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Determinants of venture capital performance in Indonesia

Ahmad Danu Prasetyo*, Institut Teknologi Bandung, Ganesha st. No.10, Bandung, Jawa Barat 40132, Indonesia.
Muhammad Febrizal Imran, Institut Teknologi Bandung, Ganesha st. No.10, Bandung, Jawa Barat 40132, Indonesia.
Fania Anindita Rizka, Institut Teknologi Bandung, Ganesha st. No.10, Bandung, Jawa Barat 40132, Indonesia.
Ira Fachira,Institut Teknologi Bandung, Ganesha st. No.10, Bandung, Jawa Barat 40132, Indonesia.

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Abstract

The growth of venture capital in Indonesia from year to year is smaller compared to other industries, both financial institutions and non-bank financial industry. Due to these weak performances, there is an urgency for venture capitals in Indonesia to improve their performances. For this purpose, we need to identify factors influencing venture capital performance in Indonesia as well as to determine their weighting scheme. The research was conducted to fill the gap. In this research, we combined qualitative and quantitative method through an in-depth interview and analytical hierarchy process method. We found that reputation was considered as the most important factor that contributes 37.4% to the overall score. Network broadness ranked second with weigh 13.7%, followed by syndication, macroeconomic condition, exit plan strategy, staging strategy, diversification strategy and funding scheme, respectively.

Keywords: Venture Capital, determinants, in-depth interview, analytical hierarchy process, Indonesia.

* ADDRESS FOR CORRESPONDENCE: **Ahmad Danu Prasetyo**, Institut Teknologi Bandung, Ganesha st. No.10, Bandung, Jawa Barat 40132, Indonesia. *E-mail address:* ahmad.danu@sbm-itb.ac.id / Tel.: +62-22-2531923

1. Introduction

The growth of venture capital in Indonesia from year to year is smaller compared to other industries, both financial institutions and non-bank financial industry. Until now, only a small part of start-up companies obtaining financing from venture capital. In fact, ever since this industry developed in 1996 until the end of 2014, the asset growth of the venture capital industry has not shown a significant development even though still showing growth trends. The total asset of the venture capital industry is just around 2.14% of the total asset of the finance industry. In the large scale, if we compare to all industries, the market share of venture capital firm is only 0.67% (Financial Service Authority, 2016).

In 2016, there are 62 venture capital firms in Indonesia with the total asset of 11.28 trillion rupiah. Even though the total amount of financing has been increased throughout 2015–2016, the operating expenses to operating income ratio were stagnant around 90%, which shows large operating expenses. The ROA was ranged from 0.66% to 2.97% while ROE was ranged from 1.64% to 6.9%. These numbers were very small compared to other financial institutions in Indonesia. On the hand, the non-performing funding was ranged from 14.42% to 17.62%, which means the risk was quite significant (Financial Service Authority, 2016).

Due to these weak performances, there is an urgency for venture capitals in Indonesia to improve their performances. For this purpose, we need to identify factors influencing venture capital performance in Indonesia as well as to determine their weighting scheme. The research was conducted to fill the gap.

In this research, we combined qualitative and quantitative method. We conducted an in-depth interview with venture capitalists and academicians to obtain the practice of the venture capital in Indonesia. In addition, we measured the relative importance of the factors affecting venture capital performances by using analytical hierarchy process (AHP) to find their weights. We found that reputation was considered as the most important factor that contributes 37.4% to the overall score. Network broadness ranked second with weigh 13.7%, followed by syndication, macroeconomic condition, exit plan strategy, staging strategy, diversification strategy and funding scheme, respectively.

The paper is structured as follows: In the second section, we study literature from previous works to obtain more understanding about factors that could influence the performance of venture capital in Indonesia. Research methodology will be explained in Section 3. We will report our analysis upon the data in Section 4, whereas the conclusion will appear in Section 5.

2. Literature study

From the previous study, we identified several factors that could influence the performance of venture capital in Indonesia, i.e., (1) Network broadness, (2) Funding scheme, (3) Government regulation, (4) Macroeconomics condition, (5) Staging, (6) Syndication, (7) Exit plan, (8) Diversification, (9) Reputation.

