Syndication of VCPE Investments : Evidence from the Indian Infrastructure Sector

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Abstract

In this paper, I examined the syndication of VCPE investments in the Indian infrastructure sector. Using a sample of 501 deals from 160 VCPE funds that happened during 2004 to 2013, the findings indicated that syndication was more pronounced when VCPE funds faced higher risk, and requirement of financial and human capital was larger. This study strongly supported the capital motive of syndication because the total size of investment was significantly higher in syndicated investments than in stand-alone investments. Moreover, I found that higher experienced VCPE funds were more open to syndication. Regression analysis of VCPE syndication indicated that due to less acquaintance with the Indian infrastructure sector and business environment, foreign VCPE investors faced higher risks and ,therefore, were more inclined to involve other VCPE funds to share knowledge base resources.

Keywords: **venture capital, private equity, syndication, infrastructure**

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VCPE investments (venture capital and private equity investments) in infrastructure projects have increased considerably over the last few years and have become an important investment tool for financing the infrastructure sector (Gemson, Gautami, & Rajan, 2012; Kingcombe, 2011; Weisman, 1996). In addition, VCPE investors are known to provide technical skills, managerial benefits, design strategy, and manage to reduce information asymmetry that exists in infrastructure projects (Engel & Stiebale, 2009). VCPEs typically employ key personnel, negotiate with suppliers, give advice to the investee firms on strategic decisions, help in structuring mergers, acquisitions, and initial public offerings (IPO's), and sometimes are involved in the day to day operating activities of a firm (Florida & Kenny, 1988).

Infrastructure projects pose unique, and at times, multiple risks to project financers. They are complex, highly capital intensive, and by nature, have a long gestation period. "The nature of infrastructure projects and their inherent complexities make them different from traditional industrial projects with which the financial institutions have been familiar, thereby leading to difficulty in appraisal and risk assessment" (p.7, Sandipan, 1996). Due to capital market imperfections, infrastructure financing and financing costs tend to be higher (Esty, 2004).

Investment in Indian infrastructure is likely to rise from 7.55% of the GDP in the Eleventh Five Year Plan to 9.95% of the GDP during the Twelfth Five Year Plan (Planning Commission, Government of India, 2012). The Government of India has targeted to increase the infrastructure investment from US$ 500 billion in the Eleventh Five Year Plan to US$ 1 trillion in the Twelfth Five Year Plan (Ministry of Finance, Government of India, 2014). Historically, infrastructure financing was entirely in the hands of the government, and depended on budgetary allocation. Given the huge requirement, the government is unable to finance all the infrastructure requirements alone. Due to the long gestation period, commercial banks face asset liability mismatch. Moreover, current lending rules, sectoral caps, and underdeveloped bond markets further limit banks' ability to finance infrastructure projects. To create a better match between long term- enduring assets and short term liabilities, the Government of

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India set up the Indian Infrastructure Financing Companies Limited (IIFCL) in 2006. However, the efforts of IIFCL are not enough, as its capacity does not cover the requirements of the infrastructure sector.

The limitation of conventional financing in the infrastructure sector highlights the role of VCPE financing. VCPE firms like ICICI Venture, IDFC-PE are taking a strong interest in infrastructure. The VCPE investment in the infrastructure sector increased from US$ 208 million in 2004 to US$ 23319 million in 2013 (Venture Intelligence Database). A survey done by Bain and Company (2011) showed that approximately half of the respondents believed that VCPE activity in the Indian infrastructure sector will grow at the rates of 25% to 50% over the next 5 years.

