

# VALUATION AND EFFECTIVE CAPITAL FUNDING IN STARTUP FIRMS

To what extent is startup valuation and investment decisions similar or different in venture capital and equity crowdfunding.

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# Abstract

This thesis will discuss the similarities and differences between venture capital and equity crowdfunding based on reviewing literature and document analysis. Equity crowdfunding is a method of raising money by soliciting small investments from a large number of people. Venture capitalists are individuals or organizations that provide funding to startup companies in exchange for a share of ownership in the company. Venture capitalists typically place more emphasis on the potential return on investment when making decisions about whether to invest in a startup. This is because they are usually investing other people's money and need to generate a profit for their investors. Equity crowdfunding investors, on the other hand, tend to focus more on the products or services offered by the startup and whether they believe in the long-term viability of the business.

The lack of focus on market data and investor experience means that there is a significant knowledge gap between traditional investors and crowd investors. This knowledge gap can be detrimental to the success of a crowdfunding campaign, as it can lead to unrealistic expectations and a lack of understanding of the risks involved. It is important for entrepreneurs to be aware of this knowledge gap and take steps to bridge it, through education and communication with potential investors.

To analyze valuation process of the randomly selected companies I used retrieved valuation documents from the Crowdfunding website Folkeinvest. I downloaded all the available valuation documents of 12 companies that had raised money on Folkeinvest from 2021 to 2022. The average valuation of the chosen companies was MNOK 47. The most used valuation method was Dis-

counted Cash Flows (DCF)-valuation. The funding success rate for the companies that used this method was 66%. This is compared to a funding success rate of 84% for the companies that used other methods of valuation or a combination of methodology. When comparing this to other valuation methods from the selection of data, we can see that the other methods generate a higher success rate of funding. This results might be connected to the observations of reviewing the available literature in the section about Decision-making - *"Crowds are more interested in product development than financial data"*

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# Chapter 1

## Introduction

startup companies have become increasingly popular in recent years, as investors are searching for the next big thing. With this increase in popularity has come a need for better understanding of how startup companies should be valued. This paper seeks to explore the various factors that go into company valuation and how they differ between venture capital and equity crowdfunding. Ultimately, I hope to provide insights that will help startup companies raise more effective capital for growth. There are a number of factors that contribute to a company's valuation. One of the most important is the stage of development that the company is in. Startups tend to be more valued than companies that have been in business for longer, as they typically have more growth potential. In addition, the amount and quality of the assets that a company owns also contributes to its valuation. This includes not only physical assets, such as property or equipment, but also intangible assets, such as intellectual property or a strong brand name. Another important consideration is the company's financial situation. The more money a company can bring in, the more it will be worth. This is especially true in the early stages of a company's development, when it is still uncertain whether or not the business will be successful. The potential for future growth is also a key factor in valuation. Investors are more likely to invest in companies that they believe have the potential to become major players in their industry. The way a company is funded can also affect its valuation. Venture capitalists typically invest in companies that they believe will be able to grow rapidly and achieve a high return on investment. In contrast, crowdfunding investors are more likely to invest in companies that they believe have social or environmental value. This difference

in focus can lead to different valuations for companies that are seeking funding.

Overall, there are a number of factors that contribute to a company's valuation. How these factors are weighted will depend on the type of investor and the stage of development that the company is in. startup companies seeking capital should be aware of these different considerations and tailor their pitch accordingly. By understanding the various factors that influence valuation, startup companies can raise more effective capital and grow their business more efficient.

The purpose of this paper is to explore the factors that contribute to startup company valuation and how they differ between venture capital and equity crowdfunding. I will also compare the investment decisions from the investors perspective when it comes to the mentioned topics. The research will focus the considerations that go into company valuation, each with its own weight depending on the investor and the stage of development that the company is in. For startup companies seeking capital, it is important to understand these different factors and tailor their pitch accordingly. By understanding the various factors that influence valuation, they can raise more effective capital and grow their business more efficiently.

*"To what extent is startup valuation and investment decisions similar or different in venture capital and equity crowdfunding."*

This research topic has been developed together with the company SmartOrg AS, which is the firm I am currently employed by. The company is developed by people with long experience and commitment in the operation of voluntary associations. We are a company that through our products and services creates value for organizational life, the local community and volunteering. We want to create an ecosystem of services and tools that are socially beneficial and promote democracy, including and digital simplification that supports the UN's sustainability goals.

# Chapter 2

## Literature review

### 2.1 Equity crowdfunding

Crowdfunding, a recent phenomenon, is an alternative method of financing projects or individuals through online platforms that accept money from a large number of investors [56]. The concept of raising money from an unknown audience via the internet originated in developing countries with modest loans [2];[39]. This strategy has evolved considerably since the early days when it was first discovered and popularized. In recent years, its implementation has grown increasingly competitive for traditional funding agents such as venture capitalists (VCs), business angels (BAs) and banks ([40];[77], providing new alternatives to those in need of financing [14]. With two decades of growth, ICOs are becoming increasingly common, particularly in the private blockchain sector. In 2015 alone, over \$34 billion was raised throughout the world through ICOs, which increased by more than 1000 % during the previous three years[51]. The crowd appears to value characteristics that signal the venture's quality in order for them to select appealing investment possibilities. According to Ahlers et al. [3], successful equity crowdfunding operations benefited from a better educated workforce (as measured by the number of board members in the management team and the share of board members with an MBA degree). In addition, Piva and Rossi-Lamastra [63] discovered that entrepreneurs' business education and experience were linked to campaign success. Receipt of grants, early funding from private networks, and patronage by professional investors such as business angels and venture capitalists all increased the chances of a successful fundraising ([47];[65]; [41].

