

Return on Investment: A Comparison between Venture Capital Investment Funds and the Venture Builder Approach

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Abstract: The Venture Builder (VB) approach is a growing model to support startups in their earlier efforts. Even though this method appears to be proliferating quickly, little is known regarding its value and the differences between the VB and Venture Capital (VC) Investment Funds. There are also few studies about the importance of the various aspects of the VB methodology to increase new ventures' success and to reduce investment risks. The objective of this article is to compare the return on investment of VC Investment Funds and a German VB, the Rocket Internet. The methodology used is a multiple case study. From the results it was possible to infer that ceteris paribus the VB has a greater IRR in relation to VC Investment Funds.

Keywords: Innovation, Venture Capital Fund, Venture Builder, Return on Investment

JEL codes: G24 – Investment Banking • Venture Capital • Brokerage • Ratings and Ratings Agencies

1. Introduction

The purpose of this article is to improve the knowledge about the return on investment of two different forms of innovation financing: Venture Capital (VC) Investment Funds and the Venture Builder (VB) approach. This is a relevant theme; thus, the findings of this study could support the decision-making process of investors when determining the investment portfolio as well as for startups when searching for funding sources.

Access to funding is one of the major barriers when starting and growing a new business, as financial capital is a necessary asset for the establishment of new firms and their operation (Cassar 2004). However, nascent firms, especially innovative ones, suffer from capital constraints, their lack of liability reduces their possibilities to raise funds from traditional financial institutions (Ausdretsch and Lehmann 2004).

According to Damodaran (2009), there are several reasons a young company faces challenges when accessing capital: “no history, small or no revenue, operating losses, dependent on private equity, many do not survive” (p. 5). Another important constraint is the information asymmetry - when there is a difference in risk perception between entrepreneurs and investors - is one of the challenges faced by young companies. The lack of business information leads to different perception of risk. This can result in investment strategies that do not maximize the value (Hall, 2002). By eliminating information asymmetry, financial restrictions are likely to decrease (Lerner, 1999).

Although technological firms are likely to succeed, they are perceived as being riskier than other types of firms. New ventures, especially those applying new technologies have an intrinsically unstable and changeable nature, the process of starting a technology-based firm involves, therefore, high uncertainty (Jalonen 2012).

In general, technological new ventures might present higher chances of financial problems as well as higher default rates than other businesses. It is more likely, therefore, that they pay more interest rates (Storey, 1995). Furthermore, it is expected that these companies have their funding requests decline by banks. This could indicate major restrictions faced by newborn companies to access formal funding sources (Kantis, 2005). With fewer possibilities of obtaining credit, startups rely on less traditional capital sources. Traditional banks, as sources of financing, fear the intrinsic uncertainty linked with the innovation process. For this reason, innovation has been financed by other means (Gompers and Lerner 2001).

These sources of capital fill the void between the need of capital of nascent firms and its availability in traditional funding sources. Filling this gap successfully means a high return on venture investments. In other words, the challenge is to produce a superior return on investments in intrinsically risky business ventures (Berk, Green and Naik 2004).

Given the important role of entrepreneurship to foster the process of creative destruction - and, hence, of innovation (Schumpeter 1934); it is necessary to increase efforts to ease financing limitations for would-be entrepreneurs (Fraser, Bhaumik, and Wright 2015). According to Gompers and Lerner 2001 “Venture capital organizations finance these high-risk, potentially high-reward projects, purchasing equity or equity-linked stakes while the firms are still privately held” (p.145).

However, VC capital is not the only financial source available for startups. VB is a growing phenomenon of companies that not only invest, but also participate in the development of the invested startups (Szigeti 2016). As the name says, these are companies that build start ups and are

much more involved in their progress (Scheuplein & Kahn 2017). VB's usually use their own human resources to support invested companies, with the hope that they can be more resilient and have greater chances of success (Lawrence 2017).