As compared to other projects, infrastructure investments involve huge risk, and returns are uncertain for the equity investors (Gramlich, 1994). VCPE investors get access to only residual cash flow after payment to all other investors. The existence of uncertainty and asymmetric information in the infrastructure projects has created a need for critical examination of projects and investment only in those projects that provide adequate return and strengthen their ability to raise funds (Gemson et al., 2012). VCPE investors have developed various strategies to address the risk, deal selection, agency conflict, and information asymmetry (Gompers & Lerner, 1999). Syndication of investment is one such strategy (Admati & Pfleiderer, 1994; Gemson & Rajan, 2012 ; Gompers, 1994 ; Lerner, 1994). Although syndication of VCPEs is empirically significant, it has received little attention in infrastructure setting. This paper analyzes the syndication of VCPE investments, a tool to reduce the risk and resource sharing in infrastructure projects.

Literature Review

Syndication is a form of collaboration between legally distinct organizations (Gemson & Rajan, 2012). The investment syndication is a form of a strategic alliance in which two or more investors jointly invest in a portfolio company and share payoff (Wright & Lockett, 2003). Equity syndication involves two or more venture capital firms taking an equity stake in the investment (Manigart et al., 2006). Wilson (1968) defined 'syndication' as a group of venture capitalists providing necessary resources and making common decisions under uncertainty that resulted in a payoff to be shared jointly among them.

Syndication in literature emerged as a result of the need to create a strategic partnership that could improve performance. The strategic alliance among VCs and their contacts could be used to enhance inter-organizational networks and thereby add value and create competitive advantage for the investors (Gemson & Rajan, 2012). Armstrong (2003) suggested that any type of corporate loan or credit facility can be syndicated. Bygrave (1987) pointed out that syndication was an important investment transaction between private equity investors. Manigart et al. (2006) empirically observed that about 60% of VC investments in the USA were syndicated. Brander, Amit, and Antweiler (2002) observed the same phenomenon from Canadian data in 1997. Lerner (1994), using a sample of 271 private biotechnology firms, concluded that syndication is commonplace, even in the first round investments.

Based on literature, there are three competing views as to why VCPE investors syndicate their investments. The first and traditional approach of syndication is based on the finance theory, and it took syndication as a means of risk sharing through portfolio diversification (Lehmann, 2006). Second, the resource shared motive took syndication as a means of providing capital and information to the firms (Dai, Jo, & Kassicieh, 2009). Third, the deal flow motive required the VCPE firms to have access to many deals, so that they could pick up the best (Bygrave, 1987).

Admati and Pfleiderer (1994) developed a rationale for VC syndication in later rounds of investment that was based on asymmetric information between the initial investor and other potential investors. They argued that later rounds of investment must be syndicated even when venture capitalists are risk neutral and under no capital constraints.

Lerner (1994) explored three hypotheses for syndication of venture capital investments using a sample of 271

privately held biotechnology firms that received VC before going public from 1978 to 1989. The first two suggested that through syndication, VCs resolved informational uncertainties about potential investment, while the third emphasized that syndication may be a mechanism through which venture capitalists exploit information asymmetry and collude to overstate their performance to potential investors (Lerner, 1994). The author concluded that in the first round, VCs primarily syndicated with a similar level of experience. In later rounds, established VCs syndicated investment to both their peers and to less established firms.

According to Lockett and Wright (2001), there is one important factor, which undermines the risk-sharing motive of private equity investments. The VCPE market is less liquid in comparison to the stock market; therefore, it cannot be traded easily. The researchers empirically examined the rationale for syndication by analyzing 60 venture capital firms from the UK market by using the rank method of a structured questionnaire. They found that the finance sharing motive was the most important followed by the size of the deal in proportion to the size of the funds available for UK venture capitalists. The resources based motive was important only when the sample was split into different stages of investment.

Syndication may lead to superior selection of investment (Lerner, 1994; Manigart et al., 2006). Syndicating first-round venture may lead to better decisions about whether to invest in firms (Lerner, 1994). Gemson and Rajan (2012) observed that Pence (1982) concluded that another VCPE firm's willingness to invest in the firm may be an important factor in the lead investors' decision to invest. Sah and Stiglitz (1986) examined the trend in hierarchy organizations, in which investments were made only if several independent observers agreed that the project was worthwhile. They showed that it may be more efficient to undertake only those projects which were approved by multiple reviewers. VCPE firms that are more open to syndication enjoy more favourable network and supportive activities that enable them to benefit from the participation of more investors (Brander et al., 2002; Hopp, 2010).

