VENTURE CAPITALISTS' DECISION-MAKING UNDER CHANGING RESOURCE AVAILABILITY: EXPLORING THE USE OF EVALUATIVE SELECTION CRITERIA

Noah John Pettit

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Supervisor of Dissertation:

Michael J. Nakkula, Professor of Practice in Education

Dean, Graduate School of Education:

Katharine O. Strunk, Dean and Professor

Dissertation Committee:

Michael J. Nakkula, Professor of Practice in Education

Raghu Krishnamoorthy, Director, Chief Learning Officer Executive Doctoral Program

Raj Ramachandran, Senior Partner, Leadership Advisory @ WittKieffer

ABSTRACT

This qualitative case study investigates the evaluative criteria that venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. The study examines VCs' lived experiences and perspectives on using objective and subjective investment selection criteria during periods of economic change when resource availability fluctuates. This qualitative research study employed semi-structured interviews with 14 VCs from the San Francisco Bay Area to obtain primary data, then incorporated thematic analysis to build a cohesive, rich narrative that accurately captured VCs' personal experiences. This study aimed to determine whether VCs continued acting in investors' best interest when confronted with a drastically changed investment landscape. An agency theoretical framework serves as the lens to examine whether VCs act as responsible fiduciary agents for principal investors.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

This dissertation examined what evaluative criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. In particular, this qualitative case study examined how venture capitalists changed their decision-making behavior, specifically their reliance on subjective vs. objective criteria, as resource availability changes. This chapter outlines the context for the qualitative case study, the problem statement, and definitions of key terms and vernacular used throughout the research study. Additionally, the chapter details the significance of the study and an overview of existing literature, with particular attention to the gaps in the literature stream that this study proposes to address. Then, the chapter will introduce the purpose of the study and the research questions that drive the study. Finally, the chapter provides an overview of the conceptual framework used to view the phenomena and the proposed study methodology.

Context

Startup companies are those characterized by significant growth and investment return opportunities but also increased risk and uncertainty (Hall & Hofer, 1993). However, startup revenue is critical to the national and global economy, as startups create nearly $3 trillion in value through job creation and innovation (Startup Genome, 2020). Nevertheless, startups face significant challenges in obtaining funding for their entrepreneurial ventures because traditional lenders and investors perceive them as too risky because of significantly high failure rates (Zacharakis & Meyer, 2000). Therefore, many startups depend on investment from venture capitalists to fund these entrepreneurial ventures and survive competitive markets while still in

nascent stages of development (Di Gregorio & Shane, 2003). For example, venture capital-backed firms such as WhatsApp, Facebook, Groupon, Google, Twitter, and Qualtrics contribute economic value, including job growth, increased GDP, and technological advancements (CB Insights, 2023). This monetary value would not have been realized if VCs had not funded those startup ventures. Therefore, VCs' role as economic value contributors is predicated on successful investment choices driven by their selection criteria to choose those startups (Bugl et al., 2022; Chemmanur et al., 2014).

The probability of the success or failure of these startups is heavily dependent on the availability of investment capital in the private equity market (Nanda & Rhodes-Kropf, 2013). However, startups do not have the same historical performance indicators as established companies and often have limited funding options from traditional financial institutions such as banks. As a result, startups' funding options are often limited to VCs who work for a fund or individual investors and are often willing to bear the risk associated with an investment in startups in exchange for future revenue that exceeds their initial investment (Di Gregorio & Shane, 2003). As a result, VCs provide more funding for startups than any other type of investor (Cavallo et al., 2019). Additionally, venture-capital-backed startups are much more likely to perform well and achieve growth, which aligns with investors' objectives (Adler et al., 2019).

Venture capital-backed startups are more likely to perform better than their startup peers who do not receive VC-backed funding for multiple reasons, including exclusive access to outside resources connected to the VC firm (Shuwaikh & Dubocage, 2022), enhanced ability to innovate through strategic VC advisement (Jeong et al., 2020), and the ability to mitigate uncertainty among investors based on the reputation of the VC supplying the funding for the

startup firm (Cumming et al., 2022). Therefore, VC investment selection decisions, composed of a mix of objective and subjective evaluative criteria, are vital to the survival of startups.