In order to increase the knowledge about return on investment of different forms of innovation financing, this article compares the performance of VC Investment Funds and the VB approach by analyzing a German Venture Builder, the Rocket Internet. The article is divided into five sections. The first is the introduction, followed by an overview of finance and innovation. In the third section the methodology is presented, while in the fourth the VB approach is presented and compared with VC Investment Funds. Finally, the last section has the final remarks, research limitations and further research recommendations.

2. Finance and Innovation

In order to understand the relationship between finance and innovation we must take into consideration uncertainties embedded in the innovation process (Knight 1921). The investment in innovation is a bet on an unknown future, which cannot be premeditated via probabilities, as found out on Jalonen (2012) study, the main uncertainties embedded in the innovation process are mainly related to technological, market, regulatory/institutional, social/political, acceptance/legitimacy, managerial, timing, and consequence. The success of investments on innovation is not pure luck, instead it is a process that encompasses calculated commitments.

Financial credit has an important role in the innovation process, and it should not be dissociated from entrepreneurial action. Schumpeter (1934) was the first scholar to link credit as a source of innovation. When applied in today's context, Schumpeter's theory addresses several issues regarding the role of entrepreneurship in the innovation process and the access to funding which enables business experimentations.

Although access to finance is important to entrepreneurship, the Global Entrepreneurship Monitor (GEM) highlights that one of the main reasons for discontinuing a business was the shortage of profitability or capital. Credit is a tool to entrepreneurship; it enables the potential entrepreneur to actually become one and innovation to take place, is an important way to enhance access to credit by expanding the supply of risk finance (Lerner, 2010).

In order to understand the sources of capital available, the next section has an overview of different types of finance, traditional and alternative sources of capital, being the last mostly used by entrepreneurs.

2.1. Traditional and Alternative Sources of Capital

According to GEM, informal investment, professional business angels, venture capitalists, banks, government loans, grants, and subsidies, as well as crowdfunding are among the available financing channels for entrepreneurs (Hart-etal-2020). As this article aims to analyze the return on investment of two different forms of innovation financing: Venture Capital Investment Funds and the Venture Builder Approach, only these two forms are going to be presented and discussed.

VC investments or Risk Capital Investment emerged mainly as a gateway to traditional capital markets (Lerner 2010). An entrepreneur has often no other source of capital to rely on (Zider, 1998; Kerr and Nanda, 2015). The counterpart of a VC investment is the ownership acquisition of part of the invested firm (Lerner, 2010). The growth of invested companies is, therefore, of investors' main interest. It is likely that venture capitalists become active in their portfolio firms, offering more than financing, but also advising and oversight (Gompers and Lerner, 2001). This type of investment combines professional management (normally, by experienced investors) with a newborn enterprise (Bhide, 1999).

The VC activities are divided into three: invest, monitor, and exit. VC Investment Funds monitor and support portfolio companies in a limited manner (Matrick 2011). There are different ways a fund can add value and monitor their portfolio companies, the most common is to have a representation on the board of directors. This is a mechanism to closely observe the decision-making process of portfolio companies, by doing so, they can support invested firms in their strategic decisions. Another way to carefully monitor them is by the participation in human resources activities, nascent firms normally lack liability and experienced investors can support them to attract and recruit quality and talented employees, especially for higher level positions. Additionally, the network effect is a benefit of having a VC Investment Fund back up. VCs often share their contacts and network with portfolio companies, that can lead to new customers and partnerships which would not be possible, or - at least - more difficult, otherwise (Matrick, 2011).

The above-mentioned mechanisms for reducing the threats inherent in risky investments are important, but often not enough to prevent investment losses (Berk, Green, and Naik, 2004). Moreover, only a small group of entrepreneurs are able to obtain VC investments; thus, careful due-diligence and research are needed in order to support VC Investment decisions, which can be more challenging nascent companies (Fried and Hisrich, 1994; Sharma, 2015).