Brander et al. (2002) included the framework of Lerner (1994) and examined the syndication in Canada and found that syndicated deals had higher returns, which supports the value adding hypothesis over the selection hypothesis. They also considered that venture capitalists brought complimentary skills in addition to the finances and ,therefore, they opined that value adding and supportive activities may benefit from the participation of more investors.

Bent, Williams, and Gilbert (2004) examined the rationale of syndication by using 35 South African venture capital and private equity firms and established that the finance motive was the most important motive for syndication followed by the resource-based rationale. They suggested that the specific resources of other VCPE firms could be used to eliminate the company-specific risk.

Hopp and Reider (2005) introduced a real option model to analyze the determinants of venture capital syndication in the German venture capital market. By using a data set of 1800 venture capital investments, they empirically showed that low level of experience and expertise were the main drivers to syndicate an investment among German venture capital firms. Their model supported the resource-based view of VCPE syndication. Hopp (2010) analyzed the driving forces of VCPE syndication put forward by Hopp and Rieder (2005) who portrayed the circumstances under which VCPE firms syndicated with other partners. His results indicated that higher risk and huge capital requirements positively affected the decision of VCPE firms to involve partners. The author empirically supported the resource based hypothesis to understand the syndication of VCPE investments.

Consistent with previous literature, Gemson and Rajan (2012) compared the syndication of PE investment in the infrastructure sector between developed and developing countries. Their empirical findings showed that PE syndication in infrastructure was used to build capacity and add knowledge.

An extensive literature review on VCPE syndication shows that there are very few studies related to the VCPE syndication in the infrastructure sector in India. This study attempts to explore the determinants of VCPE syndication in the Indian infrastructure sector. Historically, infrastructure projects were financed and managed by the government, but government funds have competing demand, and these projects are now being financed by private players, including VCPE investors, who, in addition to providing capital, bring expertise and help in mitigating the risks associated with infrastructure projects.

Hypotheses

Younger firms are associated with a higher degree of uncertainty over the future outcome. It would, therefore, be expected that higher the uncertainty associated with a deal, the greater the risk would be. If syndication is undertaken to share risk, it should be more prevalent in younger firms. Thus, the following hypotheses were formulated:

- **H1** : The probability of syndication is higher in younger firms.
- **H2 :** The younger a funded firm is, the more are the number of VCPE investors involved with a firm.

The size of an investment plays an important role in the decision to syndicate. When venture capitalists want to reduce risk or when the funding requirement of the consideration is too large for any one venture capitalist, the chances are higher that a deal will be carried out through a syndication. This leads to the following hypothesis:

- **H3:** The total size of the investment is higher in syndicated deals than in stand-alone investments.

Although the total investment size may be larger in syndicated deals than in stand-alone investments, the average investment size should be lower in syndicated deals. This leads to the following hypothesis:

- **H4:** The average investment size is lower in syndicated deals than in stand-alone investments.

Gompers and Lerner (2004) pointed out that the value of continuous monitoring is higher for those firms which are not acquainted with the market and which do not have specific industry knowledge. The due diligence ability can be significantly enhanced to reduce information asymmetry if investee firm and VCPE funds are from same country or any other proximity. Hence, I formulated the following hypothesis:

- **H5:** Foreign venture capital providers are not much familiar with the Indian infrastructure environment, and therefore, rely on syndication to limit downside exposure.

