The Reputation Factor in the Valuation of Startups

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Abstract

This paper analyses the relationship between corporate reputation and valuation, with a special focus on startups. Considering the most accredited scientific and professional literature regarding startup valuation, an attempt has been made to understand if and to what extent reputation can be a value driver in the estimate of startups during the first phases of their life cycle. The authors conducted a systematic literature review, which showed a modest interest in the subject on the part of the scientific community, while – on the contrary – practitioners developed ad hoc methods for valuing startups in their very early stages also considering reputational drivers. These methods are not based on the forecasting of flows and rates, but instead explain the value of the startup with a series of qualitative parameters that are explicitly identified and individually quantified/valued, acting as indicators of the value of the entity. Among the most used approaches are the Berkus Method, the Scorecard Method, and the Risk Factor Summation Method. These methods include reputational factors among qualitative parameters, that is among the value drivers. The analysis and the conclusions reached offer a conceptual contribution and identify a research path that deserves attention.

Keywords: company reputation, startups, business valuation, Berkus Method, Scorecard Method, Risk Factor Summation Method

JEL classification: L14; M13; G32

1. Introduction

This paper, which is conceptual in nature, analyses a topic that straddles business valuation and business economics. The research question we tried to answer is if and to what extent reputation is a value driver in the estimate of startups in their embryonic stage, in the light of the most accredited scientific and professional literature concerning the valuation of startups.

For our literature review, we followed the indications given by Fink (2019). First, we defined the research question, then we selected and analysed the scientific and professional contributions that could help us formulate the answer to that question. To this purpose, we queried the main databases provided by specialized publishers and library services by using the keywords 'startup valuation', 'startup reputation', and their variants. Subsequently, we expanded the range to other useful publications that could help us scientifically define the notion of 'reputation', 'corporate reputation', and its constituents. After this analysis, we further investigated the issue in Google Scholar. The material collected was then classified based on bibliographic details (authors, year, title, etc.), the scientific or professional nature of the contribution, the focus and content of the paper (Fink, 2019). The results obtained are described in the following pages.

The analysis and conclusions reached provide a conceptual contribution and identify a research path that deserves attention, as they stress the need for scholars to build a solid bridge between startup valuation methods and reputation. This would help answer the strong questions posed by practitioners, whose approaches offer interesting suggestions.

2. On the Meaning of 'Reputation'

In this paper, reputation is defined as a judgment of reliability that a community expresses on a social actor by observing and evaluating his or her behaviour over time (Gonnella & Talarico, 2021). According to this definition (Note i), the root of the reputation of a social player is primarily the behaviour of that same player. However, since reputation is the result of a judgement, the role of the subject making the judgment in building reputation should not be forgotten. The judgement is shared by a community, but based on a knowledge that is

often indirect in nature. Only one or a few members of the group know the player personally and these members become the connection between the community and the target player (Pastore & Vernuccio, 2008). The reliability judgement that is built on this limited direct knowledge is then shared by the whole community and affects common expectations and attitudes (Fombrun, 1996; Ferguson, Deephouse, & Ferguson, 2000; Chun, 2005; Highhouse, Broadfoot, Yugo, & Devendorf, 2009; van der Merwe e Puth, 2014). The experience of the individual of the behaviour of the social player is accepted as a collective experience, and the time the individual took to reach their judgement becomes a time saved by the community.

Gili (2005) defined the distinctive characteristics of 'reputation' in the following sections:

• The elements on which it is built are personally known to the entity or come from sources the entity considers reliable.

• It is shared among several entities, i.e., it is public in nature.

• It needs time to generate and confirm itself.

• It is generally not possible to amend it quickly, except in case of adverse events with particular social implications.

Therefore, the relationship is also key to the analysis, as it is the relationship that allows an observer to have a direct experience of the reputation of the social actor. And again, it is the relationship that allows a merely individual reliability judgement to be shared with a community (Pastore & Vernuccio, 2008).

In this meaning, reputation is governed by a triadic process through which an individual or an organization infers information on the reliability of a social actor from the appreciation others have previously expressed (Boero, Bravo, Castellani, Laganà, & Squazzoni, 2009; Giardini, Conte, & Paolucci, 2013), (Note ii) thus forming expectations and assuming consequent behaviours without the need for direct experiences (Ravasi & Gabbioneta, 2004). Thus, reputation becomes "… proven credibility…" (Gili, 2005), an abstract value that replaces personal contact, in other words, "… the alternative, based on trust, to the direct verification of organizational activities by the recipient …" (Gili, 2005). This is what makes this informal mechanism of social control so effective, and this effectiveness is used to offset, albeit partially, formal systems, whose efficiency is impaired by the increasing complexity of the contexts in which they operate and by the opacity generated by information asymmetries (Reverte, Sánchez-Hernández, & Rojo-Ramírez, 2016). Therefore, the triadic relationship, the public nature (Herbig, Milewicz, & Golden, 1994), and the historical dimension are key elements of reputation. These aspects are useful in distinguishing reputation from neighboring concepts, such as trust, which is a personal belief that may be formed even in a very short period of time without the need for diachronic development (Ensminger, 2001), as well as image, which can be defined as the "… product of an idealization, that is, of a social construction of the communicator …" (Gili, 2005) aimed at seeking consensus on the perception of the recipient, (Note iii) itself being the result of individual perception rather than shared thought (Gray & Balmer, 1998).