Table 2.1: Definitions Of Crowdfunding

<b>Authors</b>	<b>Definition</b>
Belleflamme, Lambert, and Schwienbacher [8]	<i>Crowdfunding involves an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights</i>
Lambert and Schwienbacher [44]	<i>An open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes.</i>
Tomczak and Brem [79]	<i>The act of taking a loan/funding traditionally performed by a designated agent and outsourcing it to an undefined, generally large group of people in the form of an open call.</i>
Voorbraak, Tanri-sever, and Mahieu [83]	<i>The process of one party requesting and receiving money and other resources from many individuals for financing a project, in exchange for monetary or non-monetary return on investment.</i>

The second series of research focuses on the diverse nature of crowd investors, their underlying logic, and the evolving dynamics that develop throughout fundraising (as a result of interacting with prior investors and entrepreneurs’ published updates throughout the campaign). Several papers illustrate how information cascades among crowd investors can lead to herd behavior [84]; [36];[82], which is prevalent in other types of crowdfunding markets [19]. For example, Vismara [82] claims that the number of initial early investors is positively correlated with the amount of subsequent investors, overall funding amount, and campaign success rate. Early investors are enticed by a high-profile investor because they make the offer more appealing to later investors. Additionally, entrepreneurs can post new development news, such as funding events, business developments, and collaboration projects to enhance their chances of obtaining money [11].

Finally, certain research have challenged the notion that the “crowd” is a uniform group by identifying characteristics that set it apart. Female crowd investors, according to Mohammadi and Shafi [55], are more risk-averse than male ones when it comes to selecting which equity crowdfunding enterprises to support. When investors from accredited sectors participate in retail, [32] find no statistically significant difference between the sensitivity of such investing to geographical distance and that of retail from unaccredited investors.

## 2.2 Private equity and venture capital

Venture capital investments are characterized by the acquisition of equity stake in the startup. Together with a Shareholder's Agreement, investors obtain the voting right in the company's management decisions, which ensures the transfer of managerial skills to the startup, while initiating the process of value creation. The managerial capacity of the investment fund is the result of its investment experience in other companies of the same industry, and its suppliers and customers' networks, which are worth more than the simple capital injection.

## 2.3 Investment criteria

The decision-making criteria of professional venture investors have been the subject of numerous research [80];[49];[25];[72]). To the extent that these investors are primarily interested in financial gains, they choose investments based on their perceived risk and anticipated return rates [80];[73]. In this case, the term return is most often interpreted in terms of profitability [66];[68] and risk in terms of the likelihood of a project's ongoing viability [29]. As a result, decision-makers collect and evaluate data on a number of valuation criteria that are likely to influence the risk-return profile of investment opportunities [73].

## 2.4 Decision-making in crowdfunding

Almost all startups provide information to prospective investors. However, only a small proportion of the facts supplied are verified by the crowdfunding platform or another third party. Some platforms verify basic financial details like credit score and personal income [38], as well as business plans [57]. The data might seem difficult when it comes to information such as revenue numbers, project progress, monthly disposable income for repayment, or soft announcements such as promises or self-descriptions ([53]. As a result, the connection between entrepreneur and investor is rife with information asymmetries [3]. Investors attempt to balance the potential reward and dangers of an investment



when these imbalances arise. They produce classic agency constellations ([45] as a result of these asymmetries. In the context of a principal-agent relationship, the entrepreneur solicits investment from an investor and attempts to convey his eligibility and intentions [5];[70]. The investor must have faith in the founder's signals and good intentions [61].

Investing in a campaign is similar to investing in other ventures: it's likely that many factors will influence the decision. Investors can't know the future success of a firm or repayment capacity of a borrower [4]. Investors use proxies and other methods of assessment to help them make their selections when there is little or no reliable information [58]. As a result, every available piece of information is assessed and each founder's method of signaling is examined [64]. Information sources such as social dynamics [46]) and emotional reactions [26] are utilized, for example. There are many kinds of context cues, but they all have one thing in common: they impact judgments, such as how information is presented or perceived. As a result, a human investor considers factors that a purely rational investor would disregard.

## 2.5 Venture capital and business angel decisions

When it comes to venture capital and business angels, four categories of determining factors have been identified by reviews on how VCs and BAs make decisions: the product or service, the market, the entrepreneur or team, and the finances. Factors such as product and service characteristics range from particular qualities of a product [87] to differentiation from competition offers [33] to protectability and patents [50]. The market in which a startup operates is important in the funding decision since it pertains to the prospects of a company as well as risks and chances of an investment, such as its general attractiveness [33], size, growth [52], dynamics, or entry barriers [86]. The business concept is not always as important as the person or team who creates it. VCs and BAs invest in skills, industry expertise, track record, personality, motivation, or team composition [33];[50]. Finally, investors want to make a

profit, therefore they put a lot of effort into financial risk research, including potential return on investment, cash flow, exit options, liquidity, and equity stakes [50];[52]. Other elements mentioned in reviews include the investment firm's qualities and standards [33], compatibility of investor and founder [52], and, on rare occasions, recommendations or references [52];[87]). Few studies have examined softer aspects such as the importance of intuition [34] or how a company's color scheme affects decisions [16].

# Chapter 3

## Theory

### 3.1 Characteristics newly established growth companies

An early-stage company is a startup that has not yet achieved significant scale or revenue. In the business world, the term “startup” is used to describe a new business venture. Early-stage companies are often characterized by high levels of risk and uncertainty, as they have not yet proven their business model or achieved significant market traction [76]. Many early-stage companies are supported by venture capital firms, which provide the seed funding necessary to get the business off the ground. Due to the high risks associated with early-stage businesses, most fail within the first few years of operation. However, those that do succeed can achieve incredible levels of growth and profitability.

