO year, firm financing stage, the firm's minor industry classification group, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
Local VC dummy	-0.136	0.090	0.125**
	[0.150]	[0.064]	[0.056]
Local and international VC dummy	0.174*	0.100*	0.091*
	[0.089]	[0.060]	[0.055]
Firm country GDP	0.438***	-0.534	0.036
	[0.153]	[0.460]	[0.045]
Assets	0.031	0.078***	0.120***
	[0.020]	[0.016]	[0.014]
Number of VCs	0.122***	-0.010	0.001
	[0.040]	[0.009]	[0.005]
VC age	-0.013**	0.004	0.003
	[0.006]	[0.007]	[0.005]
Number of rounds	0.044	-0.024	-0.023***
	[0.028]	[0.020]	[0.008]
Stock market development	-0.095	0.042	-0.036***
	[0.090]	[0.065]	[0.011]
US VC dummy	-0.398**	-0.127*	-0.160***
	[0.191]	[0.069]	[0.054]
UK VC dummy	0.396***	0.039	-0.009
	[0.144]	[0.065]	[0.045]
Observations	157	561	1,699
Adjusted R-sq	0.505	0.462	0.349

Table 8: Effect of International Venture Capitalist Distance on the Probability of Syndication with Local Venture Capitalists

This table reports the results of a logit estimation with a dummy as the dependent variable which equals one if the syndicate consists of international and local venture capitalists and zero if the syndicate consists of purely international venture capitalists. Each observation represents a unique firm round. The independent variables are: *International VC distance*, which is the log of one plus the average distance in thousands of miles between the entrepreneurial firm's nation and the nation of each international venture capitalist investing in the entrepreneurial firm round; *International VC distance^2*, which is square of *International VC distance*; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Round number*, which is the VC round number; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy*, which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. The regression is also separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1) Emerging Nations	(2) Developed Nations (excl. US)	(3) Developed Nations (incl. US)
International VC distance	1.811***	1.041	5.626**
	[0.511]	[0.949]	[2.384]
International VC distance^2	-0.270*	0.006	-1.680*
	[0.165]	[0.314]	[0.911]
Firm country GDP	0.314	-0.043	-0.173
	[1.223]	[0.911]	[0.152]
VC investment amount	-0.265***	-0.226***	-0.061
	[0.049]	[0.037]	[0.073]
Number of VCs	1.094***	1.400***	0.652***
	[0.385]	[0.099]	[0.171]
VC age	-0.071**	-0.086***	-0.121***
	[0.033]	[0.024]	[0.022]
Round number	-0.133	-0.062	-0.035**
	[0.113]	[0.047]	[0.017]
Stock market development	-0.451	0.153	-0.056*
	[0.834]	[0.228]	[0.033]
US VC dummy	0.719*	1.078*	2.369
	[0.438]	[0.591]	[1.924]
UK VC dummy	0.222	1.210	1.771*
	[0.402]	[1.158]	[1.031]
Observations	1,390	8,635	22,204
Pseudo R-sq	0.329	0.458	0.580

**Table 9: Effect of Local Syndication on the Relation between
International Venture Capitalist Distance and the Probability of Exit**

This table reports the results of logit estimation with exit success (i.e., IPO or M&A) as the dependent variable. The independent variables are: *International VC distance*, which is the log of one plus the average distance in thousands of miles between the entrepreneurial firm's nation and the nation of each international venture capitalist investing in the entrepreneurial firm round; *Local and international VC dummy*, a variable which equals one if the round syndicate consists of international and local venture capitalists and zero if the syndicate consists of purely international venture capitalists; *Intl. VC distance*Local and Intl. VC dummy*; *International VC distance²*, which is square of *International VC distance*; *Intl. VC distance²*Local and Intl. VC dummy*; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Round number*, which is the VC round number; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
International VC distance	-0.795**	-0.349**	-0.017
	[0.395]	[0.164]	[0.104]
Local and international VC dummy	-0.324	-0.104	-0.071
	[0.547]	[0.094]	[0.055]
Intl. VC distance*Local and Intl. VC dummy	1.952*	-0.309	-0.065
	[1.007]	[0.271]	[0.240]
International VC distance^2	0.226	-0.014	-0.088
	[0.184]	[0.081]	[0.056]
Intl. VC distance^2*Local and Intl. VC dummy	-0.899**	0.213**	0.096
	[0.400]	[0.097]	[0.104]
Firm country GDP	-0.440	0.447	-0.184**
	[0.330]	[0.933]	[0.085]
VC investment amount	0.365***	0.221***	0.206***
	[0.053]	[0.027]	[0.018]
Number of VCs	-0.024	0.065**	0.019***
	[0.040]	[0.031]	[0.007]
VC age	-0.016	0.004	0.006
	[0.029]	[0.014]	[0.005]
Round number	0.026	-0.008	0.015
	[0.050]	[0.042]	[0.013]
Stock market development	0.057	0.170**	0.002
	[0.490]	[0.081]	[0.021]
US VC dummy	0.398	0.330**	0.075
	[0.267]	[0.152]	[0.086]
UK VC dummy	0.491	0.339***	0.163
	[0.357]	[0.084]	[0.100]
Observations	1,432	8,635	22,204
Pseudo R-sq	0.141	0.135	0.145