Increased available funding during the pandemic, stemming from the Paycheck Protection Program (PPP) loans and a significant reduction in interest rates, led to a substantive rise in VC funding in startups (Bellucci et al., 2023; Ellul et al., 2020). Initial PPP loan criteria are significantly less stringent than traditional bank loans. The criteria allowed businesses with up to 500 employees loans up to $10 million at a very low 1% interest rate. Additionally, those companies that received a first-draw Small Business Association (SBA) loan were eligible for a second-draw loan up to an additional $2.5 million. The minimum credit criteria were removed, allowing businesses without established credit or historical performance to receive both loans, resulting in a significant increase in resource availability in the private equity market (SBA, 2023). The perceived risk of investment in startups decreases significantly with the availability of additional investment capital because resource scarcity is often the primary restriction VCs face when making investment decisions (Duchin & Hartford, 2021).

Therefore, the private equity market investment landscape changed drastically with the onset of the COVID-19 pandemic. Investment opportunities and capital became far more abundant, resulting in additional startup investments by VCs. However, as the number of VC-backed startups increased, so did the failure rate of those startups. The types of objective and subjective selection criteria used by VCs may have contributed to the increased failure rate continuing to affect the private equity market (MacMillan et al., 2022).

Problem Statement

The drastic change in resource availability, specifically a dramatic increase in investment capital stemming from PPP loans and reduced borrowing interest rates, brought on by the COVID-19 pandemic, presented a novel situation in which VCs were less restricted by resource availability. The increased availability of investment capital also decreased investor oversight of their agents, VCs, as limitations on investors' available resources decreased. Investors now had a surplus of investment capital, expanding the scope and amount of their investments in multiple endeavors. Unsurprisingly, the stringency of VC selection criteria for startup ventures decreased as entrepreneurs and investor groups had more capital to contribute to initial startup costs (Glucksman, 2020). VC decision-makers had more latitude because they had less oversight from the investors they represented.

However, because VCs are the investors' agents and have a fiduciary duty to act in the best interests of their investors, how they judge the desirability and profitability of investment opportunities should remain consistent with those of their investors despite changing economic or industry conditions (Kollmann & Kuckertz, 2010). However, a significant amount of funds given to startups by venture capitalists resulted in drastically lower returns than typical for the industry (Gompers et al., 2021). These poor investment decisions made by VCs during this period could result from *moral hazard,* a term used when agents (venture capitalists) exhibit self-seeking behaviors that align more with their interests than those of the principals they represent. Therefore, it is vital to understand changes in VCs' selection criteria, specifically their reliance on subjective evaluative criteria, which are less mentally taxing and, therefore, more beneficial to

VCs as they require less attention and time. Subjective investment selection criteria are based on heuristics, or rules of thumb, that are emotionally rather than cognitively driven.

Preliminary data from the SBA, the Office of the US Treasury, and the SEC (Securities Exchange Commission) indicate a notable increase in venture capital deals that coincides with the period that the most significant number and amount of PPP loans were distributed and when interest rates were at their lowest during the pandemic (Department of the US Treasury, 2023). Additionally, anecdotal data from industry experts suggests that VCs invested in higher-risk startups, based on subjective evaluations of entrepreneurs, with minimal to no historical performance data, resulting in much lower returns to investors—as many of these high-risk startups failed. Therefore, if VCs relied much more on subjective criteria than objective criteria, such as financial ratio analyses, they may have been engaging in self-seeking or self-serving behavior that negatively affected the investment return for the investors they represented.

Definition of Terms

Accelerator- a program that provides resources, such as capital and mentorship, to accelerate the growth of promising startups (Cohen et al., 2019)

Anchor Investor- the first investor in a fund (Sahoo, 2017)

Angel Investor- wealthy investors who invest in startups in the very early stages of development or seed round of fundraising (Edelman et al., 2017)

Bootstrapping- a business strategy that eliminates the need for outside investment because the startup self-funds (Ye, 2017)

Control Rights- the governance or voting rights of an investor or shareholder (Baird & Rasmussen, 2001)

Due Diligence- A process in which investors or those representing them assess the viability of the investment and validate documentation provided by the company to ensure that all information is accurate (De Cleyn & Braet, 2007)

Elevator Pitch- a short presentation given by an entrepreneur to an investor or investor's agent about the investment opportunity (Pincus, 2007)

Fiduciary- An agent that is liable to perform a set of financial duties for another person (Miller, 2011)

Seed Round- The earliest fundraising round where the company is most likely not generating any revenue and often still developing its product or service (Davila et al., 2003)

Venture Capitalist- an investor or agent of another investor seeking investment opportunities in startup companies in the private equity sector. (Fried & Hirsch, 1995)

Summary of the Academic and Professional Literature

The following section provides a high-level summary of the academic literature on the impact of VC decision-making, including the value VCs bring to the private equity market, trends in VCs' investment in startups during the pandemic, and the selection criteria VCs use when choosing startups to invest in on behalf of investors.