Early stage companies are diverse, but they share some common characteristics according to Sivicka [76]:

1. **No history:** At the risk of stating the obvious, many young firms have little or no track record. Many of them only have one or two years of operations and financing data available, while others just have financials for a portion of a year.
2. **Small or no revenues, operating losses:** Young businesses have a limited history, which is rendered even less useful by the fact that there isn't much operational information in them. Revenue for idea firms is usually low or non-existent, and expenditures are typically incurred in the beginning rather than producing income. They lead to significant

operating losses as a result of their synergy.

3. **Dependent on private equity:** Private investors, rather than public markets, typically provide equity to young enterprises. Young firms rely on private sources for equity instead of public markets. The equity is mostly provided by the founder (and friends and family) at the early stages. Venture capitalists become a source of equity capital when the promise of future success grows and the demand for additional money rises.
4. **Many don't survive:** The majority of new firms fail before they reach commercial success, according to several studies. There are a number of research that support this claim, although the failure rates vary.
5. **Multiple claims on equity:** The frequent forays by young firms to raise equity has equity investors who invested earlier in the process exposed to the chance that their value will be decreased by deals given to subsequent equity investors. Equity investors in new firms frequently demand and obtain first claims on cash flows from operations and liquidation, as well as control or veto rights, which allow them to have a voice in the company's actions. As a consequence, various equity claims in a young firm can vary significantly in terms of their value.
6. **Investments are illiquid:** Because equity investments in young firms are frequently privately held and in non-standardized parts, they are far more illiquid than publicly traded ones.

The disadvantages of seed stage company valuation is present. Often, early stage companies are not as well-defined or have as much traction as more established companies. This can make it difficult to place a value on the company and its assets. In addition, early stage companies may not be as profitable as more developed businesses, making it harder to justify a high valuation.

## 3.2 Valuation

The most common problem in valuation of early stage companies is the lack of historical financial data. This can make it difficult to determine the company's

potential for growth and profitability. Additionally, there can be a lack of clarity around the business model, which can make it hard to assess the viability of the company. However, there are a number of ways to overcome these challenges and get a clear picture of the company's prospects.

One way to overcome the challenge of lack of historical data is to look at the company's business model and assess its potential for growth and profitability [67]. This can give you a good indication of the company's future prospects. Additionally, it is important to look at the management team and their track record in growing and managing successful businesses. This can give you insights into the company's ability to execute its business plan.

Another way to assess the viability of early stage companies is to look at the market opportunity that they are addressing [52]. This can help you to understand the potential size of the market and the company's ability to capture a significant share of that market. Additionally, it is important to look at the competitive landscape and assess the company's competitive advantage. This can give you an indication of the company's ability to succeed in its chosen market.

Finally, it is also important to consider the financial health of the company [30]. This can be done by looking at the company's financial statements and assessing its liquidity, solvency and profitability. This information can give you an indication of the company's ability to meet its financial obligations and grow its business.

### **3.2.1 Key factors in valuation of early stage companies**

When it comes to early stage companies, there are a variety of valuation methods that can be used in order to determine the viability and potential of the business. Early stage companies face a unique set of challenges when it comes to valuation. In many cases, traditional metrics such as revenue and profitability are not yet relevant. Instead, startups need to focus on other indicators that

can provide insights into their progress and potential. Some common valuation methods used in early stage companies include customer engagement, user retention, and key metrics. By tracking these data points, startups can gain a better understanding of their business and make informed decisions about their future. With the right approach, valuation can be a powerful tool for early stage companies. Some of the most common methods also include analysing the team of the company, the market opportunity, the business model, and the technology.

1. **Customer engagement** is one of the most important indicators of a startup's success. By tracking customer engagement, startups can get a better understanding of how their product or service is being received [43]. There are a number of ways to measure customer engagement, including surveys, customer feedback, and social media analytic. Startups should track customer engagement data over time to see how it changes.
2. **User retention** is another key metric for startups. It measures how often users return to a product or service after using it [42]. Startups should track user retention data over time to see how it changes. There are a number of ways to improve user retention, including providing a great user experience, offering incentives, and improving customer support.
3. **Key metrics** are a set of data points that startups use to track their progress [75]. They can include measures such as revenue, profitability, and customer engagement. Startups should track key metrics over time to see how they change. By tracking key metrics, startups can identify trends and make informed decisions about their business.
4. **The team.** Investors will often look at the founding team in order to assess whether or not they have the necessary skills and experience to execute on their vision. Additionally, it is important to look at the team's track record in order to gauge their success in previous ventures. Another key area that investors will look at is the company's management team [17]. They will want to see if the team has the experience and expertise to successfully execute the business plan. Additionally, they will also want

to assess the team's commitment to the company and its ability to work together.

5. **Market opportunity.** Investors will want to assess whether or not there is a large enough market for the company's product or service [23]. Additionally, they will also want to assess whether or not the company has a competitive advantage in that market.
6. **The business model** is also a critical area of focus for investors. They will want to assess how the company plans to generate revenue and whether or not that model is sustainable. Additionally, they will also want to look at the company's costs in order to determine if they are realistic.
7. **Technology.** They will want to understand how the company plans to use technology to execute on their business model and whether or not they have a competitive advantage [37]. Additionally, they will also want to assess the company's technical risks in order to determine if they are manageable.

### 3.2.2 Valuation methods

Valuation is important as value of company will determine the fractions of shares received by the investors in returns for their investment. Valuation contribute greatly to the entrepreneur as it lead motivations and value of the resources and efforts they put in the company. Moreover valuation will help to align the ambitions of the entrepreneurs and investors, addressing fair treatment and lessen probable dispute between them [54];[21];[86].