Because of the abovementioned requirements, reputation is a resource that cannot be acquired but only built with a high level of specificity, that is difficult to imitate (Smaiziene & Jucevicius, 2009), with high effects on the competitive capacity of the company (Branco & Rodrigues, 2006; Giardini et al., 2013; Hall, 1992).

3. Corporate Reputation or Corporate Reputations?

We have previously pointed out that reputation is based on relationship (Roberts & Dowling, 2002). Each relationship connects at least two individuals with one another: the individual who expresses the reputational judgement and the target of reputation (Zerwas & von Korflesch, 2016). (Note iv)

Scholars have often stressed how corporate reputation may be intended as a 'hidden asset' (Branco & Rodrigues, 2006; Mahon, 2002; Miles & Covin, 2000, 2002; Tadelis, 1999), on which the company has a limited control and the management of which is consequently particularly complex. This complexity arises both because reputation also originates, to some extent, from the unintentional communication issued by the target entity and because the source of the messages that contribute to defining reputation is not exclusively the target entity but also third parties—one need only remember the public nature of the resource (Fombrun & Shanley, 1990); think for example of the role of social media. Moreover, reputation is the product of a communication process where the receiver plays the active role of the interpreter, therefore taking part in the generation of sender's reputation (Balmer & Gray, 1999). It is for this reason that it is more correct to talk of many reputations, as the categories of stakeholders in whom this feeling arises are (Dowling, 2001, 2016; Mitnick & Mahon, 2007). In fact, different stakeholders may attribute a particular significance to certain characteristics and behaviours of the company while other stakeholders may attribute less or no significance to the same. This depends on how much these attributes and behaviours may affect the expectations and realization of the interests of the stakeholders.

Precisely because it can orient the formation of expectations, reputation is a factor that mitigates the risk arising from the relationship between the stakeholder and the target player (Bültel, 2011; Kollock, 1994; Shane & Cable, 2002; Zerwas & von Korflesch, 2016).

If it is true that each category of stakeholders has their own interests, sensitivity and expectations, the reputational issue should be analysed by class of stakeholders (Bromley, 2002; Burke & Graeme, 2011; Eccles, Newquist, & Schatz, 2007; Gotsi & Wilson, 2001; Walker, 2010). (Note v)

When referring to investors, the factors that most affect the judgement on the reliability of the company and the formation of the consequent expectations are the quality of human resources and economic-financial performance (Cusumano, 2013; Fombrun, Ponzi, & Newburry, 2015; Franke, Gruber, Harhoff, & Henkel, 2008; Gardberg & Fombrun, 2006). These are the main drivers of the reputation of a company for investors. And this is the category of stakeholders we are dealing with in this paper.

4. The Reputation Factor: A Review of the Literature

The issue of corporate reputation is broadly dealt with in the field of economics but rarely in business valuation studies, and when this issue is addressed, the focus is generally on professional practice rather than academic inquiries. Nevertheless, the economic literature on corporate reputation raises very interesting issues even when not related to business valuation.

The studies that are closer to the interpretation adopted in this paper are those that investigated the influence reputation has on investors' decisions and on the process that leads to them. These are research objectives that do not fully correspond to those of this paper; however, the admission by scholars that reputation affects the investor's decision-making process, and the identification of the related parameters are of great relevance for a more conscious use of the valuation approaches proposed for startups and established companies. In the case of startups, particularly in the pre-revenue stage, these drivers play a crucial role and cannot but refer to the management team. The economic literature confirms the importance, for the various private equity operators, of qualities related both to individual components of the management team and to the team considered as a unit (Cusumano, 2013; Franke et al., 2008). Regarding the latter, there is extensive literature that shows how startups are increasingly created on the initiative of multiple persons or entities, rather than springing from the "genius" of an individual (Klotz, Hmieleski, Bradley, & Busenitz, 2014).

We may find many research studies in the literature conducted with the purpose of identifying the characteristics of the target player that are particularly appreciated by investors. The factors that most generate a positive reputation of the founder and members of the management team are the passion and reliability they show (Van Osnabrugge & Robinson, 2000), but also their motivation (Eisele, Haecker, & Oesterle, 2004; Muzyka, Birley, & Leleux, 1996), dedication to work (Bachher & Guild, 1996; Kollmann & Kuckertz, 2010; Silva, 2004), decision-making skills and perseverance (Bachher & Guild, 1996; Black, Burton, Wood, & Zimbelman, 2010; Brettel, 2002; Eisele et al., 2004; Macmillan, Siegel, & Narasimha, 1985; Mishra, 2004), and risk management skills (Macmillan et al., 1985; Mishra, 2004).

Reputation is positively affected by the previous entrepreneurial experiences of the founder and his or her staff (Hall & Hofer, 1993; Streletzki & Schulte, 2013), as well as experiences in executive roles (Black et al., 2010; Streletzki & Schulte, 2013) and in technical fields (Bachher & Guild, 1996; Brettel, 2002; Dixon, 1991; Eisele et al., 2004; Franke et al., 2008; Macmillan et al., 1985; Miloud, Aspelund, & Cabrol, 2012; Mishra, 2004; Muzyka et al., 1996; Shepherd, 1999a, 1999b; Shepherd, Ettenson, & Crouch, 2000; Shrader, Steier, McDougall, & Oviatt, 1997; Zacharakis & Meyer, 2000). In addition, leadership skills are particularly appreciated (Franke et al., 2008; Macmillan et al., 1985; Mishra, 2004; Muzyka et al., 1996; Petty & Gruber, 2011).