Value Creation in the Private Equity Market - Venture Capital and Entrepreneurial Firms

Venture capitalists invest in risky firms with very little to no historical performance records to achieve high rates of return on their initial investment (Vinig & Haan, 2008). However, the choice to invest substantial amounts of capital in risky firms can lead to incredible losses (Arundale & Mason, 2020). As a result, VCs create value in the private equity market by bearing the risk associated with these types of investments. At the same time, other funding

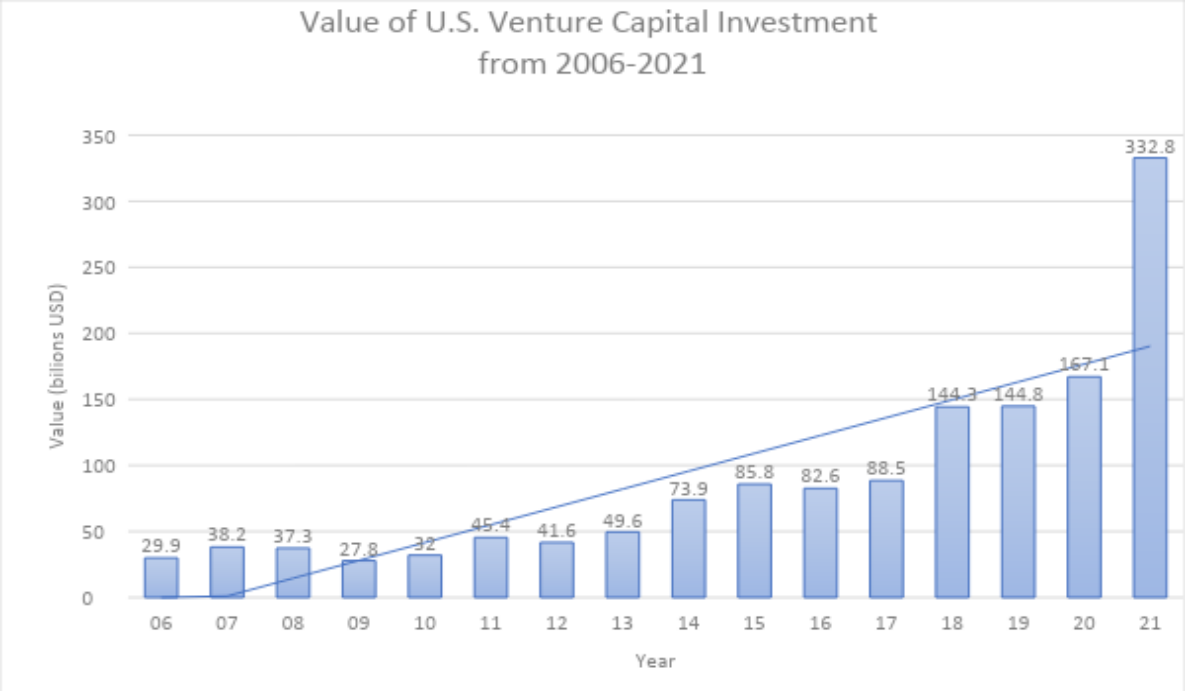
sources, such as banks and institutional investors, avoid these types of investments for fear of significant losses (Adler et al., 2019; Cavallo et al., 2019). Moreover, when VCs invest in early-stage startups, more risk-averse funding institutions are more likely to invest in those startups in later stages of startup development (Kollmann & Kuckertz, 2010). Because VC-backed startups have historically performed better than those not backed by VC funding, risk-averse investors are likelier to invest in startups chosen by VCs (Andrusiv et al., 2020; Bottazzi & Da Rin, 2002; Bottazzi et al., 2008; Gompers, 1996; Kaplan & Lerner, 2010). Therefore, actors in private equity markets have traditionally perceived VC decision-making as trustworthy, and their selection criteria are robust by many investors in those markets (Kollmann & Kuckertz, 2010).

Pandemic VC Investment Trends

In the last three years, a decrease in interest rates (to near or at 0%) and an influx of PPP funds from the US government resulted in the most significant increase in VC-backed startup financing in history (Grabow, 2022; Shen, 2021). Moreover, as of Q4 2021, the venture capital market surpassed $300 billion. In 2021, venture-backed startups doubled the previous record set in 2020 (Grabow, 2022; Savitz, 2022). Figure 1 depicts the value of venture capital investment in the United States from 2006-2021.