A business is like any other company or enterprise that needs one or more contributions to assist their day-to-day activity in the early days of their lives before they can raise any revenue to support their own funding. Furthermore, startups try to value themselves whenever companies are shares are being sold to existing or new investors [78]. Startups are priced for several reasons, such as having exit strategies for either merger acquisition or initial public offering (IPO), designing stock option policy, and drawing up funding proposals for the business ' future. Startups have some features that make it hard for them to

be priced using conventional methods. We lack financial history-related data, uncertain distribution, untested market platform, unknown rival, inexperienced staff, and unrealistic expectations [28].

As thought that it is hard to value startups in the early stage, pre-revenue valuation is important as it will create framework with which the entities will negotiate a pre-money valuation. The valuation will lay baselines for current and future distribution of ownership [7]. Terms that are pre-money or post-money assessment are commonly used by stakeholders when valuing a company such as SmartOrg. Post-money value is calculated by dividing the investment capital by the number of equity shares of the shareholders. On the other hand, pre-money valuation is simply calculated by subtracting the amount of capital invested from the post-money valuation [81].

There are several approaches used by practitioners for valuing startups, which are the Berkus Method, Scorecard Method, Risk Factor Summation Method, Discounted Free Cash Flow Method (DCF), and Venture Capital Approach.

### **Berkus Method**

The Berkus Method is a valuation technique that relies on the use of market data to estimate the value of a business [76]. The method was developed by venture capitalist David Berkus and is commonly used by investors to assess the potential return on investment of a startup company. The Berkus Method begins with an analysis of the size and growth potential of the addressable market for a company's products or services [76]. This is then used to generate a range of possible values for the company based on its current share of the market. The method also takes into account other factors such as the company's management team, technology, and business model. While the Berkus Method is not without its critics, it remains one of the most commonly used valuation techniques in the venture capital industry [76].



## **Scorecard Method**

The scorecard method is a valuation technique that assigns a numerical value to an asset based on a set of criteria [62]. The criteria can be financial, such as return on investment or debt-to-equity ratio, or non-financial, such as customer satisfaction or employee retention [62]. The scorecard method is often used in conjunction with other valuation techniques, such as discounted cash flow analysis or comparative market analysis. While the scorecard method has its advantages, it also has some drawbacks. One potential disadvantage is that the value of an asset can be highly sensitive to the weightings assigned to the various criteria. As a result, it is important to carefully consider the weightings before using this valuation technique. Another potential drawback is that the scorecard method can be time-consuming and expensive to implement. However, when used correctly, the scorecard method can be a valuable tool for valuation purposes.

## **Risk Factor Summation Method**

The Risk Factor Summation (RFS) Method is a valuation approach that has been gaining popularity in recent years. The RFS method involves summing the market risk premiums of individual risk factors to arrive at a valuation for an asset [60]. This approach can be used to value both equity and fixed income securities. The main advantage of the RFS method is that it is relatively straightforward to implement. In addition, the RFS method is flexible and can be adapted to valuation problems of varying complexity. As a result, the RFS method is well-suited for valuation applications in a wide range of settings.

## **Discounted Free Cash Flow Method (DCF)**

The DCF model is one of the methods for calculating a company's enterprise value, which is calculated by discounting expected free cash flow [10]. The majority of professionals use the DCF approach to estimate the worth of a firm they would like to spend their money on. As a result, this method demands a strong foundation of hypotheses that fail to establish these findings mostly in

error. Shareholders must make investment decisions based on assumptions, projections and analysis of historical performance. However, because DCF models provide detailed information about how stock would do with particular estimators, investors can use them to assist them in determining whether a company is worth investing in. For example, if only one output element is changed, the product may be moved by ten million units and generate billions of dollars for major businesses [6]. But shareholders must evaluate a company's inherent value before investing their money into it using the DCF model. In addition, Narktabtee, Carnes, and Black [59] stated that cash flow measurement provided more value to the firm during early life cycle stages.

### 3.3 Funding options

When it comes to funding their businesses, early stage companies have a few different options. One option is crowdfunding. Crowdfunding allows companies to raise money from a large number of small investors, typically through an online platform. This can be a great way to get funding from individuals who believe in your company and its mission. However, it's important to note that crowdfunding is typically only an option for businesses that are seeking relatively small amounts of money [48].

Another option for early stage companies is to seek out angel investors. Angel investors are typically wealthy individuals who invest in high-growth potential companies in exchange for equity [89]. This can be a great way to raise money, but it's important to remember that you will be giving up a portion of ownership in your company.

The third option for early stage companies is venture capital. Venture capitalists are professional investors who provide funding in exchange for an equity stake in the company. This can be a great option for companies that are seeking larger amounts of funding and are willing to give up a portion of ownership in their business. However, it can be difficult to secure venture capital funding,

as investors will only invest in companies that they believe have high potential for growth.

Finally, early stage companies can also consider debt financing. This is when businesses take out loans from banks or other financial institutions in order to fund their operations. Debt financing can be a good option for companies that need quick access to capital but may not be able to secure other forms of funding. However, it's important to note that debt financing will need to be repaid, with interest, over time.

### **3.3.1 Crowdfunding**

Crowdfunding is the practice of raising funds from a large number of people, typically via the internet [35]. Platforms like Folkeinvest allow users to create campaigns and solicit donations from the general public. Donors can choose to give any amount they like, and all money raised goes directly to the campaign creator. In return for their donation, donors may receive rewards or perks depending on the campaign. For example, donors to a film crowdfunding campaign might receive a copy of the finished film, or access to behind-the-scenes content.

Crowdfunding is an appealing option for those seeking funds because it allows them to tap into a large pool of potential investors. It also provides a way for people to support causes they care about without having to make a large financial commitment [27]. However, there are some risk involved in crowdfunding. For example, there is no guarantee that a campaign will reach its fundraising goal, and investors are not typically refunded if a campaign fails to meet its goal [13] Additionally, crowdfunding platforms typically charge fees, which can eat into the money raised.