Data and Measurement

This study uses VCPE investment transactions in infrastructure firms during 2004 to 2013. Year 2004 is taken to be the start year because during this period, the sector witnessed significant growth. Prior to this year, there were limited VCPE investments in the Indian infrastructure sector. Therefore, a detailed study of the VCPE syndication in this sector would be of general research interest. Furthermore, the data before 2004 was not available in a form that could be used for research purposes.

The deal level data used in this study has been sourced from Venture Intelligence database. This database records the date of venture financing, size of investment, stage of financing, details of investors, and number of participants in each deal. Venture Intelligence obtains this data from individual and institutional investors in VCPE funds. The correctness and accuracy was checked by verification from other sources, such as newspapers, reports, and the website - DealCurry.com as well as company websites. Information such as age of the investee firms was not available in the database, so it was separately sourced from the websites of independent companies.

The database for the covered period shows 562 VCPE investments in the Indian infrastructure sector. Out of the 562 deals that were obtained, 61 did not have information on either project cost or fund age ; hence, these were excluded from further analysis. Therefore, the final sample consists of a total of 501 deals involving 160 VCPE funds during the period from 2004 - 2013. The venture intelligence database covers energy, logistics, engineering

& construction, travel & transport, and telecom under infrastructure and ,therefore, the study is confined to these sub- sectors only.

The Venture Intelligence database gives information about eight different categories: (a) early stage, (b) growth stage, (c) growth stage PE, (d) late stage, (e) PIPE, (f) Pre-IPO, (g) buyout, (h) and others (special purpose financing) based on the lifecycle stage of the investee firm as well as the amount of the investment. To facilitate a more detailed analysis, I combined the database categories - late phase, pre-IPO, buyout, and others to form a new category that is also labelled as "Late Stage," as there is no clear distinction among PIPE, Pre-IPO, buyout, and other financing activities. The age of the infrastructure firm at the time of VCPE financing is represented in years. To test the hypothesis H2, the number of VCPE funds - who provided equity to each firm - were counted .

Analysis and Results

Descriptive Statistics : The Table 1 presents the summary statistics of the data set. The number of VCPE funds in a deal averaged 1.37, with a maximum of 11 VCPE funds involved in a firm and stand-alone investment as the minimum value. The median age of the investee firms is 10 years, and VCPE funds is 5 years. The average size of investment is US$ 39.57 with standard deviation of 88.3. This showed greater variability in terms of size of the investment among the VCPE funds.

Comparative Analysis of Investments with VCPE Syndication and Without VCPE Syndication : The Table 2 gives a comparative picture of infrastructure deals with and without PE syndication. Out of 501 deals, 105 deals were syndicated, while 396 deals did not have syndication. The dummy variable for syndication is represented by "1" and stand-alone investment by "0". Before conducting further analysis, I checked the assumption of normality and homogeneity of variance. One-sample K-S test was used to check the normality. The significance value *(p)* is less than .05 for both the categories (syndicated and stand-alone investments), and hence, the data is not normal.

The significance value for Levene's test of equality of variance was also less than .05, which indicates that the variances of both the categories are significantly different and the assumption of homogeneity of variance has been violated. The findings of the data show that the assumptions of the parametric test had not been fulfilled. Therefore, the Mann-Whitney U-test was used for conducting a comparative analysis.

An examination of the Table 2 indicates that the median age of the investee firms in syndicated deals did not differ significantly from the non - syndicated deals at the 5% level of significance. Therefore, the hypothesis H1 is rejected. This result is in line with the findings of Lehmann (2006), who concluded that the number of venture capitalists in a deal cannot be explained by the age of the investee firms. Gemson and Rajan (2012) found results on similar lines, where they concluded that publicly available information about an infrastructure company does not affect the propensity to syndicate.

The total amount of syndicated investments was significantly larger than that of non-syndicated investments, which supports the premise that need for capital was an important motive for VCPE syndication. Considering the results, the hypothesis H3 cannot be rejected. This further supports the results of Lockett and Wright (2001) and Bent et al. (2004) that the capital resources of other VCPE firms could be used to reduce company specific risks.