However, not only the skills of individuals are appreciated, but also the quality of executive teams are carefully evaluated (Hill & Power, 2002; Macmillan et al., 1985; Miloud et al., 2012). The reliability of composite teams is recognised in the literature for their professional knowledge and expertise (Bachher & Guild, 1996; Dixon, 1991; Eisele et al., 2004; Franke et al., 2008; Goslin & Barge, 1986; Mishra, 2004; Rea, 1989; Robinson, 1987; Streletzki & Schulte, 2013). Even age is considered, as proved by the research studies that particularly appreciate teams composed of members with a mean age ranging from 35 to 45 years (Franke et al., 2008). These characteristics are the more important for reputation the shorter is the life of the entrepreneurial project. Originally, as we will see in the subsequent section, the reputation of the founder and his or her team is the only reputational driver that can be considered by investors.

As the entrepreneurial project is developed – that is, over time and along with the evolution of a history – the roots of reputation change and multiply. Then the company will be identified with its own behaviours and its

own credibility, and corporate reputation will eventually be distinguished from the reputation of the entrepreneur and of the other top managers. The characteristics of the founder and his or her team are added up to other drivers to compose a wide range of reputational factors (Fombrun et al., 2015; Fombrun & Gardberg, 2000), such as, for example, economic-financial performance and the quality of the vision (Fombrun et al., 2015; Gardberg & Fombrun, 2006), the corporate brand (Bontis, Booker, & Serenko, 2007), governance (Bear, Rahman, & Post, 2010), the continuity and quality of the relationships of the company with its stakeholders (McCorkindale, 2008), just to mention a few.

Over the last few years, stakeholders have increasingly focused on corporate policies concerning the environment, social and governance (ESG) issues (Gangi, Daniele & Varrone, 2020; Gardberg & Fombrun, 2006; Lin, Zeng, Wang, Zou & Ma, 2016), which have therefore become particularly significant in the formation of the judgement on reputation. This multitude of drivers and their interactions generate a perception of quality that encompasses the company in its entirety (Highhouse et al., 2009; van der Merwe & Puth, 2014).

We noted above that the academic literature on business valuation has largely ignored the possible contribution of reputation to the value of a business. However, we should note that some proposals have been recently put forward for the practical valuation of startups, in particular in the pre-revenue stage. The most significant contributions to valuation made by practitioners follow two different approaches. The First Chicago Method combines consolidated methodologies that have been accredited by the scientific community and by practitioners as well to view startups through a hybrid lens and attribute value to them based on three probabilistic scenarios: worst, base and best (Smith, Smith, & Bliss, 2011). While the First Chicago Method follows generally accepted valuation principles, it also introduces original adjustments consistent with the high degree of uncertainty and complexity that characterise the estimate of startups. Conversely, the so-called qualitative methods – the Berkus Method (Berkus, 2012, 2016; Kowlessar, 2016; Payne, 2011d; Puca, 2020), the Scorecard Method (Payne, 2011b; Puca, 2020), and the Risk Factor Summation Method (Kowlessar, 2016; Payne, 2011c; Puca, 2020; Rahardjo & Sugiarto, 2019) – mark a discontinuity with generally accepted corporate valuation principles and formulas and rather identify certain qualitative parameters, such as value drivers, which also include reputational factors that are assigned, as we will see later on, a different, but still significant, weight in the three methods for the purpose of determining the value of a startup. (Note vi) These valuation methods will be analysed in the following sections of this work.

5. Startups and Reputation

In the light of the research question we posed, we consider it appropriate to briefly insist on the peculiarity of each of the stages into which the scientific community and practitioners have split the life cycle of a startup – seed stage, early stage, later stage, and exit stage (Note vii).

A company is a dynamic phenomenon. In the transition from the embryonic start-up phase to that of an established company, there are many significant changes affecting governance, operations, income trends, the financial structure, the risk profile, and also the control system, which over time provides additional information that was previously missing. In the very first stage of the life cycle of the startup (the 'seed stage') there is a project, but its implementation has not started yet or is only at the initial stage. There is a maximum degree of uncertainty, and the mortality risk is also maximum for the new company (D'Avino, De Simone, Iannucci, & Schiraldi, 2015; Romanelli, 1989). Usually, only the founder, and maybe his/her family members, are willing to invest their own capital in an entrepreneurial project that is mostly still non-implemented, with an organizational structure that is often still incomplete, with a business model that has not yet passed the market test (Reinfeld, 2018), and in the pre-revenue stage because the product has not yet been marketed. Sometimes the founder manages to launch and successfully complete equity crowdfunding campaigns, with the support of the trust obtained from non-institutional investors (Miller, Scahill, & Warren, 2019). In general, the first institutional investors that are ready to take part in the funding of the startup are the so-called 'business angels' (Freear, Sohl, & Wetzel, 2002; Giaquinto & Bortoluzzo, 2020; Morrissette, 2007; OECD, 2011; Roberts, 1991; Sohl, 2003). Then, later investors may arrive in the role of venture capitalists, generally starting from the early stage (Hellmann & Puri, 2002; Hsu, 2004; Roberts, 1991; Tyebjee & Bruno, 1984). The early stage marks, with its several rounds, the end of most of the initial incompleteness of the startup. The identity of the company and its business model are defined with more clarity and awareness, the management team and the organizational structure gradually take shape, production can start, often with the making of prototypes, and then the first contact with the outlet market will produce the first revenues – which, however, will still be insufficient to obtain profits. The risk profile remains high at this stage, although reduced compared to the previous stage.