One of the key advantages of crowdfunding is that it allows startups to bypass the traditional financial system and raise capital directly from the public. This can be a particularly attractive option for companies that are unable to

secure seed funding or venture capital investment. In addition, crowdfunding can provide valuable validation for a business model or product idea. If a large number of people are willing to invest in a project, it can be a strong indicator that there is significant market demand for the product. Finally, crowdfunding can also help to generate publicity and build buzz around a new company or product launch. This can lead to further investment down the line and help to ensure that a business gets off to a strong start. Therefore, it is clear that there are several potential advantages of crowdfunding for startups.

One of the main disadvantages of crowdfunding is that it can be difficult to determine the true value of a project. This is because projects are often funded by a large number of small investors, each of whom may have a different valuation for the project. As a result, the valuation of a project can be highly volatile, making it difficult for investors to make informed decisions. Additionally, crowdfunding can create a lot of hype around a project, which can lead to unrealistic expectations and eventual disappointment.

Crowdfunding is done in four ways [88]:

1. **Donation-based crowdfunding:** People give money to enterprises or organizations whose activities, ideas or purchase they want to support, without expecting anything in return.
2. **Pre-payment or rewards-based crowdfunding:** People give money to receive a reward, service or product. This works well for consumer goods and tangible products.
3. **Loan-based crowdfunding:** People lend money to firms in exchange for that firms commitment to repay over a time interval, together with interest payments.
4. **Equity-based crowdfunding:** People invest directly or indirectly on businesses to receive some ownership in the company. such as shares or debt securities.

The four types of crowdfunding mentioned are each useful in different ways. Donation-based crowdfunding is good for causes or organizations that people

want to support but don't necessarily need anything in return. Pre-payment or rewards-based crowdfunding is good for tangible products that people want to receive as a reward for their donation. Loan-based crowdfunding is good for businesses that need money but are committed to repaying it over a certain period of time, with interest. Equity-based crowdfunding is good for businesses that people want to invest in and receive some ownership in the company in return. For the purpose of this thesis we will focus on the segment of Equity-based crowdfunding.

### **3.3.2 Venture capital**

Venture capital is the financial support provided to businesses that wish to expand their client base and product and service offerings. It's used to finance capital expenditures such as increasing production capacity, marketing campaigns to promote its goods and services, and working capital requirements associated with asset growth. At this phase of a startup's life cycle, entrepreneurs can no longer apply for government or corporate funding for research and development, and they don't have a track record in business or steady revenue. These venture capital investors fill the funding gap for businesses looking to build a customers' portfolio [22].

The purchase of equity stakes in startups is typical in venture capital investments. Investors obtain the voting authority over company management decisions, ensuring the movement of managerial abilities to the firm while also beginning the process of value creation, under a Shareholder's Agreement. The financial management of the investment fund is based on its prior experience in other firms in the same industry, as well as its suppliers and customers' networks, which are worth more than a simple cash infusion.

# Chapter 4

## methodology

The first step in conducting an effective analysis is to plan out the entire research process. This will provide you with the best possible starting point for addressing the issue. Within science, there are three types of research and research design: exploratory, descriptive, and causal design [71].

The choice of research design depends on the problem. In this thesis, the purpose is to investigate a complex and new phenomenon where there is relatively little research-based knowledge. We want to acquire new knowledge and a deeper understanding within the phenomenon. Thus, it is relevant to use an exploratory design [31].

The majority of qualitative researchers employ one or more of three primary approaches for gathering data [69]. One strategy is to witness events and record them as they occur (field observation). Another strategy is to question participants directly about their experience (interviews). Finally, researchers may review written material (document analysis). Readers should analyse at the data collection techniques employed by researchers and whether these methods are likely to provide the most thorough and accurate picture of the topic.

As previously stated, document study (document analysis) is the analysis of written documents by a researcher [15]. Document analysis is a method for examining and analyzing documents - both printed and electronic (computer-based, Internet-transmitted) material [12]. These can include personal and non-personal documents such as archives, annual reports, guidelines, policy

documents, diaries or letters. Document analysis, like other qualitative research analytical techniques, requires that data be analyzed and interpreted in order to extract meaning, understand it, and create knowledge [20]. Document analysis is essential for method triangulation and data integration, the great value of documents in case study research, and its use as a standalone method for specialized sorts of qualitative research. [12].

## 4.1 Advantages and limitations of document analysis

Document analysis has both benefits and drawbacks when compared to other qualitative research techniques. First let us look at the advantages following this method of analysis.

- **Efficient method:** In contrast to qualitative research, which may take months or even years to complete and offers no immediate results, text analysis allows for time-saving and efficiency. It replaces data gathering with data selection [12].
- **Availability:** There are many public-domain documents available, especially as a result of the Internet, and they may be downloaded without asking the authors. The ability to track and analyze a large number of documents is particularly appealing to qualitative researchers [12]
- **Exactness:** Documents that are meticulously detailed and named, as well as references and specifics of events, assist in the research process [85];[12].
- **Coverage:** Documents provide comprehensive coverage. They tend to cover a wide range of time, events, and locations [85];[12].

The analysis of documents is not always beneficial. The following are a number of document limitations.

- **Insufficient detail:** Documents are produced for a purpose other than research; they are generated outside of a research plan. As a result, they seldom contain enough specifics to answer a research question [12]

- **Low retrievability:** It is difficult to obtain documentation. Documents may be intentionally hidden away. As Yin [85] has pointed out, documents might be deliberately hindered access to them Bowen [12].
- **Biased selectivity:** A collection that is lacking in certain documents suggests biased selectivity [85]. In an organizational setting, the accessible (chosen) papers are more likely to be in line with company policies and procedures as well as the organization’s leadership agenda [12].