Figure 1

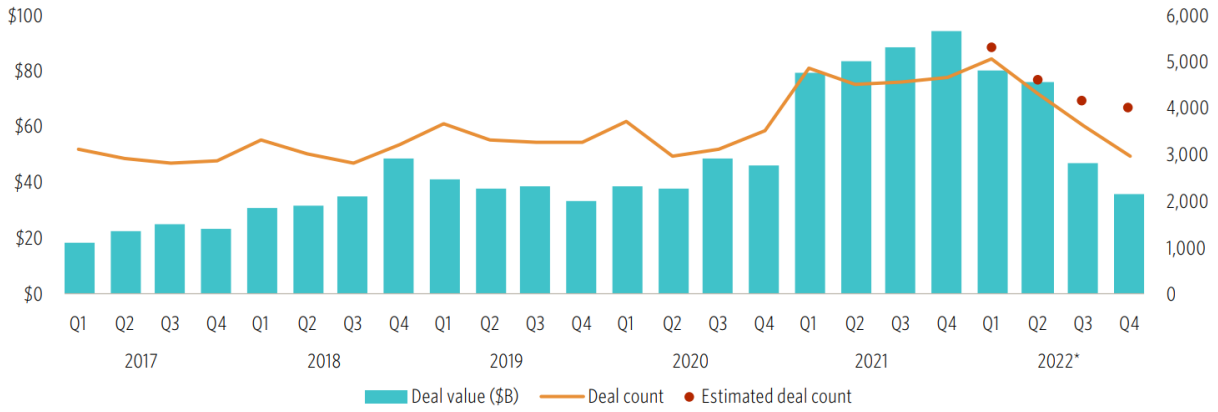
Value of VC Investment in the US from 2006-2021



The number of VC investments in startups is reflected in the overall number of deals completed in the VC startup market. An increase in the number of deals shows not only the number of startups that received funding but also the speed at which VCs made investment choices (Petty et al., 2023). A fiscal year is limited to 12 months, with most VC activity occurring in January and again in June when the traditional business cycle ends for the year (Sharma et al., 2022). Figure 2 illustrates the number of deals by quarter between 2017 and 2022.

Figure 2

U.S. Venture Capital Deal Activity by Quarter



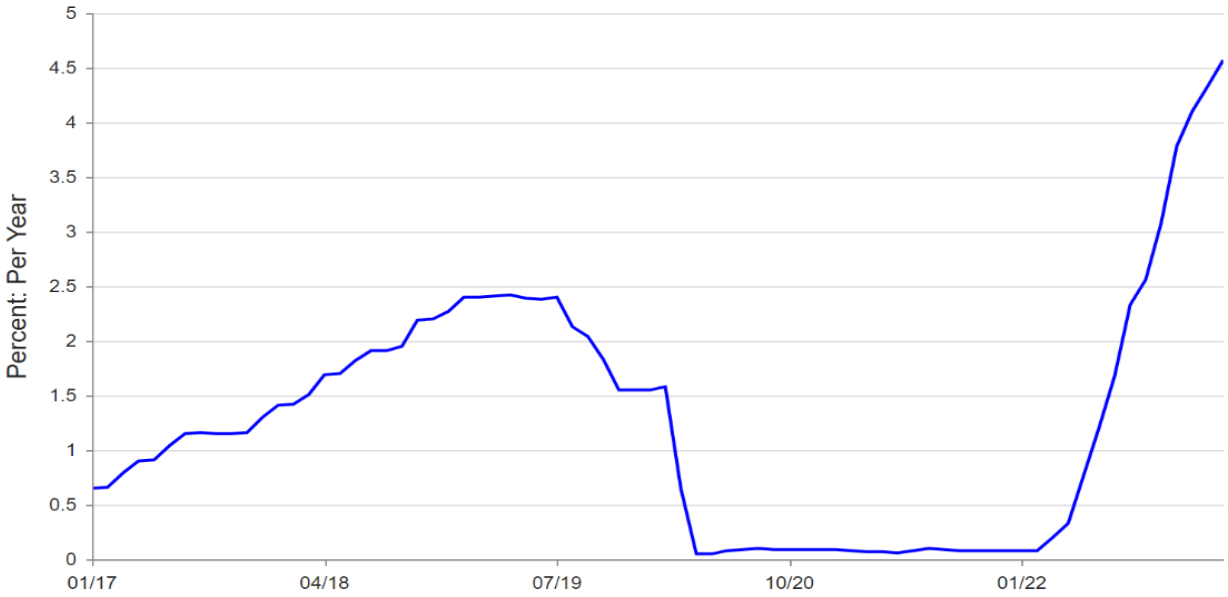
The number of deals fluctuates throughout the focal period. Still, there is a notable increase between the first quarter of 2021 and the first quarter of 2022, coinciding with the most significant number and value of PPP loans distributed by the SBA (SBA, 2023). As previously mentioned, the driving force behind this increase in deal activity was the availability of low-cost PPP loans, a reduction in interest rates, and the subsequent influx of investment capital into the US economy (Ceppos, 2022).