It is only with the subsequent later stage that the startup will be ready to enter the market and realize profits and

positive net cash flows. The business risk will decrease unless the revenues obtained are insufficient and impose a revision of strategic choices and/or of the business model. New funders will then appear: the private equity operators (AIFI, 2004; Bentivogli et al., 2009; Damodaran, 2018; Gervasoni & Sattin, 2008).

At this point the startup has its own history, albeit a short one, and, if it will be able to set up for and continue a virtuous development path, its value will increase. This will increase the attractiveness of the exit strategy (Gompers & Lerner, 2001), which may sometimes take the form of an initial public offering (IPO) and listing on a stock exchange (Gompers & Lerner, 2001), while other times it may be the sale of shares either to other (bigger) companies or to its founders, who may be willing to regain the ownership of the company they had created.

The previous short digression is useful to highlight how, during the first life stages of a startup, there is still a lack of information necessary to develop the estimates for the application of the valuation methods that are most consolidated in the scientific community and among practitioners. For this reason, it is appropriate to rethink valuation methods and the value drivers selected.

However, the definition of the life stages of a startup also requires a clearer view of a very important preliminary issue for the research question of this paper, which is: in the initial life stages of a startup, when the entity has not yet had the time to form its own history, or when it has only taken its first steps, can we really talk of a 'reputation' of the startup?

The authors of this paper believe that this is legitimate, provided that the utmost clarity is made about the origin of reputation in this embryonic stage of the life of the startup. If it is necessary to have a history to root one's reputation in it, and if the startup has no history, then investors will look at the history of its creators, that is the founder and his or her team, and will rely on their reputation. (Note [viii]) The reputation of the founder and his or her team will then fill the empty space of the reputation of the startup (Chatsios, Foroglou, & Moutafidis, 2016), which is not yet capable of offering its stakeholders a relational experience that feeds their confidence. This will apply as long as the startup has built its own history, at which time the reputation recognised to the company by the various stakeholders will no longer consist only in the reputation of the entrepreneur and other top managers. Then the reputation of the human resources who have contributed to the life of the entrepreneurial project will have its specific significance, being, however, only one among the many drivers of the most complex and multifaceted corporate reputation.

The transition from a 'reflected reputation' to full reputation marks the course of the life of the startup. It is, therefore, appropriate to analyse the factors that generate reputation, while keeping in mind this aspect and the impact it may have on the identification of the most appropriate valuation methods.

Further consideration is necessary at this point.

Corporate reputation has a dual influence on investors, and this duality is particularly evident in startups. In the first place, the choice of the investor to participate in financing a new business is affected by the reputation of the attributed to the founder and to the management team, therefore reputation plays a role in the process that leads the investor to the choice of making or not making the investment (Cusumano, 2013; Morrissette, 2007). In the second place, reputation is a key parameter in the determination of the value of the startup estimated with "qualitative" valuation methods, i.e., the Berkus Method, the Scorecard Method, and the Risk Summation Method. Clearly, the value assigned to the startup is one of the main components of the investment decision, and since this value, in the methods mentioned above, is linked to reputation, the latter influences the investor in two ways.

In this work, we exclusively selected the second of the two research paths described above to further investigate the contribution of innovative professional startup valuation methods to the definition of the reputation factor.

6. The Limits of Traditional Valuation Methods in the Valuation of Startups

Traditional valuation methods (e.g., discounted cash flow and multiples) that have been described in the best theoretical works on business valuation and regulated by international (IVSC) and national (OIV) standards are particularly indicated and used in operating practice for the appraisal of established companies. These methods are less often used for startups. (Note ix) This is the case for several reasons that can be connected with the absence of the typical information required for their use.

In the early stages of its life, a firm is usually not yet capable of producing revenues and consequently income and cash flows because it does not yet have its own customer base. This is the so-called 'pre-revenue stage', where the startup has no historical accounting data. This, of course, does not prevent management from setting up a business plan, as is normally done, mainly because it is useful for the vital fundraising activity of the entity (Brusa, 2016; Payne, 2006). However, income and cash flow forecasts are often highly uncertain and unreliable

at this stage (Hellmann & Puri, 2002). (Note x) This is the case with the company's internal data.

Regarding the information originating outside the company, we should note that, in the embryonic stages of the startup, it is quite difficult to identify comparable businesses listed on the stock exchange - a prerequisite for the collection of the essential financial data and information required for an estimate of certain valuation parameters, such as, for example, the 'beta' value needed to estimate the cost of equity with the CAPM (capital asset pricing model) formula. Indeed, even in the rare, if not vanishingly rare, cases where this is feasible, (Note xi) comparable companies would be listed on a regulated market and are therefore at a different stage of the business life cycle, characterized by an equally dissimilar risk profile. In this regard, it is important to consider the uncertainty factors that weigh on new entrepreneurial initiatives, as well as on the high rate of failure of startups (Bonabello, 2018; Damodaran, 2018; Gonzalez, 2017). (Note xii) It is well known that different risk levels imply different costs of capital (Sahlman, 2003).

Since we have to valuate a non-listed firm (the startup), which is also smaller than any comparable entity that may be identified, we cannot clearly adopt a 'pure' CAPM method, but should instead leverage—as is done in professional practice—models for the valuation of the cost of equity that value small size and nondiversified portfolios, such as the MCAPM and the build-up methods, which add further risk premiums for 'small size' and for 'unsystematic risk'. Currently, while there are databases that offer data on these two premiums, it is equally true that the available information always refers to mature companies, so it cannot be used to evaluate startups. In addition, as has been observed by Steffens and Douglas (2007), traditional valuation methods, such as the discounted cash flow (DCF) method, usually assume the nonvariation of the cost of capital over time, an assumption that is justified in connection with established companies but appears to be irrational in the case of newly incorporated entities, where the Risk Factor Summation Method tends to change to a rather considerably extent over time.