The disadvantages highlighted in the listing above are can be considered minor flaws rather than major shortcomings. Document analysis has advantages that greatly outweigh the limitations, given its effectiveness and detailed examination connected to the relevant topic.

## 4.2 Valuation

### 4.2.1 selection and sampling

To analyze valuation process of the randomly selected companies I used retrieved valuation documents from the Crowdfunding website Folkeinvest. I downloaded all the available valuation documents of 12 companies that had raised money on Folkeinvest from 2021 to 2022. The companies had to fulfil the following criteria to be included in my sample: 1) they had to have at least one valuation document from Folkeinvest, 2) the valuation document(s) had to be from 2021 or later, 3) the funding campaign needed to be completed. I chose this time frame and these criteria to focus on companies that had recently raised money and were still in a growth phase. I was also interested in how new(er) companies approached valuation compared to more established companies, to better draw conclusions on the most ideal valuation method for effective funding process and higher valuation.

I read through all of the valuation documents to identify and understand the most common valuation methods used in the funding campaigns. I also looked for differences in valuation methods between newer and more established com-



panies. I identified four different types of valuation methods: Discounted Cash Flows (DCF), Scorecard method, VC-Method method and a combination of valuation methodologies primary based on fundamental aspects.

#### **4.2.2 Method**

There are many different approaches that can be taken when conducting a document analysis for the purpose of valuation. The first step is to identify the type of documents that will be most relevant to the particular asset being valued. This may include financial statements, investor decks, tax returns, deeds and leases, property appraisals, and so forth. Once the relevant documents have been compiled, the next step is to analyze these documents in order to determine their value. This process may involve reviewing historical data, examining current trends, and making assumptions about future conditions. Ultimately, the goal is to arrive at a fair and accurate estimate of the value of the asset in question. The specific approach that is taken will vary depending on the type of asset being valued and the particular purpose of the valuation. However, there are some general steps that are typically followed in most cases according to Bowen [12]. First, the documents to be analyzed are gathered and organized. Next, key information is extracted from these documents and analyzed. Finally, a conclusion is reached regarding the value of the asset.

### **4.3 Decision-making in Equity crowdfunding and venture capital**

In this part of the research, I conduct an interdisciplinary review of crowdfunding decision making research based on literature review and document analysis, emphasizing studied factors and applied methodologies to expose gaps and possible avenues for future investigation. The result is an integrated framework of criteria influencing investor decision-making in crowdfunding and a systematic comparison of decisions in crowdfunding with those in traditional settings. The findings have implications for improving the success rate of crowdfunding

campaigns as well as the theory and practice of startup valuation.

# Chapter 5

## Results and findings

### 5.1 Decision-making

While the basic equity investment concept is very similar in both equity crowdfunding and some of the decision criteria, the two methods of raising money differ significantly in several ways. Crowd investors are more interested in product or service benefits, particularly when it comes to the sooner stages of the investment cycle [9]. However, the thorough vetting of project details, differentiators, and intellectual property is frequently less thorough. Meanwhile, in the financial industry, while crowdfunders do pay attention to numbers, they appear to place a lower value on them than traditional investors, owing mostly to a lack of access to business data and a lesser understanding of reading and interpreting financial and business papers [1]. In both cases, the perception of the founder or founding team is critical, but due to a lack of physical access to the founders, investors must turn to substitutes in order to form an opinion [3]. Replacing a campaign with one that is similar, but not identical, has the advantage of keeping costs low while still being effective in terms of message. Product videos, customer service responses, and prior successful campaigns on the same platform are some examples [90]. Almost all studies about crowdfunding choices ignore the market for a business or the investor market experience. This absence makes sense since crowds typically do not have the required knowledge and views [1]. Crowd investors, on the other hand, are more dependent on external influences and decisions are primarily determined by the actions of other investors and the situation in which a decision is made [18]. Similarly, the portfolio management and issues that are relevant to professional investors

[33] are likewise ignored in the field of crowdfunding. Amateurs tend to take a less organized approach to this sort of investment, which suggests they don't have a long-term balanced portfolio in mind.

## 5.2 Valuation

This study of equity crowdfunding valuations has found that the average deal is valued at around MNOK 7,9. This results in an average funding success rate of 71% across the 12 evaluated businesses. The study also found that there is a wide range in valuations, with some deals coming in below MNOK 18 and others exceeding MNOK 169. The average valuation of the chosen companies was MNOK 47. The most used valuation method was Discounted Cash Flows (DCF)-valuation. The funding success rate for the companies that used this method was 66%. This is compared tot a funding success rate of 84% for the companies that used other methods of valuation or a combination of methodology.

	<b>Valuation</b>	<b>Issue value</b>	<b>Amount raised</b>	<b>Sucess rate</b>
<b>Mean</b>	47 318 535	11 397 358	7 907 826	71 %

Table 5.1: Valuation of companies - Summary of means

One possible explanation for the higher valuations is the increased maturity of the crowdfunding market. As more startups have turned to crowdfunding to raise capital, investors have become more familiar with the process and more comfortable making equity investments. This has allowed startups to command higher prices for their shares.

Another factor that may be driving up valuations is the increasing popularity of crowdfunding among startup employees. In the past, many employees were hesitant to invest in their company's crowdfunding campaign because they feared it would negatively impact their career prospects if the company failed. However, as crowdfunding has become more so called mainstream, more employees

are willing to take the risk and invest in their company's future.

The higher valuations being seen in equity crowdfunding deals are likely to continue as the market matures and more employees become comfortable with investing in startups. This trend could lead to even more capital in the crowdfunding markets.