A contemporary way to support enterprise ideas is the VB approach. They go beyond the way of "doing business" of incubators, accelerators,

and VC funds because they use internal resources and ideas to build companies combining the skills of innovative founders and financial resources (Scheuplein and Kahl, 2017). VBs build startups in a factory-like manner (Köhler and Baumann, 2017) sustainable and repeatable (Szigeti, 2017) using their own resources to enable startups to grow and scale (Lawrence, 2017).

The VB approach is also referred to as company builders, startup studios or startup factories. VB differs from traditional models, mainly, the incubation and acceleration programs (Scheuplein and Kahl, 2017). In a VB, multiple ideas (internal and external) are developed at the same time. Nevertheless, only the best ones are selected to be built (Lawrence, 2017). Not only does this method help startups to scale faster, but more importantly, it trashes unsuccessful ideas easily, which is equally important for its founders as well as investors. The sharing effect is intrinsic to this approach allowing resources such as infrastructure, marketing, legal, accounting, to be used by several companies (Köhler and Baumann, 2017). Thereby, the innovation process is optimized, while reducing risks inherent to the company's formation.

The following table presents a summary of the similarities and differences regarding the different approaches (VC Investment Funds and the VB approach).

Table 1: Differences and similarities: VC and the VB approach

	VC	VB
Conception	Finance and know-how	Internal control or majority stake
Duration	Life of fund	Several years
Compensation	Equity	Majority stake or complete internalization
Support financing	Yes	Yes
Coaching	Yes	Yes
Network integration	Yes	Yes
Business premises	No	Yes
IT and programming	No	Yes
Marketing	No	Yes
Recruitment	No	Yes
Objective for exit	Next Investment phase	Long-term ownership (strategic investor, IPO)

IPO = initial public offering; IT = information technology.

Source: Developed by the author with data from Scheuplein and Kahl (2017).

By evaluating the table, it is possible to see great differences between the two forms in almost all aspects analyzed. VB's great differential is the

active participation in the business expecting greater investment success and, therefore, return on investment.

Authors such as Scheuplein and Kahl (2017), Köhler and Baumann (2017), and Lawrence (2017) have analyzed the VB approach, however, not much has been studied on this approach regarding the possible gains to investors by using this type of risk investment compared to other types of venture investments, namely VC Investments, which is the main objective of this article. Not only are there different ways to invest in a startup, but there are also different forms to analyze the results generated by it. The next session aims to explain the valuation methods used to evaluate the results of new ventures.

2.2. Valuation Methods

Economic profitability is a vital source to the decision-making process, as well as to post evaluation of the financial sustainability of projects (Fried and Hisrich, 1994; Sharma, 2015). According to Palepu, Healy, and Bernard (2004), valuation is the process of translating forecasts into a company's estimated value. The most commonly used valuation techniques are the methods of discount of the dividends flow, the discounted cash-flow, multi-valuation models and residual profit models.

Multiple of Revenue has been widely used due to a wave of IPO of companies belonging to the so-called new economy. These types of companies do not have a long historical, which would allow them to be evaluated by traditional methods, such as profit and Earnings before interest, taxes, depreciation, and amortization (EBITDA) multiples or by the discounted cash flow method (Martelanc, Pasin, & Cavalcante, 2005). The authors suggest the use of multiples revenue analysis to difficult data manipulation.

The rate at which the project breaks even is called the Internal Return Rate (IRR). According to Knight (2015), it is commonly used by financial analysts.

IRR represents the rate at which a series of cash flows are discounted so that the Net Present Value (NPV) of cash flows equals zero. For fund-level IRRs, any remaining value in the fund is treated as a distribution in the most recent reporting period. (PitchBook 2018, p.1)

Within the next section the methodology of this article is presented, and the source of information explained.

3. Methodology

The purpose of this article is to analyze the return on investment of two different forms of innovation financing: VC Investment Funds and the VB

Approach. In order to do so, the case of a German VB, the Rocket Internet, has been analyzed and compared with a pool of VC investments registered by the PitchBook Benchmark report.