Similarly, the same problems relating to a lack of internal corporate information and of external market information affect the application of stock exchange multiples or comparable transaction methodologies. Since we know that, in the early stages of their existence (the seed or early stages), startups have no or very low revenues and often negative results at the different levels of the income statement (e.g., EBITDA, EBIT, earnings), it is not difficult to understand that the methodology in question is quite difficult to use for these entities because the most commonly used multiples are based on revenues (e.g., price/sales) or on economic performances (e.g., EV/EBITDA, EV/EBIT, price/earnings). For the multiple method, the same considerations developed for the DCF apply as regards the difficulty of finding comparable data on the market. Moreover, even if this were possible, the available market data would still refer to companies that have been established for some time and not to startups in the embryonic stage (Damodaran, 2009).

The considerations mentioned thus far are certainly not new to insiders, scholars, or professionals in the field of business valuation. In fact, all of these stakeholders, having long been aware of the absolute or partial lack of historical data, of the difficulty of finding comparative data in similar businesses, of the peculiarity or even uniqueness of business models, and of the high level of uncertainty shown in particular by entities at the embryonic stage, have worked to find valid methodological solutions that may offer an alternative to traditional methods in an attempt to increase the rationality and reliability of the methods used to estimate startups. Hence, there is further and consequent awareness of the need to adopt different valuation methods for the different stages of the startup life cycle, from the *seed* stage to the *exit* stage, to use logics, valuation methods and procedures as rationally and reliably as possible for each stage.

The main alternative proposals formulated in the academic literature are as follows:

- The Venture Capital Method, theorized by Professor Bill Sahlman of the Harvard Business School (Sahlman & Scherlis, 1987), is widely used to valuate startups, especially in the pre-revenue stage (Payne, 2011a; Sammut, 2012).

- The Modified DCF Method, which also includes the model proposed by Prof. Damodaran, presents many adjustments made to the traditional DCF to appreciate the qualitative characteristics of startups (Damodaran, 2009, 2018).

- The Real Option Method, which, according to some scholars, is most suitable for the valuation of startups (Smit & Trigeorgis, 2004).

Additional methodologies have been proposed within the world of valuation practitioners, some of which are worth recalling:

- The First Chicago Method, which derives its name from the first fund that used it in its own valuations (the

Chicago Corporation) and which is used by venture capitalists and private equity investors, especially to estimate early-stage startups.

- The Berkus Method, named after its creator, Dave Berkus, known in the world of finance as one of the most active business angel in the United States, having made more than 180 investments in startups at their early stage (Berkus, 2021).

- The Scorecard Method, which first appeared in a 2006 publication by Payne (2006), a famous business angel and financial advisor, former member of the Ohio TechAngels group and of several boards of directors, with more than fifty successful startup investments.

- The Risk Factor Summation Method, created by the Ohio TechAngels Fund (Rahardjo & Sugiarto, 2019), which today is the largest angel group in the United States.

7. Valuation of Startups with Qualitative Methods: The Reputation Driver

At this point of our research, we should focus on the three methods recalled above (the Berkus, Scorecard and Risk Factor Summation Methods), which have been used specifically for the estimate of startups in their first life stages; we describe primarily their underlying assumptions and then the valuation process on which they are based. Our analysis will show that one can infer that the reputation of a startup—whether intended as the quality of its management team or as a generator of a specific risk case—is recognized as one of the constituents of its value.

7.1 The Berkus Method

The Berkus Method, also known as the checklist method, is one of the most widely used methods in the valuation of *seed* and *early* stage startups.

The idea of Berkus was to base the pre-revenue valuation on five key factors. These, in the most current version of the model (Berkus, 2016), are:

- Sound idea.

- Working prototype.

- Quality management team.

- Strategic relationships.

- The roll-out or sale of the product. (Note xiii)

The logic underlying the methodology in question is that if we exclude the first factor (the soundness of the entrepreneurial idea), the remaining four factors represent, as Berkus (2016) himself pointed out, the greatest risk elements every young startup will have to face in the future:

- The presence or absence of a working prototype is linked to technological risk.

- The quality of the management team is linked to the execution risk.

- The strength of strategic relationships affects the market risk.

- The launch or sale of the product affects the production risk.

The valuation process—which is analytical in nature—is developed in the following steps.

According to the original approach, each of the factors listed above should be assigned by the appraiser a value that typically varies from $0 to $500,000, based on an analysis of the characteristics of said factors in the startup examined. This analysis consists of qualitative questionnaires that convert answers into monetary equivalents. The pre-revenue valuation is obtained by summing up the values attributed to the aforementioned five variables, which act as true value drivers in the methodology under examination. (Note xiv) The table 1 lists the criteria used and the value ranges assigned to the different factors:

Table 1. The Berkus Method

If the following exists:	Add to the company a value up to:
Sound idea (basic value)	$500,000
Prototype (reduces technology risk)	$500,000
Quality management team (reduces execution risk)	$500,000
Strategic relationships (reduces market risk)	$500,000
Product rollout or sales (reduces production risk)	$500,000

Adapted from Payne (2011d).