Table 1. Descriptive Statistics of the Data Set

Variable	Mean	*S.D.*	Median	Minimum	Maximum
Number of VCPE funds in a deal	1.37	00.94	1	1	11
Size of Investment (in US$ million)	39.57	82.30	18	.10	1250
Firm Age (in years)	13.55	13.49	10	1	88
VCPE Fund Age (in years)	8.82	11.705	5	1	57

Figures covering period 2004-2013 compiled from Venture Intelligence database

Table 2. Mann-Whitney U- Test Between Syndication vs. Stand-Alone Investments

Particular	Dummy variable for syndication	*N*	Mean	Median	*Z*-value	*p*- value
Age of investee firm	No	396	13.90	10	-1.098	0.136
	Yes	105	12.09	10		
	Total	501				
Amount of investment (in US$ million)	No	396	28.73	15	-5.837	.000
	Yes	105	82.20	27		
	Total	501				
Average amount of investment (in US$ million)	No	396	27.60	15	-0.006	0.497
	Yes	105	29.76	11		
	Total	501				

Note: The Table provides a comparative analysis of 501 VCPE Deals in Infrastructure. The *z* values and the respective *p*- values are shown in the table at 5% level of significance for the 1 tailed test

The results are also in line with Hopp (2010), who found that size of investments was significantly higher in syndicated deals. However, this result is contrary to the results obtained by Gemson and Rajan (2012), who argued that capital requirement may not be a reason to syndicate VCPE investments. They showed that syndication is an attribute of fund size rather than investment size.

The variable average amount of investment does not differ significantly between syndicated and stand-alone investments (p - >.05) at the 5% level of significance. Therefore, the hypothesis H4 is rejected. This result is contrary to the results obtained by Lehmann (2006), who found that the average size of investment was lower in syndicated deals than in stand-alone investments.

The Table 3 provides an analysis of the types of investors and the likelihood of syndication. The expectations with respect to the types of investors are confirmed by the results on domestic and foreign investors. Overall, 21% of the deals were syndicated. An examination of the Table 3 indicates that 11.5% of the domestic deals and 29.8% of the foreign deals were syndicated. The difference in the two categories is significant (p - value <.05) and is consistent with my prediction that foreign venture capital providers are more likely to syndicate their investments. Therefore, the hypothesis H5 cannot be rejected at the 5% level of significance. The result is consistent with the findings of Hochberg, Ljungqvist, and Lu (2007), Dai et al. (2009), and Gemson & Rajan (2012). Hochberg et al. (2007) concluded that foreign investors recognized their lack of knowledge of local laws, customs, and business environment, and therefore, syndicated their deals to reduce the information asymmetry problem. Dai et al. (2009) found similar results in the U.S. venture capital market. This premise supports the resource based view of syndication.

↳ **Regression Analysis :** With reference to the hypothesis H2, I examine the relation between the number of VCPE funds in a deal and the age of the investee firm. In addition to independent variables (age of investee firm, log of investment size), a range of control variables were also included. These are sector dummies, and type of investor dummies. Dummy variable for sectors included: logistics, engineering & construction, telecom, and travel & transport. Dummy variable for foreign investors took the value "1" if investor came from foreign origin, otherwise "0". The results in the Table 4 show that the number of venture capitalists could not be significantly explained by the age of the firm. Considering the results, I reject the hypothesis H2 that younger firms have more number of VCPE investors. This result is contrary to the argument of Lehmann (2006) that the existence of multiple investors in a single investment transaction increases with the firm's risk. Age of the investee firm is taken as a proxy for risk and asymmetric information (Lehmann, 2006). However, the regression results are consistent with the hypotheses H3 and H5.