2.1. Network broadness

VCs tend to syndicate their investment with other VC, rather than investing alone (Lerner, 1994). Hege, Palomino and Schwienbacher (2003) found that a developed VC market and network externalities have a positive impact on VC performance. Venture capital networks also have a positive impact on VC performance according to the research conducted by Hochberg, Ljungvist and Lu(2005). They found that VC funds whose parent firms enjoy more influential network positions have significantly better performance, as measured by the proportion of portfolio investments that are successfully exited through an initial public offering or a sale to another company. Access to external

knowledge also has a positive impact on the performance of VC (Clercq & Dimov, 2008). They found that in terms of the number of a firm's exchange partners, the performance of VCs was enhanced. More partners increase the scope of knowledge the firm can access and offer more solutions to specific problems. An investment that involved more investors likely selected better deals (Lerner, 1994) and helped bring these investments to successful ends (Brander, 2002).

2.2. Funding scheme

Another factor that influences VC performance is contingent control rights. Performance is positively correlated with the use of convertible securities and the frequency of replacement of the entrepreneur. It further allows to reduce downside risk by forcing bankruptcy more quickly. In a more developed VC market, the venture capitalist will more effectively and systematically assert control rights in case of conflicts of interest (Hege, Palomino & Schwienbacher, 2003). Convertible securities can be exchanged at the option of the holder for other securities of the issuing company and they generally represent a mixture of debt and equity.

2.3. Government regulation

Gulinello (2015) and Callagher, Smith and Ruscoe (2015) describe that government participation could give a positive result to the venture capital. The government should make a regulation about the venture capital and also subsidise regulation. Venture capital is a part of the national macroeconomic and government should pay attention. Callagher, Smith and Ruscoe (2015) also said in his journal that there is a kind of hybrid fund between venture capital and government named government-sponsored venture capital funds, this is the direct approach to fill the funding gap in an underdeveloped market. A regulation made by the government not only limited to the financial but also in the area of startup invested. Some country regulated that venture capital should invest in the technology area. This regulation can be fitted by the vision of the government.

2.4. Macroeconomic condition

Fuss and Schweizer (2011) determines the impact channels of macroeconomic supply and demand factors on the performance of VC investments. The value of venture capital investments is positively related to industrial production, the exit channel Nasdaq and the long-term interest rate. However, the value of venture capital investments is negatively related to the short-term interest rate. Steven (2011) said that venture capital commitments have a correlation with GDP and capital market valuation. While capital market fund-raising activities (Initial public offerings and seasoned equity offerings) are also correlated with venture capital flows, these effects are subsumed by GDP, indicating that the overall economy drives both venture capital flows and capital market financing activities.

2.5. Staging (tranches)

One possibility to deal with the information asymmetries that are present at the beginning of the entrepreneur-venture capitalist interaction is to base capital payout on performance goals. PE and VC funds often provide their portfolio companies with step-wise or staged capital allocation instead of a single up-front investment. Neher (1999) developed a model explaining that staging can help to overcome the entrepreneur's hold-up or commitment problems. Gompers (1995) provided evidence that staging is primarily applied when information asymmetries between the fund and the portfolio company are highest, which is typically the case at the beginning of an investment relationship. Krohmer (2006) found that staging has a positive influence on performance during the initial investment phase and is negatively associated with performance during the pre-exit phase.

Lauterbach, Welpe and Fertig (2007) provided evidence that staging during the initial investment phase positively influences both on reducing losses and maximising profits.

2.6. Syndication

Many investments are syndicated: VC firms jointly invest in start-up companies rather than investing alone. Multiple reasons and motivations for syndication in the VC industry, such as diversification of risk (Lerner, 1994; Manigart, 2006), post-investment added value (Macmillan,1989) and the need to pool appropriate resources and capabilities for the successful development of the venture (Ferrary, 2010; Meuleman,2009). There are two types of investors in a syndicate: lead and non-lead. Lead investors usually have the largest equity stake, are the most involved in the post-investment process, have the informal right to invite non-lead investors, coordinate syndicate and provide most of the post-investment support (Lerner, 1994).

2.7. Exit plan

The link between the IPO market and venture capital investment is one of the most studied subjects in this area. We already mentioned the importance of IPO as a vehicle to exit venture capital investment. For capital investors, IPO is important to get a good return as well as to certify their quality as managers of the venture capital fund. Gomper and Lerner (1997) and Jeng and Wells (2000) used IPO as a variable representing investment exits and as an important determinant of venture capital investment. This fact is associated with the existence of strong stock markets (Black & Gilson, 1998) and being the exit vehicle which allows greatest returns (Barry, 1990; Gompers 1995, 1996; Gompers & Lerner, 1997; Megginson & Weiss, 1991).