It is clear, for example, that, in the case of the quality management team, the higher the level of knowledge, skills and entrepreneurial successes obtained in the past by the members of the team, the lower the risk the investor will take and, consequently, the higher the value attributed by the expert to the value driver (Chatsios et al., 2016). This confirms the previous assumption that reputation factors influence the value of the startup.

In the new version of the model, the valuation process follows a different development. First, market data are collected, i.e., the maximum value attributed to startups considered at the same development stage in a certain geographical area. (Note xv) This introduces an element that changes as a function of the reference market, abandoning the original approach that required the allocation, in each estimate, of an undifferentiated maximum value of $2.5 million.

Having done this, in line with the flexibility mentioned above, the different value drivers should be identified starting from the *sound idea*. These factors, as mentioned above, may also be qualitatively different from or in a higher number than those specified in the initial model.

If the expert, having carried out the necessary analyses, considers it appropriate to attribute, in the case examined, the values of $500,000 to the entrepreneurial idea, $1.2 million to the quality of management, $400,000 to strategic relationships, $200,000 to the launch of the product, $200,000 to patenting, and $500,000 to the startup development stage, the resulting estimate will be $3 million. See the table 2.

Table 2. Berkus Method application example

Value driver	Maximum attributable value	Assigned value
Entrepreneurial idea	$800,000	$500,000
Quality of management	$1,2 million	$1,2 million
Strategic relationships	$600,000	$400,000
Product rollout	$300,000	$200,000
Patenting	$300,000	$200,000
Development stage	$800,000	$500,000
	Startup value	**$3 million**

Adapted from Payne (2011d).

7.2 The Scorecard Method

The Scorecard Method, also known as the Benchmark Method, is most suitable to valuate startups in their early stages of life (seed or early stages), when they are not yet generating revenues (Karius, 2016). Like the Berkus Method, it allows appraisers to obtain a pre-revenue valuation without having to prepare economic-financial reports, which would be highly uncertain and unreliable at the life stage considered.

First, it is worth noting that the Scorecard is inspired by a typical comparative approach. Valuation is carried out by comparing the target company with *comparable* startups in relation to the specific parameters or drivers of the value indicated below:

- Strength of the management team (max 30%).

- Size of the opportunity (max 25%).

- Product/technology (max 15%).

- Competitive environment (max 10%).

- Marketing/sales/partnership (max 10%).

- Need for additional investments (max 5%).

- Other factors (max 5%).

The percentages indicated above are the maximum weights the method attributes to the various key factors. The strength of the management team can affect the final value to a greater extent than the remaining factors, as this factor has a potential contribution of up to 30%, which confirms the decisive contribution of reputation in estimating startups. (Note xvi)

After conducting the comparative analysis, the expert will assign a score of less than 100% (e.g., 90%) to each of the parameters used by the method. A discount is given if the target company is weaker than its comparable, or a score of more than 100% (e.g., 120%), i.e., a premium, is assigned if the company is stronger than the comparable.

By summing the products obtained by multiplying the weights assigned to the different parameters by the scores assigned to each parameter, a multiplier is obtained with a higher or lower value than the unit.

The valuation of the target entity will be obtained by using the product of the multiplier calculated by the mean pre-revenue value of startups operating in the same business sector in the same geographical area, which are at a similar stage of the life cycle as the target entity (Payne, 2011b).

In other words, the Scorecard Method "corrects" the estimate of the average value of comparable enterprises to obtain a pre-revenue valuation of the target startup.

The valuation process—again of an analytical nature—is composed of the following steps:

• Collection of data on the value of comparable pre-revenue startups operating in the same geographical area and belonging to the same business sector to obtain their average valuation.

• Comparison of the target company with comparable companies using the key factors defined by the model to assign the various scores to each of these factors.

• Calculation of the sum of the products of the weights assigned to each value driver for the respective scores assumed by the appraiser (multiple).

• Estimate of the target startup obtained by applying the multiple determined to the average valuation of the basket of comparable companies.

In the example shown in Table 3, summing up the various factors, a multiple of 1.190 is obtained. This, applied to the average value of the comparable values of $2,500,000, returns a value of $3,000,000.

Table 3. Scorecard Method application example

Comparison Factor	Weight %	Comparison %	Factor = (W*C)
Management Team Strength	30%	150%	0.450
Size of the Opportunity	25%	110%	0.275
Product/Technology	15%	90%	0.135
Competitive Environment	10%	120%	0.120
Marketing/Sales/Partnerships	10%	110%	0.110
Need for Additional Investment	5%	90%	0.045
Other Factors	5%	110%	0.055
		Factor sum	1.190
		Average Company Valuation	$ 2.5 million
		Target Company Valuation	$ 2.975 million

Adapted from Payne (2011b).

7.3 Risk Factor Summation Method

The Risk Factor Summation (RFS) Method is another tool suitable for the pre-revenue valuation of startups in the *seed* or *early* stages, similar to the Scorecard Method but based on different metrics (Karius, 2016). Unlike in the previous methods, the valuation process here is based on a wider range of risk factors (Kowlessar, 2016), which allows a more accurate analysis. This method also includes several exogenous risk factors associated with the startup, which should be governed by the company for an adequately profitable subsequent "exit" (Payne, 2011c). The wide range of risk factors used in the RFS method is a strength because it requires investors to more thoroughly analyze the management aspects that will have to be properly managed to allow the startup to develop and investors to obtain a satisfactory exit. The underlying assumption is that the higher the number of risk factors considered, the greater the overall risk investors will take to achieve a satisfactory exit. Therefore, in addition to management risk, generally considered the most important in the initial stages, this method also seeks to quantify several additional risks with a more accurate perception (Achimská, 2020). The risk factors underlying the RFS method are listed below (Payne, 2011c):

• Management risk.