# Chapter 6

## Discussions and Conclusions

### 6.1 Decision-making

Crowdfunding and traditional investment methods differ in a few key ways, the most important being that crowd investors are more interested in product or service benefits. Traditional investors place more value on financial data and business papers, while crowdfunding investors turn to substitutes to form an opinion about a project. Additionally, because they lack access to business data, crowds tend to make decisions based on the actions of other investors and the situation in which a decision is made. Finally, amateur investors typically take a less organized approach to this sort of investment, which suggests they don't have a long-term balanced portfolio in mind. Overall, these differences between crowdfunding and traditional investment methods suggest that crowds are more interested in product development than financial data. Consequently, when making a decision about investing in a project, it is more important to focus on the product or service benefits than on the financial data.

While the article does provide a good overview of the different factors that go into an investor's decision, it does not discuss how these factors are actually used by investors to make their decisions. For example, it is not clear how an investor would actually use market size and growth potential to determine whether or not to invest in a startup. This lack of clarity could be addressed by including more specific examples of how each factor is considered by investors when making funding decisions.

Despite this lack of clarity, the article does provide a good starting point for understanding the different factors that go into an investor's decision to fund early stage companies. This information will be useful for entrepreneurs who are seeking funding for their own startups, as they can use it to better understand what investors are looking for and how to appeal to them. Additionally, this article could be used by investors themselves as a reference when making funding decisions, to ensure that they are considering all of the relevant factors.

Further study related to the topic it would be interesting to evaluate how people's attitudes towards investing change when they are given access to business data. It would also be beneficial to compare the investment portfolios of crowdfunding investors and traditional investors to see if there are any differences.

## 6.2 Valuation

The findings of this study suggest that equity crowdfunding valuations are on the rise, with the average deal valued at around MNOK 7,9. This results in an average funding success rate of 71%. The most used valuation method was Discounted Cash Flows (DCF)-valuation, which had a funding success rate of 66%. When comparing this to other valuation methods from the selection of data, we can see that the other methods generate a higher success rate of funding. This results might be connected to the observations of reviewing the available literature in the section about Decision-making - "*Crowds are more interested in product development than financial data*". Another factor that may be driving up valuations is the increasing popularity of crowdfunding among startup employees. The higher valuations being seen in equity crowdfunding deals are likely to continue as the market matures and more employees become comfortable with investing in startups. This trend could lead to even more capital in the crowdfunding markets

When it comes to further research it would be interesting to explore whether the average valuation for equity crowdfunding deals continues to rise as the market matures. Additionally, it would be useful to study how the popularity

of crowdfunding among startup employees affects valuations. Finally, it would be interesting to investigate whether the higher valuations being seen in equity crowdfunding deals lead to more capital being invested in the market.



# Appendix A

## Valuation of companies - analysis

Company	Description	Valuation method	Valuation	Issue value	Amount raised	Sucess rate
PINSJ AS	Pinsj is a green, digital platform where both private individuals and shops can rent, lend and sell used sports and outdoor equipment.	Combination of valuation methods	17 967 249	4 395 000	4 395 000	100 %
BRAVO MARINE AS	Bravo Marine develops underwater washing technology for use on open, semi-closed and closed fish farms.	Discounted Cash Flows (DCF)	30 000 000	4 500 000	2 377 400	52 %
KEY ACCOUNT AS	Provider of financial services for all types of companies.	A combination of expected average earnings and a strategic value	18 000 000	4 500 000	1 611 854	35 %
WAY AS	Revolutionizes traffic training.	Discounted Cash Flows (DCF)	169 600 050	50 000 010	34 182 525	68 %
AGDIR DRIFT AS	Digital advisor platform for anyone who cultivates or cultivates land.	Discounted Cash Flows (DCF)	24 999 775	8 075 000	5 009 900	62 %

TILLIT FORSIKRING AS	Fully digital insurance company that is revolutionizing the industry. Automated and scalable solutions, low prices and simple claims handling.	Discounted Cash Flows (DCF)	70 985 914	19 998 258	14 209 354	71 %
MATFRA.NO AS	Marketplace for local food with customers throughout Norway. Communicates sustainable food production and less food waste.	Combination of valuation methods	11 999 726	2 999 932	2 999 932	100 %
ALV B AS	Develops innovative cancer vaccines for dogs and cats.	Discounted Cash Flows (DCF)	90 501 400	14 999 996	10 168 092	67 %
CLIKK AS	All your digital platforms in one place. An ingenious solution adapted to you, influencers and companies. International ambitions in 2022.	Scorecard method	49 740 000	8 000 004	6 787 452	84 %

LOKALBRYGG AS	Established as Norway's largest marketplace for craft beer. Enables new products such as beer subscriptions and Christmas beer calendars.	Discounted Cash Flows (DCF)	44 992 404	4 500 113	2 705 025	60 %
BOOKD AS	The Nordic region's first mobile booking platform for the entertainment industry.	VC-Method	21 031 614	5 800 000	5 800 000	100 %
GIVN HOLDING AS	new platform for digital gift cards that ensures that they are used.	Discounted Cash Flows (DCF) and exit-multiples	18 004 293	8 999 987	4 647 381	51 %

Company	Description	Valuation method	Valuation	Issue value	Amount raised	Success rate
PINSJ AS	Pinsj is a green, digital platform where both private individuals and shops can rent, lend and sell used sports and outdoor equipment.	Combination of valuation methods	17 967 249	4 395 000	4 395 000	100 %
BRAVO MARINE AS	Bravo Marine develops underwater washing technology for use on open, semi-closed and closed fish farms.	Discounted Cash Flows (DCF)	30 000 000	4 500 000	2 377 400	52 %
KEY ACCOUNT AS	Provider of financial services for all types of companies.	A combination of expected average earnings and a strategic value	18 000 000	4 500 000	1 611 854	35 %
WAY AS	Revolutionizes traffic training.	Discounted Cash Flows (DCF)	169 600 050	50 000 010	34 182 525	68 %
AGDIR DRIFT AS	Digital advisor platform for anyone who cultivates or cultivates land.	Discounted Cash Flows (DCF)	24 999 775	8 075 000	5 009 900	62 %