Table 10: Effect of Air Service Agreements on International VC Syndication and the Probability of Exit

This table reports the results of logit estimation with a dummy as the dependent variable, which equals one if the entrepreneurial firm has a successful exit (i.e., IPO or M&A) and zero in the case of no exit. The independent variables are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm round are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm round is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Local and international VC dummy*ASA* this is the interaction of the Local and international VC dummy variable and a dummy for if an air traffic agreement was signed between the entrepreneurial firm's nation and that of at least one of the international VCs syndicating in the round; *International only VC dummy*ASA*, the interaction of a dummy if only international VCs are syndicating in a particular VC deal round and a dummy for if an air traffic agreement was signed between the entrepreneurial firm's nation and that of at least one of the international VCs syndicating in the round; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Round number,* which is the VC round number; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. The regression is also separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
Local VC dummy	0.130	-0.029	-0.017
	[0.192]	[0.121]	[0.132]
Local and international VC dummy	0.717***	-0.063	-0.168
	[0.168]	[0.151]	[0.142]
Local and international VC dummy*ASA	0.316	0.057	0.036
	[0.240]	[0.245]	[0.065]
International only VC dummy* ASA	0.571**	0.168	-0.038
	[0.242]	[0.169]	[0.202]
Firm country GDP	-1.560***	-0.005	-0.127*
	[0.278]	[0.981]	[0.073]
VC investment amount	0.347***	0.288***	0.260***
	[0.063]	[0.036]	[0.007]
Number of VCs	0.108***	0.074*	0.036***
	[0.040]	[0.038]	[0.003]
VC age	0.027	0.016	0.010***
	[0.051]	[0.011]	[0.002]
Round number	0.060	-0.007	0.010
	[0.089]	[0.041]	[0.007]
Stock market development	-0.803	-0.059	0.029
	[0.549]	[0.252]	[0.022]
US VC dummy	-0.817**	-0.046	0.178***
	[0.319]	[0.142]	[0.052]
UK VC dummy	0.155	0.256***	0.164**
	[0.409]	[0.080]	[0.074]
Observations	1,870	10,943	64,204
Pseudo R-sq	0.148	0.158	0.157

**Table 11: Effect of Local Venture Capitalists' Prior International
Syndication Experience on the Probability of Syndication with International Venture Capitalists**

This table reports the results of logit estimations where the dependent variable equals one if the syndicate is composed of local and international venture capitalists and zero if the syndicate is composed purely of local venture capitalists. Each observation represents a unique firm round. The independent variables are: *High prior syndication dummy*, which equals one if the prior number of rounds over which the local venture capitalist has syndicated with international venture capitalists is greater than the sample median, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Round number*, which is the VC round number; and *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
High prior syndication dummy	-1.335***	-1.219***	0.255
	[0.504]	[0.136]	[0.442]
Firm country GDP	1.736	1.572	0.084
	[1.333]	[1.217]	[0.158]
VC investment amount	0.615***	0.612***	0.547***
	[0.085]	[0.062]	[0.030]
VC age	0.324***	0.261***	0.001
	[0.071]	[0.037]	[0.086]
Round number	-0.147*	0.016	-0.034***
	[0.085]	[0.055]	[0.009]
Stock market development	2.365	-0.730***	-0.070**
	[1.528]	[0.233]	[0.033]
Observations	1,414	9,669	62,811
Pseudo R-sq	0.375	0.338	0.187