During the peak of the COVID-19 pandemic, traditional lenders such as conventional banks aimed to compete with low-cost PPP loans by lowering interest rates and minimum credit requirements (Sharma et al., 2022). Before the SBA began distributing PPP loans, the average interest rate for startup business loans was between 5.35% and up to 44%, depending on the bank's risk assessment. Beginning in the second quarter of 2021, banks began offering business loans as low as 0.25% to a maximum of 3% (Milstein & Wessel, 2022). Figure 3 presents a graphical depiction of interest rates in the United States between 2017 and 2023. As indicated in

Figure 3, interest rates dropped significantly during the peak of the COVID-19 pandemic, with some banks offering loans at 0.25%. However, interest rates skyrocketed immediately following January of 2022, reducing profit margins for VCs and their investors.

Figure 3

U.S. Interest Rates, 2017-2022



VC Decision-Making—Selection Criteria of Startups

When making investment decisions for investors, VCs rely on objective and subjective criteria to thoroughly evaluate the potential return to investors (Kollmann & Kuckertz, 2010). For example, typical objective performance measures include financial metrics, market demand, and existing funding (Elango et al., 1995; Zacharakis & Meyer, 2000). However, startups lack performance histories and typically do not have existing financing. Therefore, VCs often rely on financial metrics and purported analysts' evaluation of market demand when employing objective investment selection criteria (Brander et al., 2002). Recently, Gompers et al. (2020) interviewed 885 venture capitalists at 681 VC firms to gain insight into VCs' specific objective

factors in selecting investments. These objective criteria were assigned to eight categories: deal sourcing, investment selection, valuation, deal structure, post-investment value-added, internal firm organizations, and relationships with limited partners. However, Gompers et al. (2020) also assert that VCs' perceptions of management team characteristics are more important than previously mentioned traditional selection criteria. Therefore, subjective measures of the potential future success of startups also influence VCs' investment selection decisions.

VCs may receive many investment opportunities but only have the potential to invest in a choice few; this makes choosing those investments highly selective and requires intense scrutiny of a company's objective measures of a startup's potential for success (Lin et al., 2021). However, according to Zacharakis and Shepherd (2007), that is not necessarily true. VCs' scrutiny of a startup's potential to create value for their investments is often influenced by VCs' perception of future performance, which does not rely on objective measures (Sahi et al., 2013; Yang et al., 2021). Therefore, VCs often employ subjective judgment criteria when selecting investments among several investment opportunities (Montani et al., 2020). These subjective criteria are often driven by an affective component, or VCs' feelings about certain entrepreneurs or the firm, not by available objective data (Cable & Shane, 1997). These subjective measures of a startup's potential future success include assessments of the entrepreneurs' previous experience, successes and failures, education, and even the founding entrepreneur's personality (Kerr et al., 2018; Wright et al., 1997). The totality of subjective and objective evaluations of a startup's future success should drive their final decision on whether to invest in a startup (Kollmann & Kuckertz, 2010; Mason & Stark, 2004). However, very few empirical studies examine objective and subjective investment selection criteria to gain vital insight into VCs'

decision-making process and the ultimate selection of startups to maximize investors' returns (Tian et al., 2018).

Gaps in the Literature

A plethora of empirical research examines VC decision-making and objective and subjective investment selection criteria separately (Kaplan & Lerner, 2010; Kaplan & Stromberg, 2004). However, scholars lack consensus about which objective and subjective investment selection criteria VCs use when choosing startups that inherently do not have a previous performance history to evaluate (Hallen & Pahnke, 2016). Additionally, a salient gap in the literature stream considers the totality of these divergent criteria, specifically when economic conditions change. Also, less is known about which criteria are used more frequently and why VCs choose those selection criteria when resources are abundant. Moreover, those studies that do examine some of these phenomena focus almost exclusively on the decision-making process (Gompers et al., 2020) and fail to include the effect of those decisions on the contractual relationship between the VC and the investors they represent. Therefore, this study employed an agency theoretical framework to view the phenomena through the lens of that contractual relationship.