## Appendix B

### Valuation of companies - Summary of means

	<b>Valuation</b>	<b>Issue value</b>	<b>Amount raised</b>	<b>Sucess rate</b>
<b>Mean</b>	47 318 535	11 397 358	7 907 826	71 %

# Appendix C

## Discussion paper

### Introduction

The purpose of my thesis is to explore the factors that contribute to startup company valuation and how they differ between venture capital and equity crowdfunding. I will also compare the investment decisions from the investors perspective when it comes to the mentioned topics. The research will focus the considerations that go into company valuation, each with its own weight depending on the investor and the stage of development that the company is in. For startup companies seeking capital, it is important to understand these different factors and tailor their pitch accordingly. By understanding the various factors that influence valuation, they can raise more effective capital and grow their business more efficiently.

*"To what extent is startup valuation and investment decisions similar or different in venture capital and equity crowdfunding."*

This research topic has been developed together with the company SmartOrg AS, which is the firm I am currently employed by. The company is developed by people with long experience and commitment in the operation of voluntary associations. We are a company that through our products and services creates value for organizational life, the local community and volunteering.

We want to create an ecosystem of services and tools that are socially beneficial and promote democracy, including and digital simplification that supports the UN's sustainability goals.

As the world of equity crowdfunding continues to grow, it is important for both investors and issuers alike to be responsible and act with due diligence.

In order to ensure that everyone involved in this type of investment is treated fairly, it is important that all parties take their responsibilities seriously. This includes being transparent about the risks involved in venture capital and crowdfunding investments, as well as being honest about the potential rewards.

## Discussion and review of literature

In a world where crowdfunding is becoming increasingly popular and accessible, it is important to consider the ethical implications of this trend. Rotem Shneor, an expert in the field of crowdfunding, notes that there are a number of considerations that must be taken into account when participating in this practice.

One key consideration is transparency. When launching a crowdfunding campaign, it is important to be clear about your goals and how the funds will be used. This can help to build trust with potential donors and avoid any potential legal issues down the road. Another key consideration is the use of rewards. When offering rewards for donations, it is important to make sure that these rewards are not unethical in nature. For example, offering donors exclusive access to a product that is not yet available to the public may be considered unethical if it means exploiting vulnerable people for financial gain. Lastly, it is important to consider the impact of crowdfunding on existing industries. As Shneor and Torjesen [74] notes, many established businesses have expressed concerns about being crowded out by new players in their industry. This is an important consideration that must be taken into account when crowdfunding, as it can have significant implications for the long-term sustainability of a business or organization.

There are many ethical considerations to be aware of when participating in crowdfunding. Whether you are a startup entrepreneur looking to raise funds or a venture capitalist looking to invest in promising startups, it is essential to understand these issues and how they might impact your business or investment decisions.

De Clercq et al. [21] provide a detailed comparison of the ethical challenges

and responsibilities associated with crowdfunding and traditional venture capital. They argue that both funding models are fraught with ethical challenges related to issues such as equity distribution, transparency, accountability, and fiduciary duty. However, they also note that there are some key differences between these two funding approaches, with crowdfunding often providing greater flexibility and less regulatory oversight than traditional venture capital.

The authors argue that there are some key differences between the ethical challenges associated with crowdfunding and traditional venture capital. First, they note that crowdfunding often provides greater flexibility than traditional venture capital in terms of how funds can be used. This is due to the fact that crowdfunding campaigns are often less well regulated than traditional venture capital investments. Second, the authors argue that crowdfunding is often less accountable than traditional venture capital. This is because crowdfunding platforms are often less well regulated than traditional venture capital firms, and also because crowdfunding campaigns are often less transparent than traditional venture capital investments.

Finally, the authors note that the ethical challenges associated with crowdfunding often extend beyond the issue of equity distribution to include concerns related to privacy, data security, and investor protection.

Both crowdfunding and traditional venture capital raise important ethical challenges for entrepreneurs seeking funding for their businesses. However, they also suggest that the different funding models may be better suited to different types of businesses, with crowdfunding often providing greater flexibility and less regulatory oversight than traditional venture capital. As such, it is important for entrepreneurs to carefully consider the ethical implications of both funding models before choosing one for their business.

Fink [24] discusses the ethical challenges related to crowdfunding and traditional venture capital in his article "The Ethics of Crowdfunding and Venture Capital." Fink argues that both crowdfunding and traditional venture capital have their own sets of ethical challenges, but that traditional venture capital is more responsible in terms of its impact on society. Fink attributes this to the fact that traditional venture capital is more regulated



than crowdfunding, and that traditional venture capitalists are more likely to have a fiduciary duty to their investors. Fink also argues that traditional venture capitalists are more likely to be held accountable for their actions by the government and by the media. As such, Fink concludes that traditional venture capital is more responsible than crowdfunding when it comes to the ethical challenges associated with each respective industry.

## **Conclusion**

All the mentioned challenges that is discussed above also apply for start-up companies. When it comes to start-ups, both crowdfunding and traditional venture capital is relevant choices. Both of these methods have their own set of ethical challenges that need to be taken into consideration. For example, with crowdfunding, there is the potential for start-ups to take advantage of people's generosity by not delivering on their promises. With traditional venture capital, there is the potential for start-ups to give up too much control of their company in exchange for funding.

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