Table 12: The Effect of Local Venture Capitalists' Prior International Syndication Experience on the Probability of Exit

This table reports the results of logit estimation with exit success (i.e., IPO or M&A) as the dependent variable. The independent variables are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalist investing in the entrepreneurial firm round are located in the same country as the entrepreneurial firm, and zero otherwise; *High prior syndication dummy*, which equals one if the prior number of rounds over which the local venture capitalist has syndicated with international venture capitalists is greater than the sample median, and zero otherwise *Local VC dummy*High prior syndication*; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Round number*, which is the VC round number; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment, firm financing stage, the firm's industry, and the firm's nation. The regression is also separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1) Emerging Nations	(2) Developed Nations (excl. US)	(3) Developed Nations (incl. US)
Local VC dummy	-0.668**	-0.252	0.006
	[0.317]	[0.168]	[0.058]
High prior syndication dummy	-0.044	-0.123	-0.031
	[0.224]	[0.128]	[0.060]
Local VC*High prior syndication	0.841***	0.393**	0.123*
	[0.161]	[0.162]	[0.067]
Firm country GDP	-2.128***	-0.415	-0.109
	[0.290]	[0.953]	[0.076]
VC investment amount	0.350***	0.278***	0.258***
	[0.085]	[0.036]	[0.006]
Number of VCs	-0.055	0.033	0.027***
	[0.114]	[0.030]	[0.002]
VC age	0.005	0.011	0.006**
	[0.051]	[0.010]	[0.003]
Round number	0.110	0.012	0.013**
	[0.069]	[0.043]	[0.006]
Stock market development	-2.007**	-0.027	0.029
	[0.876]	[0.253]	[0.022]
UK VC dummy	0.495	0.140	0.103*
	[0.473]	[0.132]	[0.059]
US VC dummy	-0.199	-0.077	0.123***
	[0.517]	[0.189]	[0.042]
Observations	1,652	10,815	64,622
Pseudo R-sq	0.185	0.158	0.156

Table 13: Effect of International VC Syndication and Local VC market development on the Probability of Exit

This table reports the results of logit estimation with a dummy as the dependent variable, which equals one if the entrepreneurial firm has a successful exit (i.e., IPO or M&A) and zero in the case of no exit. The independent variables are: *International VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are not located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Developed local VC market,* which is a dummy variable that is one if the total number of companies getting financing from at least one local VC is greater than the sample median; *International VC dummy*Developed local VC market; Local and international VC dummy*Developed local VC market*; *Local VC dummy*Developed local VC market,* where *Local VC dummy* is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, which the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Number of rounds*, which is the number of the rounds of venture capital that the entrepreneurial firm receives; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, firm financing stage, the firm's industry, and the firm's nation. The regression is also separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
International VC dummy	-0.147	0.115	0.035
	[0.158]	[0.160]	[0.114]
Local and international VC dummy	0.700***	0.459***	0.134**
	[0.236]	[0.160]	[0.057]
Intl. VC* Developed local VC market	0.575	0.143	0.453*
	[0.363]	[0.193]	[0.262]
Local and Intl. VC dummy* Developed local VC market	-0.042	-0.280	0.283
	[0.226]	[0.201]	[0.281]
Local VC dummy* Developed local VC market	0.438***	-0.018	0.685***
	[0.130]	[0.166]	[0.235]
Firm country GDP	-2.326***	-0.318	-0.603***
	[0.363]	[0.663]	[0.175]
VC investment amount	0.290***	0.234***	0.307***
	[0.040]	[0.029]	[0.031]
Number of VCs	0.029	0.057**	0.042***
	[0.035]	[0.028]	[0.008]
VC age	-0.001	-0.003	-0.005
	[0.032]	[0.017]	[0.006]
Number of rounds	0.006	-0.112***	-0.067***
	[0.032]	[0.025]	[0.016]
Stock market development	0.214	0.052	0.030
	[0.369]	[0.128]	[0.023]
US VC dummy	-0.030	-0.052	-0.005
	[0.211]	[0.116]	[0.047]
UK VC dummy	0.491**	0.345***	0.176**
	[0.243]	[0.061]	[0.075]
Observations	1,872	9,065	28,157
Pseudo R-sq	0.129	0.161	0.169