• Stage of the business.

• Legislation/political risk.

• Manufacturing risk.

• Sales and marketing risk.

• Funding/capital raising risk.

• Competition risk.

- Technology risk.

- Litigation risk.

- International risk.

- Reputation risk.

- Potential lucrative exit.

Similar to the Scorecard Method, the RFS method is based on a typically comparative approach. When the characteristics of the target company are compared, in terms of the various risk factors listed above, with those of comparable companies (Bratic, Blok, & Gostola, 2014), one of the five ratings defined in the model is assigned to each value driver by the appraiser (-2, -1, 0, +1, +2), (Note xvii) each corresponding to a reduction (discount) or increase in value (premium) according to whether the rating is negative or positive, respectively. This will "adjust" the pre-revenue average value of comparable companies operating in the same sector and in the same geographical area, taken as a benchmark (Karius, 2016). If the score obtained is 0, obviously no adjustment will be made. The table 4 shows the premiums and discounts that are applied for the different ratings in this method:

Table 4. Ratings and value adjustments applied to the average value of comparables

Rating	Meaning	Average pre-revenue valuation adjustment
-2	Very negative to grow the business and get an ideal exit	- $500,000
-1	Negative	- $250,000
0	Neutral	No correction
1	Positive	+ $250,000
2	Very positive to grow the business and achieve an ideal exit	+ $500,000

Adapted from Payne (2011c).

In substance, the method adds or subtracts $250,000 for each added or subtracted point assigned by the appraiser.

Similar to the two methods discussed above, the RFS method is also analytical in nature and consists of the following steps:

- Identification of an average valuation of comparable pre-revenue startups operating in the same geographical area and in the same industry.

- Comparative analysis of the target entity against its comparables according to predefined risk factors, which are considered with the purpose of assigning a rating and the consequent premiums or discounts to each of them.

- Estimate of the target company obtained by algebraically summing the average value of the sample of comparables to the premiums and discounts assigned to the various risk factors.

An example of how to use the Risk Factor Summation Method is in table 5:

Table 5. Risk Factor Summation Method Application Example

Average pre-revenue valuation: $2,5 million		
Risk factors:	Score	Value
Management	+2	$500,000
Stage of Business	0	$0
Political	-1	$-250,000
Manufacturing	0	$0
Sales & Marketing	+1	$250,000
Funding	-1	$-250,000
Competition	0	$0
Technology	+2	$500,000
Litigation	0	$0
International	0	$0
Reputation	+2	$500,000
Potential Lucrative Exit	+1	$250,000
	Company Valuation	$1.5 million

Adapted from Payne (2011c).

If one compares the value drivers used in the three different methods described above, it is clear how some drivers are considered in several valuation methods, while others appear in only one of them. The reputation of management is undoubtedly part of the first group, beyond the different specific designations assumed in the

various criteria (quality management team, management team strength, management). Moreover, some research studies have shown that the capacities of the management team are crucial to the success of the startup (Amit, Glosten, & Muller, 1990), which is why the reputation of the management is included in the various startup valuation methods (Mishra, 2004; Reverte et al., 2016).

Furthermore, the Risk Factor Summation Method uses a specific value driver—the reputation risk of the startup.

8. Conclusions

Reputation is a resource for business continuity in all stages of the life of a company. However, its source and its weight change as a function of the stage of life of the enterprise. This cannot be ignored in setting up the most suitable valuation methods to determine the value of a growing company.

When an entrepreneurial project is still exclusively in the ideational phase or its implementation is at the embryonic stage, the business valuation process prevalently consists of the valuation of the potential of the entity. In fact, while it is true that value depends on two elements—ongoing activities and development opportunities—for all companies, value in the pre-revenue stages of the life of a startup lies almost exclusively in opportunities. Hence, a greater underlying uncertainty is identified concerning both expected income and cash flows and discount rates, with the effect of making the resulting value a mere hope.

Scholars have proposed that the basic approach of the most accredited methods should be preserved, while the methods used for the valuation of fundamental parameters should be adapted to the specificities of the business phenomenon in the embryonic stage. However, a different approach has been adopted by the best practitioners. Starting from the assumption that the need is to valuate not an existing situation but a potential development and that expectations cannot be based on factual data—as they do not yet exist—the focus of professional investors has shifted to the presence of conditions that allow them to predict the possibility that an entrepreneurial idea can be translated into action and gain value over time. As we have seen, some valuation methods defined by practitioners explain the value of a startup with a set of qualitative parameters that are explicitly identified and quantified/valued individually, acting as business value drivers. The Berkus, Scorecard and Risk Factor Summation Methods have been described to show how they also include reputation factors among their qualitative parameters or value drivers. Reputation-related factors take on different specific weights in the three methods described for the purpose of determining the value of the target entity. In each case, reputation is a determinant, if not prevalent value, as in the Scorecard Method, where the management team strength can be assigned a maximum weight of 30%, higher than the weights of other factors.