2.8. Diversification

Firms that specialise in one particular industry may have a greater understanding of that industry and can more effectively select successful ventures with disruptive technology or innovation. This expertise is a competitive advantage. It is similar to the way in which a stock analyst focuses on a single publicly traded stock. The depth of knowledge of that firm and the industry in which it operates is the basis of the analyst's expertise. Likewise, VC firms that focus on one industry have a similar advantage when identifying opportunities. Raculia (2014) confirmed the results supporting that specialist VCs invest in IPOs that have better performance and survival. Thus, it has a positive correlation.

2.9. Reputation

Reputation is an invaluable asset in markets where the quality is uncertain and the information is asymmetric, offering firms important competitive benefits and supplying customers with important information. For specialised financial intermediaries encountering a large number of competitors, reputation can be particularly valuable. In fact, numerous studies indicate that reputation is an important trait in the financial service industry. The study conducted by Shu, Yeh, Chiu and Ho (2010) focused on the venture capitalist that operate in a fragmented while competitive market. The result is that VC-backed IPOs, reputable VC-backed firms outperform mediocre VC-backed ones. The overall result confirms the reputation effect associated with VC.

3. Methodology

To answer the research question as stated in advance, we combined qualitative and quantitative method. We conducted an in-depth interview with venture capitalists and academicians to obtain the

practice of venture capital in Indonesia. The interview was conducted from July to October 2017 to several venture capitalist in Jakarta, Bandung and Surabaya, Indonesia.

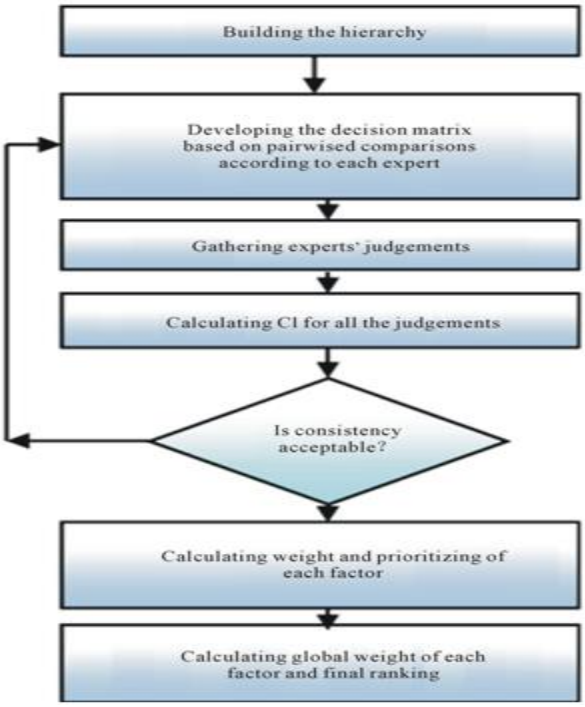

Figure 1. Research flow diagram with AHP

In addition, we ask the interviewees and some academicians to give relative importance scores to the factors by using AHP to find their weights. This approach is utilised since there are qualitative factors which complicated to be elaborated and applied in other approaches. Moreover, this method is excellent in term of flexibility and tracing a complex system (Saaty, 1980). But, this method has its weakness which is the subjectivity and relativity from the input. Other than that, AHP is a non-parametric method without confidence limits from the created models (Saaty, 1980).

The first step to answer the research question is by making an interview with venture capital experts to get the scale of degree of interest from every factor which compared pairwise. After that, the matrix of relative weights from every factor being compared is formed. Besides, the experts were asked to do the scoring for the qualitative factors for every investment analysis unit from the venture capital involved. After we get the relative weights and scores for each of factors, both are multiplied to get the ranks from every investment.

Since we use the pairwise comparison to determine the matrix of relative weights, there are often inconsistencies in entering the input. Thus, consistency index (CI) is required to measure the consistency of the input. To get a valid judgment, 90% of CI is expected (Saaty, 1980). Therefore, iteration should be done if there are inconsistencies in defining the weights in the matrix.