The data regarding the pool of VC investments has been collected by PitchBook's Venture Capital benchmark statistics, issued in the second quarter of 2018. This report presents data through diverse lenses - IRRs and cash multiples, which provides a performance overview within different strategies, and vintage years.

The data used in this article was the Equal-Weighted Pooled IRR from 2009 to 2016 from a selected pool of new ventures invested by VC Investment Funds. The data analyzed in this article is from 2009 on, this decision has been made in order to prevent the data from being harmed by the financial crisis of 2008.

The methodology of the PitchBook benchmark is based on "fund return data from Limited Partners (LP) reports which are used as a baseline for estimations across the fund" (p.1).

To be included in pooled calculations, a fund must have: (i) at least one LP report within two years of the fund's vintage, and (ii) LP reports in at least 45% of applicable reporting periods. To mitigate discrepancies among multiple LPs reporting, the PitchBook Benchmarks (iii) determine returns for each fund based on data from all LP reports in a given period. For periods that lack an LP report, (iv) a straight-line interpolation calculation is used to populate the missing data; interpolated data is used for approximately 10% of reporting periods. All returns data in this report are net of fees. (PitchBook 2018, p. 1).

In order to contrast the information available in the report with another form of venture investment, the data from a German VB, the Rocket Internet, has been analyzed.

In order to gather Rocket Internet's necessary information, different databases were used. The first database used was the CrunchBase, within the data available in this platform it was possible to collect all the investments made by Rocket Internet in new ventures in the analyzed period (2009 to 2016). Additionally, the same database has available data regarding the year of investment, type of investment, and the total funding amount captured by each new venture. Within this information, it was possible to infer Rocket Internet's participation on each investment.

As a way to estimate Rocket Internet's Multiples the following steps were taken. First, within data provided by the Owlery website, the estimated revenue of the invested new ventures was collected. In order to calculate the Rocket Internet's Multiple of Revenue, the following benchmark has been used, where the multiples for each revenue amount have been described.

Table 2: Revenue Multiple Benchmark

Revenue Multiple by Seller Revenue Last 3 years, from December 2018	
<i>Seller Revenue</i>	<i>Median Enterprise Value (EV) / Revenue Multiple</i>
<= 10M	3,5x
>10M <=20M	4,6x
>20M <=50M	4,1x
>50M <=100M	5,3x
>100M	4,5x

Source: Developed by the authors with data from Software Equity Group (2018 Annual Report), p.41.

* The first column is dedicated to the seller revenue, while the second one to the Median EV to Revenue Multiple. In order to establish a large enough dataset, the Software Equity Group on its 2018 Annual Report, analyzed 829 SaaS M&A transactions in different areas (CRM & Marketing, Analytics & Business Intelligence, Communications & Collaboration, Human Resources & Talent Management, Supply Chain & Logistics among others) that took place in 2017. The Median EV/Revenue Multiple has been calculated according to Seller Revenue in order to create the above benchmark.

This standard has been used to calculate the average current valuation of Rocket Internet's portfolio companies. The table 2 is merely a standard to calculate Revenue Multiples, within this data, it was possible to measure Rocket Internet's current multiples and subsequently its Internal Rate of Return.

The next section is dedicated to describing the analyzed case, the Rocket Internet VB, and the comparison made with the average return on investments of VC Investment Funds in the same period of time.

4. Venture Builder Approach: The Case of Rocket Internet

Rocket Internet is used in this article as a case study to analyze the performance of the venture builder approach. This company was established in Germany, in 2007. According to the company's website, since 2009, Rocket Internet has invested in more than 100 companies, in four main segments: food and groceries, fashion, general merchandise, and home and living.