Surprisingly, given the disproportionately adverse effects of poor investment choices on investors, few empirical studies examine VC decision-making using an agency theoretical framework (Nyberg et al., 2010; Panda & Nabaghan, 2017). Lastly, most empirical research in the VC literature stream uses a quantitative research methodology, which does not capture the perceptions, emotions, and expectations that influence VC decision-making (Kaczynski et al., 2014; Levasseur et al., 2022). This research aimed to expand our current understanding of these

phenomena, as they are vital to academic scholarship and investors who trust VC decision-making acumen.

Purpose Statement

This qualitative case study explored VC decision-making, specifically the types of objective and subjective evaluative criteria for startup investments under changing economic conditions using an agency framework, emphasizing the contractual relationship between VCs and the investors they represent. Also, the study explored changes in the VCs' reliance on subjective over objective investment selection criteria during economic periods of resource abundance. While a dearth of literature identifies different objective and subjective criteria, very few studies examine the totality of those criteria, specifically under changing economic conditions (Lerner & Nanda, 2020). Finally, the study aimed to obtain more insightful data through a qualitative research approach that elicits detailed responses from VCs to develop a narrative that accurately reflects their lived experiences and thought processes during the period studied.

Research Objectives

The research objectives were as follows:

(1) Develop a rich, thick narrative that accurately reflects the lived experiences of VC decision-makers when economic conditions, specifically resource availability in the form of investment capital, change.

(2) Examine VC decision-makers' reliance on subjective vs. objective investment selection criteria.

(3) Explore the potential effects of overreliance on subjective investment criteria on investors.

(4) Determine to what extent VC decision-makers, who have a fiduciary duty to their principal investors, make decisions that maximize their investors' benefits over their own.

Research Questions

This study explored which investment selection criteria VCs use when choosing startups for funding. Additionally, the research aimed to identify changes in those selection criteria as economic conditions change and resources become more abundant. Therefore, the primary and secondary research questions for this study were:

Research Question 1: According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?

Research Question 1A: In what ways did their objective criteria change based on resource availability during the pandemic?

Research Question 1B: In what ways did their subjective criteria change based on resource availability during the pandemic?

Conceptual Framework

The theoretical framework chosen for this dissertation is agency theory, as it focuses on the contractual relationship that exists between the principal (investor) and the agent (VCs) and the inherent self-seeking behavior of agents (Jensen & Meckling, 1976; Fama, 1980). In the context of this dissertation, the agency theory framework purports that once VCs have decision-

making power, like all economic actors, self-seeking behavior influences those decisions. For example, the agent (VCs) may *shirk* effort and choose selection criteria requiring less mentally taxing judgment, which agency theorists call a *moral hazard* (Jensen & Meckling, 1976; Fama, 1980). Additionally, an inherent information asymmetry exists between the investor and VC, as VCs have more direct contact with startups and, therefore, receive more information (Cumming & Johan, 2008). VCs may exploit this information asymmetry by selecting investments that serve their interests or allow for moral hazard (Wang & Zhou, 2004). Finally, agency theory purports that managers or agents have bounded rationality, meaning that VCs do not always make perfect decisions on behalf of investors because there are cognitive limitations to the amount and complexity of information they can process (Eisenhardt, 1989). Therefore, this dissertation employs agency theory to examine VCs' behavior, specifically when making investment decisions for investors.

Methodology

The researcher utilized Zoom audio-recorded semi-structured interviews with thirteen venture capitalists who worked before, during, and after the COVID-19 pandemic when the influx of PPP loans increased available investment capital. The participants were chosen from venture capital firms with whom the researcher interacted professionally. These firms focus almost exclusively on startup funding and represent principal investors throughout the pandemic. Therefore, the sample population contained participants that fit the study's objectives and purpose, and the resulting data effectively answered the a priori research questions.

The researcher employed a purposive sampling methodology, which is non-probabilistic. Purposive sampling is a deliberate choice of participants based on their qualities (Tongco, 2007).

The purposive sample consisted of venture capitalists who were decision-makers in their respective firms, met the inclusion criteria, and failed to meet the exclusion criteria detailed in the methodology chapter.