The results from logistic regression (Table 5) are used to predict the syndication of VCPE investments, given

Table 3. Analysis of the Likelihood of Syndication

Percent of syndicated VCPE deals across types of VCPE investors			
Domestic Investor	**Foreign Investor**	**Chi-Square**	***p*-value**
11.5%	29.8%	22.867	.000

Table 4. Regression Analysis on the Number of Investors

	Number of Observations	501
	F statistics	11.677
	R^2	.149
	Adjusted R^2	.144
Variables	**Coefficient**	***P* - value**
LnAge	-.052	.214
LnSize	.068	.000**
Telecom	.266	.001**
Engineering and Construction	-.035	.415
Logistic	-.070	.809
Travel and Transport	.010	.809
Foreign	.152	.000**

** Significant at the 5% level of significance.

the independent variable. The dependent variable equals to '1' if multiple VCPE funds are involved in a particular deal and '0' otherwise. The explanatory variables include the size of investment, age of the investee firm, VCPE funds age, and types of investors as per the studies of Lerner (1994), Lehmann (2006), Dai et al., (2009), Hopp (2010), and Gemson and Rajan (2012). To control the sub- sector effects, I included dummy variables for the following sectors: logistics, engineering & construction, telecom, and travel & transport. Dummy variables for the stages of investments were also included. These stages were, growth stage, growth-PE stage, and Late Stage. The log and square root transformation was used to normalize the data.

The model to be estimated is given below:

$$Zsyn_i = a_{0,1} + a_2(log\_Size_i) + a_3(Squ\_age_i) + a_4(foreign_i) + a_5(VCPE\_age_i) + a_6(Logistic_i) + a_7(Engg\ \&\ Cons_i) + a_8(Travel\ \&\ Transport) + a_9(Telecom) + a_{10}(Growth) + a_{11}(GrowthPE) + a_{12}(Late) + e_i \quad \ldots\ldots\ldots (1)$$

The Table 5 presents the logistic regression estimate based on equation (1) for the decision to syndicate. The present model correctly classifies 81% of the deal. The Table 5 reports the log likelihood ratio index for the log regression model. The value of the pseudo-R^2 provides the information about the effect size (explanatory power) of the model being estimated. The effect size of the model is determined to be .333, which can be considered medium, given the log likelihood ratio index (Cohen, 1988). From the Table 5, it is observed that the growth-PE stage and late stage of development are negatively significant at the 5% level of significance. This implies that the likelihood of syndication decreases as firms mature. Growth PE and Late-stage firms have a long track record from which VCPE funds can draw the requisite information and ,therefore, information asymmetry can be better resolved (Espenlaub, Khurshed, & Mohamed, 2011). The coefficient for VCPE investments of growth stage is not statistically different from investment in early stages. The result is in line with Hopp (2010) and Gemson and Rajan (2012), who found that more staging resulted in less syndication.

Table 5. Estimate of the Likelihood of Syndication

Log Likelihood= 448.106, Chi-Square=66.321, *p*-value=.000, Pseudo *R* Square=.333					
Variables	**B**	**S.E.**	**Wald**	**Sig.**	**Exp(B)**
Logistic	-0.029	0.311	0.008	0.927	0.972
Engineering and Construction	-0.319	0.334	0.913	0.339	0.727
Travel and Transport	0.559	0.57	0.963	0.326	1.75
Telecom	0.445	0.504	0.778	0.378	1.56
Growth Stage	-1.047	0.609	2.954	0.086	0.351
Growth-PE stage	-1.552	0.571	7.384	.007**	0.212
Late Stage	-1.327	0.492	7.264	.007**	0.265
Foreign	0.761	0.269	7.972	.005**	2.14
Log_ size	0.607	0.114	28.392	.000**	1.834
Squ_ age	-0.01	0.127	0.006	0.938	0.99
Log_ VCPE age	0.187	0.127	14.605	.000**	1.628