According to Baumann et al. (2016), Rocket Internet focuses heavily on the operational aspect of building companies, thus its strategy is based on the imitation of promising business models. By using ideas that are already in the market they are able to separate the creative and operation aspects of starting a new business and truly focus on the execution. Furthermore, the company holds a large share of the portfolio ventures,

in doing so they have a strong interest in their rapid scale and success being, therefore, deeply involved with the operational aspects of their portfolio companies. Rocket Internet, as a venture builder, is involved in generating business ideas, recruiting entrepreneurs to establish them, finally guiding their progress.

Open-ended incubation periods compared to traditional incubators or accelerators that tend to have contractually fixed incubation periods, Rocket Internet's influence over its portfolio companies does not have a set termination date. Instead, Rocket Internet follows a strictly economic approach, closely monitoring the performance of each company, to then decide about further engagement or exit. While relationships are thus in principle open-ended, the firm's focus on data rather than people and its strict performance culture might foster the perception of a potentially short-term collaboration. (Baumann et al., 2016, p. 1).

This company has been chosen to be examined in this paper; because it is one of the oldest VB with available data to perform the analysis. The following table is the result of the calculations of the investments made by Rocket Internet from 2009 to 2016 in portfolio companies, the total funding amount, the estimated revenue, valuation – based on multiples of revenue.

According to data available at Owler and Crunchbase database, Rocket Internet, website, and the SEG Report, during 2009 and 2016, Rocket Internet has made 49 investments, totaling USD3.1 million. The invested companies have received circa USD21 million funding amount, including other sources of investment. Their estimated annual revenue is USD6.6 million and their valuation is estimated at USD29.4 million, while Rocket Internet Multiples is valued at UDS6.1 million.

Rocket Internet's discloses the information about its main investors as following: Global Founders GmbH (49,6% ownership), Cornwall (Luxembourg S.à.r.l.)/ Elliot International Ltd/ Paul E. Singer (15,1% ownership), Merrill Lynch International (6,6% ownership), 683 Capital Partners (3,1% ownership), LP, Laureus Capital GmbH (3,0% ownership), Treasury Shares (20,5% ownership), Other Shareholders (2,1% ownership). According to the VB website, the main purpose of Rocket Internet towards its portfolio companies and investors is to build global internet and technology companies by providing investment and deep operational support.

The following table describes the investments made by Rocket Internet over the years and the Current Value of Portfolio Companies. The final calculation is the Internal Rate of Return (IRR).

The IRR represents the rate at which a series of cash flows are discounted so that the net present value of cash flows equals zero. For

fund-level IRRs, any remaining value in the fund is treated as a distribution in the most recent reporting period (PitchBook 2018, p.4).

**Table 3: Investment and Current Value of Portfolio Companies
(million and billion USD)**

<i>Year</i>	<i>Rocket Internet Investment</i>	
2009	10.000.000,00	-10.000.000,00
2010	1.800.000,00	-1.800.000,00
2011	99.000.000,00	-99.000.000,00
2012	126.900.000,00	-126.900.000,00
2013	193.500.000,00	-193.500.000,00
2014	291.100.000,00	-291.100.000,00
2015	1.357.600.000,00	-1.357.600.000,00
2016	1.040.600.000,00	-1.040.600.000,00
Rocket's Multiples	6.154.672.597,3	6.154.672.597,3
IRR	22%	

Source: Developed by the authors with data from Owler, Crunchbase, Rocket Internet, SEG Report

Considering no investment dilution due to Rocket Internet's follow on.

* Excel's IRR function calculates the Internal Rate of Return for an investment based on the initial investment and a sequence of positive cash flows obtained at regular intervals. The first value of the range and the following cash flows must have different signs. In this table, the values from 2009 to 2016 have negative sign as they represent the investments made by Rocket Internet over the years. The last range (Rocket's Multiples) represents the revenue with a positive sign.

From the information collected it was possible to calculate an estimation of IRR equals 22%, which represents the investment return generated by Rocket Internet portfolio companies over the years. This number alone does not represent much, therefore, a comparison with the average return on investments of VC Investment Funds in the same period of time has been made.