4. Findings

4.1. Result from an in-depth interview

We have interviewed several venture capitalists regarding the factors that may affect the performance of a VC. Based on axial coding from the interview transcript, there are several

terminologies that often associated with each factor mentioned in the literature study. The terminologies are shown in Table 1 below

Table 1. Axial coding from interview transcripts

No	Factors	Terminologies
1	Networking	Investors, business partners, customers, connection, recommendations, relationship with larger venture capital, access, CSR funds, public service, association organisation
2	Funding scheme	Convertible bonds, reducing risk, equity participation, valuation, financing standard, returns, loan, origin of the investments, profit sharing model, instalment, productive financing, managerial involvement
3	Government regulation	Market competitiveness, fin-tech, minimum capital, administration, contribution fee, number of employees, financial service authority
4	Macroeconomic condition	Unemployment rate, labour qualification, business model, financial back-up from parent company, benchmark rate, import, financial crisis, economic development
5	Staging (Tranches)	Phase, lump sum, key performance indicator, early stage, growth stage, late (Pre-exit) stage, working capital, loan ceiling, due diligence, feasibility, business capability, long-term funding, minimise risk, additional funding
6	Syndication	Co-investment, amount of investment, number of partners, lead investor, risk-profit sharing, amount of capital, idle fund, risk mitigation decision
7	Exit plan	Acquisition, IPO, vertical integration, loan redemption, selling to strategic partner
8	Diversification	Business sectors, synergy, knowledge and understanding, rising sector, priority, reducing business risk
9	Reputation	Attraction, marketing, famous individual, competition, financial literacy education, financial inclusion, long-term return.

4.2. AHP result

We have asked several venture capitalists and academician to give relative importance score for each factor regarding the VC performance. Based on the experts' judgment, the VC's reputation contributes the most to its performance, with overall weight equal to 37.4%. Next factor to affect the VC performance is the network broadness that contributes 13.7% to the performance. Syndication and macroeconomics condition each contribute 11.1% and 10% to the VC performance. Followed by an exit plan strategy, staging strategy, diversification and funding schemes that weigh 8.7%, 7.8%, 6% and 5.2%, respectively. The inconsistency level of the AHP measurement is 0.07, which means this weighting is quite valid to be used as a measurement model for VC performance.

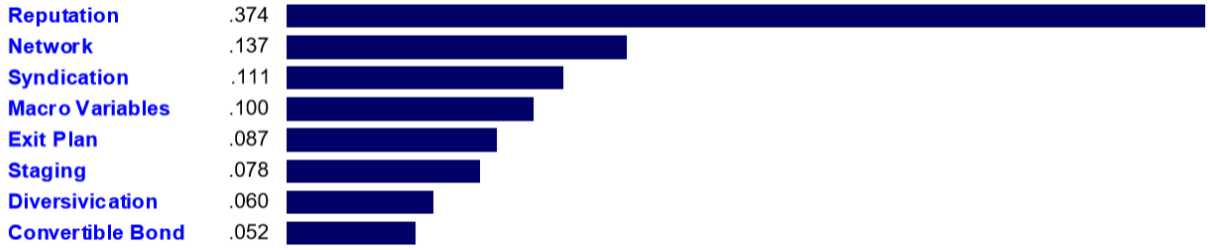

Figure 2. Weight of each factors that affecting the VC performance

5. Conclusion

The poor development of a venture capital industry in Indonesia has raised some concern both from VC firms and regulator. This paper is aimed to identify factors influencing VC performance in Indonesia as well as modelling the weighting scheme of factors that contribute to the VC's performance. From the literature study, we have identified nine factors that determine the performance of VC, i.e., (1) Network, (2) Funding scheme, (3) Government regulation, (4) Macroeconomics condition, (5) Staging, (6) Syndication, (7) Exit Plan, (8) Diversification, (9) Reputation. We employed a qualitative method through an in-depth interview to obtain the understanding of the empirical practices have been conducted by the VCs in three major cities in Indonesia–Jakarta, Bandung and Surabaya–regarding the factors. An axial coding has been conducted to identify some key terminologies associated with each factor. Through AHP method, we obtain the relative importance weight for each factor as follows: reputation 37.4%, network broadness 13.7%, syndication 11.1%, macroeconomic condition 10%, exit plan strategy 8.7%, staging strategy 7.8%, diversification strategy 6% and funding scheme 5.2%.

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