Assumptions and Positionality

Assumptions

The researcher assumed that VCs often rely on subjective selection criteria when choosing startups mainly because of the characteristics of the entrepreneur, including the personal experiences the VC managers have with those entrepreneurs. Additionally, the researcher assumed that VCs are less likely to be stringent in decision-making and rely on subjective criteria more often when resources are more abundant; this is because investors are less likely to monitor VCs' investment selection behavior diligently when their personal investment capital increases. Finally, the researcher made a priori assumptions about the nature of this empirical study, including the following:

1. Participants will be truthful in their responses to the researcher's questions.
2. The final sample will be large enough to provide trustworthy findings.
3. Participants will be willing to engage in the study

Positionality

The researcher has had contact with the firms used in the study but not necessarily with the venture capitalists who participated in the study. Additionally, the researcher has experience working within the venture capital ecosystem and some direct experience working in startups. Therefore, the researcher has preconceptions about VCs' behavior and decision-making process, which may lead to confirmation bias (Sahi et al., 2013). Additionally, the researcher may

interview participants with whom he has a prior working relationship. Lastly, the participants will know that the researcher and managing director have a working or personal relationship, which may result in acquiescence bias (Dearnley, 2005).

Other biases that may have affected this research study are common in qualitative research, including question order and leading question bias. Question order bias occurs when one question affects subsequent questions based on how it is written. Leading question bias occurs when a question is phrased in a manner that influences or directs participants' responses in a particular direction (Diefenbach, 2009). The researcher relied on the expert panel's advice to mitigate these biases.

Conclusion

The role of VCs in the private equity market is essential for the viability of startups because of an absence of potential investors and few options to acquire critical investment capital from traditional lending institutions (Cantamessa et al., 2018). Historically, VC-backed startups have performed better and provided investors with higher returns than those startups that did not receive VC funding (Glucksman, 2020). Therefore, private and institutional investors had confidence in the potential future success of the startups VCs chose to fund, their decision-making process, and the criteria used to select startup ventures (Zahera & Bansal, 2018).

However, as economic conditions changed during the pandemic, driven by lower interest rates and an influx of investment capital from PPP loans, VCs may have relied on more subjective assessments of startups' future success, as these subjective selection criteria were less cognitively challenging and allowed for faster evaluations and, therefore, more opportunities to increase investors' returns and their compensation. This study employed a qualitative case study

methodology to examine VC decision-making, objective and subjective investment criteria choices, and potential changes due to rapid economic changes resulting in resource abundance to gain more robust data and fill a salient gap in the existing literature stream.

CHAPTER 2

LITERATURE REVIEW

Several studies indicate that startups backed by venture capital firms (VCs) are far more likely to succeed than those that are not (Andrusiv et al., 2020; Bottazzi & Da Rin, 2002; Bottazzi et al., 2008; Gompers, 1996; Kaplan & Lerner, 2010). Usually, that success is predicated on the VC's network of investors, experience, and due diligence when choosing which startups are most likely to be successful (De Cleyn & Braet, 2007; Lerner & Nanda, 2020). Because financial resources are finite and scarce compared to the number of startups requiring funding, resource scarcity is one of the fundamental economic drivers of VCs' selectivity. Therefore, they have limited funding and robust evaluative criteria to judge a startup's potential future success (Blunden, 1993; Reypens et al., 2021). Additionally, venture capitalists' investment decisions should be consonant with the investment objectives of the fund or principal investor, as they owe a fiduciary duty to act in the best interest of their principal (Cheng & Tang, 2019). Thereby, venture capitalists serve as the agent to the investor, who is the principal.

When making investment decisions for investors, VCs rely on objective and subjective criteria to thoroughly evaluate the potential return to investors (Kollmann & Kuckertz, 2010). However, an inherent information asymmetry exists because venture capitalists have more information available while making investment decisions for investors than do the investors. Moreover, VCs could make decisions that serve their needs more than the principal, referred to by agency theorists as a moral hazard (Arthurs & Busenitz, 2003; Jensen & Meckling, 1979). This potential misalignment between those interests results in what is referred to by business

scholars as an agency dilemma (Cowden et al., 2020; Fama,1980). Therefore, to mitigate the self-seeking behavior of VCs, investors expect sufficiently robust evaluative criteria to reduce a VCs ability to seek out pecuniary and non-pecuniary benefits that do not align with those of the investors they represent (Cummin & Johan, 2008; Du et al., 2020; Glucksman, 2020; Trester, 1998). As a result, VCs often employ the use of seemingly objective measures of performance, such as financial metrics, market demand, and existing funding (Elango et al., 1995; Zacharakis & Meyer, 2000). However, VCs also use subjective measures of potential future success, such as assessments of the entrepreneurs' previous experience, successes and failures, education, and even the founding entrepreneur's personality (Kollmann & Kuckertz, 2010; Mason & Stark, 2004).