To better understand return on investment of two different forms of innovation financing: VC Funds and the VB approach, after presenting the results of Rocket Internet, the results were compared with the data of equal-weighted pooled IRR of VC Investment Funds collected by the PitchBook historical series of VC Investment Funds from 2009 to 2016. The following table has the data gathered by the PitchBook report.

As it is possible to infer by the analysis of both forms of investments, the equal-weighted pooled IRR of the analyzed VC Investment Funds by the PitchBook is 16,9% which is relatively lower than the 22% IRR calculated from Rocket Internet investments. This result indicates that the methodology used by a VB could be a methodology that enhances the

chances of a higher return on investments in risky ventures. The following table summarizes these findings.

Table 4: PitchBook Historical IRR by Vintage (2009 – 2016)

<i>Vintage Year</i>	<i>Equal-Weighted Pooled IRR</i>	<i>Number of funds</i>
2009	9,02	21
2010	18,38	25
2011	16,15	21
2012	16,96	18
2013	17,33	23
2014	17,60	37
2015	18,78	38
2016	20,99	45
Average	16,90%	28

Source: Developed by the author with data from PitchBook Benchmarks: 2Q 2018

* Equal-Weighted Pooled IRR: “Each fund’s cash flows and ending Net Asset Value (NAV) are expressed as a ratio of fund size. Each fund’s ratios are then used to compute pooled calculations for IRR and cash multiples by aggregating all the cash flows and NAV from the same group in the calculation. Regardless of fund size, each fund in these calculations has an equal impact on the output” (PitchBook Benchmarks: 2Q 2018, p.5).

Table 5: Rocket Internet IRR and PitchBook Historical IRR by Vintage (2009 – 2016)

<i>Rocket Internet (VB)</i>	<i>VC Investment Funds</i>
IRR	Equal-Weighted Pooled IRR
22%	16,90%

Source: Developed by the author (2020)

The VB and VC are essentially different modes of investment in new ventures. While the first uses internal resources and ideas to start new business or to support new ventures to scale (Scheuplein and Kahl, 2017), the second has three main objectives when investing in new ventures, namely: invest, monitor, and exit, therefore supports the portfolio companies in a limited manner (Matrick 2011).

This study has been developed in order to answer, ‘Which method has greater chances of success?’. By analyzing the return of investment of these two different investments approaches it was possible to conclude that *ceteris paribus* the VB has shown a greater return on investment.

5. Final Considerations

The purpose of this article is to enhance the knowledge about the return on investment of two different forms of innovation financing: VC Funds and the VB approach. The VB approach is growing over time, nonetheless,

there is still a lack of scientific studies regarding this methodology and its benefits to create and scale new ventures.

The results pointed out that *ceteris paribus* the studied VB has shown a greater IRR in relation to the pool of VC Investment Funds in the same given period. This can be a relevant finding; thus, it supports the idea that a VB concept - to build together with entrepreneurs - is a positive approach that can help these companies to sustainably grow. From data obtained, it is possible to infer that from this model companies will be more likely to succeed and, consequently, investors would have greater chances of return on their investments.

Among the limitations we must mention that this was a case study of one VB, the Rocket Internet, with a benchmark of pooled venture funds analyzed by the PitchBook report in the second quarter of 2018. It is not possible to generalize that the VB approach has greater chances of success when compared with other VC Investment Funds, thus a single VB has been evaluated. It shows, exclusively, that Rocket Internet's investments had a greater return on investment the pooled of VC Investment Funds.

Even though this is a relevant finding, further analysis considering other VBs would be necessary to understand if this approach has better success chances when comparing with VC Funds. Furthermore, a study comparing the VB approach and other traditional programs - incubation and acceleration - could also be relevant to understand the positive aspects of choosing the VB over these other methods of creating and scaling new business.

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