Table 14: Effect of International VC Syndication on the Financing of an Early Stage Entrepreneurial Firm

This table reports the results of logit estimation with the early stage dummy as the dependent variable, which equals one if entrepreneurial firm is seed or startup level firm in its first round of financing, and zero otherwise. The independent variables (based on first round data) are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the investment round, the firm's industry, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
Local VC dummy	0.622***	0.280**	0.268***
	[0.124]	[0.133]	[0.080]
Local and international VC dummy	0.480*	0.303***	0.202
	[0.271]	[0.111]	[0.124]
Firm country GDP	1.080	-0.481	0.037
	[0.918]	[0.836]	[0.084]
VC investment amount	-0.406***	-0.363***	-0.446***
	[0.039]	[0.048]	[0.032]
Number of VCs	0.023	0.036	0.133***
	[0.130]	[0.044]	[0.023]
VC age	0.008	-0.040**	-0.003
	[0.023]	[0.018]	[0.011]
Stock market development	-0.006	-0.011	-0.097***
	[0.867]	[0.216]	[0.033]
US VC dummy	0.454**	0.409*	0.157
	[0.224]	[0.214]	[0.106]
UK VC dummy	-0.458	-0.215	-0.161
	[0.628]	[0.135]	[0.128]
Observations	1,816	9,075	28,167
Pseudo R-sq	0.164	0.124	0.108

Table 15: Effect of International VC Syndication on the Number of Financing Rounds

This table reports the results of Poisson regressions with the total number of VC financing rounds as the dependent variable. The independent variables (based on first round data) are: *Local VC dummy,* which is a dummy variable which equals one if all venture capitalists investing in the firm are located in the same nation as the entrepreneurial firm, and zero otherwise; *Local and international VC dummy,* which is a dummy variable which equals one if at least one venture capitalist investing in the entrepreneurial firm is located in the same country as the entrepreneurial firm and at least one venture capitalist is located outside the entrepreneurial firm's country, and zero otherwise; *Firm country GDP*, which is the GDP of the entrepreneurial firm's country in trillions of dollars; *VC investment amount*, which is the log of the total amount of venture capital invested in the entrepreneurial firm, in thousands of US dollars; *Number of VCs*, the total number of venture capitalists that have invested in the project; *VC age*, which is the average age of all venture capitalists investing in an entrepreneurial firm; *Stock market development*, which is the entrepreneurial firm nation's total stock market capitalization in trillions of US dollars; *US VC Dummy*, which is a dummy variable that equals one if at least one US venture capitalist invests in the firm, and zero otherwise; *UK VC Dummy,* which is a dummy variable that equals one if at least one UK venture capitalist invests in the firm, and zero otherwise. Fixed effects are included for the year of the first round of financing, firm financing stage, the firm's industry, and the firm's nation. The regression is separately estimated for investments in emerging nations, developed nations excluding the US, and developed nation including the US. Heteroskedasticity corrected robust standard errors, which are clustered on the firm's nation, are in brackets. The regressions are estimated with an intercept term. ***, **, and * represent statistical significance at the 1, 5, and 10 percent levels, respectively.

	(1)	(2)	(3)
	Emerging Nations	Developed Nations (excl. US)	Developed Nations (incl. US)
Local VC dummy	-0.071***	-0.075	-0.020
	[0.026]	[0.046]	[0.026]
Local and international VC dummy	-0.103	-0.042	-0.053
	[0.068]	[0.041]	[0.033]
Firm country GDP	0.392***	0.079	0.051**
	[0.075]	[0.168]	[0.026]
VC investment amount	0.014*	0.045***	0.001
	[0.008]	[0.013]	[0.014]
Number of VCs	0.053*	0.049***	0.050***
	[0.028]	[0.010]	[0.004]
VC age	0.007**	0.010***	0.010***
	[0.003]	[0.002]	[0.001]
Stock market development	-0.194**	0.001	-0.028***
	[0.096]	[0.065]	[0.008]
US VC dummy	0.064	-0.087***	0.021
	[0.040]	[0.031]	[0.026]
UK VC dummy	0.070	-0.011	0.017
	[0.115]	[0.041]	[0.032]
Observations	1,891	9,088	28,180
Prob. > Chi sq.	0.000***	0.000***	0.000***