It must be repeated, as previously pointed out, that reputation needs time to form and needs a history in which to root. Since a startup does not yet have a history in the first stages of its life, its reputation will be rooted in the history of others, firstly in the reputation of the entrepreneur who created it and, more generally, of its management team. Over time, as more experience is acquired and economic-financial results are obtained on which stakeholders can base their expectations, the startup and then the established company will acquire a clearer and more autonomous identify with respect to the persons who created the entrepreneurial project. During this path, a corporate reputation is formed, which overpasses the reputations of the founder and management team, to incorporate them without being exhausted in them. Simultaneously, with the formation of its history, the corporate information necessary for the application of traditional valuation methods becomes available. Reputation will always maintain its influence on value, but it will be a mediated influence. For example, corporate reputation may be deemed to affect investors' perception of the presumable feasibility of the strategic plan and their assessment of the reliability of expected flows. Similarly, reputation may also affect the risk perceived by the investor and therefore the discount/capitalization rate.

We can conclude that, when the company is established, reputation will still be capable of affecting value, but only indirectly, since it will influence the parameters required by traditional valuation methods. Qualitative approaches and the explicit, primary contribution of reputation-related parameters will then be abandoned in determining the value of the startup, while the economic and financial results realized over time will become a more solid ground on which to base the estimate of its value.

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Notes

Note [i]. There are many definitions of 'reputation'. For a broad review, see Dowling (2016).

Note [ii]. "Reputation can be seen as a process of triadic interaction through which a player – in front of a decision-making context characterized by information asymmetry and risk – acquires relevant information about a target object of interest - for example, the reliability of a second player with whom it may establish an exchange relationship by accessing the assessment of a third party (Conte & Paolucci, 2002)" (Boero, Bravo, Castellani, Lagan à, & Squazzoni, 2009, p. 268).

Note [iii]. The difference between the concepts recalled is identified by scholars in various manners, as there is no shared definition of either 'reputation' or of 'identity' and 'image'. For a review of the different approaches in the doctrine, see Barnett, Jermier, and Lafferty (2006). However, it should be added that image is generally considered easier to manipulate than reputation, which takes time to form, as it needs the experience of the

behavior and depends on the company's values, vision and results (Fombrun & Rindova, 1998, p. 206).

Note [iv]. The reputation of the company expresses the "… relative success in fulfilling the expectations of multiple stakeholders…" (Fombrun & Shanley, 1990) or, in other words, "Reputational assessments are determined by the congruence between firms' behaviors and the expectations and preferences of stakeholders" (Branco & Rodrigues, 2006). What Gili (2005, p. 4) maintains about credibility – "... credibility is not an intrinsic feature of the source, but a relationship..." – is, in fact, even more appropriate for reputation, to which the collective dimension is intrinsic.

Note [v]. Fombrun defined reputation as "… the net perceptions of a company's ability to meet the expectations of all its stakeholders…" (Fombrun, 1996). The same definition is adopted by Kelley and Thams (2019).

Note [vi]. "Obviously, when it is difficult to value a subject based on output (future cash flows), pricing it based on inputs (entrepreneur, industry attractiveness, etc.) may be a better alternative than 'pure guess'" (Miloud, Aspelund, & Cabrol, 2012, p. 153).

Note [vii]. The startup life cycle can be divided into phases that are partially different from those described here; see: David, Gopalan, & Ramachandran, 2020, p. 6; Jeong, Kim, Son, & Nam, 2020, pp. 3-4; Le Merle & Le Merle, p. 5; Roberts, 1991, p. 4; Sohl, 2003, p. 11).

Note [viii]. "Venture capitalists often say they invest primarily in people – the entrepreneur or the management team – and secondarily in ideas" (Cusumano, 2013, p. 26).

Note [ix]. Damodaran, in this regard, stressed that in the case of "young companies… the standard techniques we use to estimate cash flows, growth rates and discount rates either do not work or yield unrealistic numbers" (Damodaran, 2009, p. 2).

Note [x]. At this point, we should recall the well-known distinction between 'base business' and 'new projects' (Copeland, Kollert, & Murrin, 2002, p. 313), i.e., between ongoing activities and activities to be developed, which clearly shows that, in the initial stages of the company's existence, its economic or financial flows can only refer to new entrepreneurial projects, mostly not yet implemented. It goes without saying that, as time goes by, the company will begin to produce income flows and cash flows through the progressive formation of a 'business base', and the accounting information that will be generated over time will create a sound information base on which more reasonable, reliable and true future forecasts can be based, precisely because they are based on historical financial information.

Note [xi]. We should not forget that the primary distinctive characters of startups include the uniqueness of their business models.

Note [xii]. It goes without saying that the high risk level of a startup, especially in the early stages of its life, increases the probability of more uncertain estimates whether the expert uses traditional, possibly adapted, valuation methods or more innovative alternative methods, analyzed below.

Note [xiii]. In a first version, the value drivers were different, namely: sound idea, prototype, quality management team, quality board, roll-out and sales. See Amis and Stevenson (2001, p. 150).

Note [xiv]. It goes without saying that the value assigned to each of the valuation parameters will be higher, therefore moving closer to $500,000, the better the entrepreneurial idea is and the more effective the mitigating factors of the various risks (technological, execution, market and production) are.

Note [xv]. Among the most well-known platforms used to draw on comparable startup values, we can mention Crunchbase, PitchBook and CB Insights.

Note [xvi]. "Some are surprised to find that investor rankings of product and technology are below those of the management team and the size of the opportunity. In building a business, the quality of the team is paramount to success. A great team will fix early product flaws, but the reverse is not true... Good product and intellectual property are important, but the quality of the team is key" (Payne, 2011b).

Note [xvii]. This is a typical example of the Likert (1932) scale. Obviously, it is adopted to limit, as much as possible, the degrees of freedom of the appraiser.

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