** Significant at the .05% level

Examining the variables that were positively significant, it can be noted that the coefficient for VCPE fund's age is positively significant at the conventional level (5%), therefore, the greater is the VCPE fund's age, the greater is the propensity to syndicate. This shows that age of VCPE funds drives the syndication in the infrastructure sector. Lerner (1994) found similar results in the biotechnology sector, and concluded that the older and more experienced VC firms drove syndication strategies. This is also in line with the results of Gemson and Rajan (2012), who found VCPE fund's age to be significant at the 1% level of significance in the infrastructure sector. However, the result is contrary to the findings of Casamatta and Harichabalet (2007) and Hopp (2010), who argued that more experienced VCPE investors usually did not syndicate. The coefficient for the size of investments and foreign investors is positively significant at the 5% level. The result is consistent with the predictions (H3, H5). The age of the infrastructure firm is not significant at the conventional level. Concerning the control variable, the coefficient is not statistically significant at the .05% level. This implies that sector level investment did not affect the VCPE fund's decision to syndicate.

Conclusion

In this paper, light has been shed on the syndicated behaviour of VCPE funds in the Indian infrastructure sector. The analysis of this study provides insights into syndication as a risk and resource sharing tool when infrastructure projects require financial capital, human capital, and expert advices, which cannot be provided by a single investor.

It is observed that a large number of VCPE funds did not syndicate their investments while investing in infrastructure ; 396 deals (79% of the total sample) out of 501 involved only single investors. Inspite of large stand-alone deals, VCPE funds syndicated their investments when requirement of financial capital was too large for a single investor to supply. This strongly supports the capital motive (risk sharing) of syndication because the total size of investment is significantly higher in syndicated investments than in stand-alone investments.

The strength of the findings with respect to the resource sharing motive of syndication suggests that the older VCPE funds tend to syndicate to capitalize their experiences and expertise and provide value added services to the infrastructure firms. Regression results indicate that due to less acquaintance with the Indian infrastructure sector and business environment, foreign VCPE funds face a higher risk, and therefore, they are more inclined to involve

a partner to access knowledge base resources, which is extremely important for infrastructure development. The regression results also indicate a significantly negative relationship between stages of development and VCPE syndication.

Furthermore, it is observed that the likelihood of syndication and number of VCPE investors could not be significantly explained by investee firms' characteristics such as infrastructure sub-sector, and the age of the investee firm.

Research Implications, Limitations of the Study, and Scope for Future Research

The findings of the study have several implications for venture practitioners, business policy makers, and academicians. Lack of published data on the syndication of VCPE investments in the Indian infrastructure sector makes the study novel. A substantial financial gap in the Indian infrastructure sector presents an excellent opportunity for VCPE funds. The share of VC/PE investments in the Indian infrastructure sector has increased considerably during the last decade. However, the existence of uncertainty and information asymmetry in the infrastructure projects presents a higher risk level. VCPE funds can syndicate with other partners to capitalize these opportunities, while at the same time handing these risks too.

If VCPE funds lack necessary capital resources, know how, and information about the local laws, they can syndicate with other VCPE funds that have sufficient capital resources and knowledge of the micro and macro environment. Thus, VCPE funds can also capitalize the enormous opportunities available. The Government of India needs to create a conducive environment for VCPE funds to invest in infrastructure projects. Gemson and Rajan (2012) found similar findings to the ones obtained in this paper when they concluded that developing a strong domestic VCPE market encourages the foreign investors to invest in infrastructure projects by syndicating with other partners. Furthermore, older VCPE funds' tendency to syndicate ensures value adding services.

The empirical results herein provide the initial evidences about the determinants of VCPE syndication in the Indian infrastructure sector. I hope that these evidences inspire future theoretical and empirical research so that we may better understand the motives of syndication in infrastructure projects. Small number of observations and missing or incomplete data are the major constraints of this research. Nevertheless, we need to gain further insights on how VCPE funds add value to a funded firm and how reputation of a firm affects the risk aversion of VCPE funds and their propensity to syndicate.

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