Empirical and theoretical research on venture capitalists' investment decision-making process and reliance on various evaluative criteria is well-documented in the literature. However, most existing research focuses more on the role of the objective rather than subjective evaluative criteria in VC's investment decision-making (Muzyka et al., 1996; Sapienza & Gupta, 1994). However, early research by a niche group of researchers studying subjective criteria used in investment decision-making, such as the top management team's educational background or the founder's personality traits (Knight, 1986, 1994; Lee & Tsang, 2001), has resulted in more recent empirical work examining the role of subjective criteria in these decisions, such as VC intuition (Drover et al., 2014; Sharma, 2015; Tian et al., 2018). While these studies examine multiple objective and subjective criteria used by VCs when making investment decisions for investors, the researchers assume fixed resource scarcity and focus almost exclusively on one type of

criteria. There is a salient gap in the literature that examines the use of objective and subjective evaluative criteria under changing levels of resource scarcity.

This literature review details existing theoretical and empirical research in the venture capital literature stream, specifically those studies examining objective and subjective criteria for investment decision-making through an agency framework. The roots of agency theory are detailed, the constituent pieces most relevant to the relationship between VCs and investors, and the role of moral hazard in VC investment decision-making. Seminal and more contemporary research in VC decision-making and the evolution of research examining an array of objective and subjective criteria influencing VC decision-making are explored. Finally, the gap in existing research is identified, logically leading to the research questions that drive this study.

Theoretical Framework

Increased available funding during the pandemic, stemming from PPP loans and a significant reduction in interest rates, led to a substantive rise in VC funding in startups (Bellucci et al., 2023; Ellul et al., 2020). However, absent a significant influx of startups that met the VC industry's stringent investment criteria, the industry modified its selection criteria significantly. Initial PPP loan criteria are substantially less stringent than traditional bank loans. The criteria allowed businesses with up to 500 employees loans up to $10 million at a very low 1% interest rate. Additionally, those companies that received a first draw SBA loan were eligible for a second draw loan up to an additional $2.5 million. The minimum credit criteria were removed, allowing businesses without established credit to receive both loans (SBA, 2023).

Unsurprisingly, the stringency of VC selection criteria for startup ventures decreased as entrepreneurs and investor groups had more capital to contribute to initial startup costs. The

perceived risk of investment in those startups was significantly reduced with the increased availability of cheaper investment capital (Duchin & Hartford, 2021). VCs' reliance on revenue projection models using financial multiples included the PPP loans as a safety net to cover losses and spur growth (Arundale & Mason, 2020). Therefore, the minimum required or desirable multiples were inflated by excess capital, and VCs knowingly invested in these startups without adequately assessing their long-term viability.

Moreover, very little is known about the changes in subjective selection criteria used by VCs during this period. Because excess capital at lower rates provided, at times, a false sense of security, VCs may have increased their reliance on subjective selection criteria, which vary widely based on a VC's unique perception of those criteria (Mason, 2020). Therefore, this study assessed these pandemic trends in investment criteria. The guiding conceptual framework is agency theory (Payne & Petrenko, 2019), as decreased evaluative criteria result in increased risk-taking by VC firms with a fiduciary duty to investors.

Historical Beginnings of Agency Theory-Economic Self-Interest

Over 200 years ago, Adam Smith asserted the existence of self-interest underlying any relationship in which one party delegates or empowers another to work on their behalf in his seminal work, *An Inquiry Into the Nature and Causes of the Wealth of Nations* (1793). Smith initially focused on economic self-interest and society as a whole, as described by Stigler (1971):

"The *Wealth of Nations* is a stupendous palace erected upon the granite of self-interest. […] The immensely powerful force of self-interest guides resources to their most efficient uses, stimulates laborers to diligence and inventors to splendid new divisions of labor—in short, it orders and enriches the nation which gives it free rein." (p. 265).

The introduction of *economic self-interest* into the business literature stream has since served as a significant predictor of human behavior, specifically when financial relationships are formed between a principal and their agent. A principal maintains ownership in the form of a company or investment capital, while that principal contracts the agent to act in their best interest, such as venture capitalists seeking and making investment decisions for the investors they represent (Cowden et al., 2020). Scholars charged themselves with developing an adept theoretical framework to address the dynamics of the contractual relationship between *principals* and *agents* (Jensen & Meckling, 1976; Fama, 1980). One of the central tenets of agency theory is that all economic actors, including agents, are driven by self-interest, and the principal must constrain it. Agency theorists focus on the contractual relationships that exist between the agent and principal, emphasizing different constraints that are inherent or explicit within that contract that serve to mitigate the innate self-interest of economic actors, specifically agents within the context of this study (Jensen & Meckling, 1976; Fama, 1980 (a)).

Economic self-interest is a primary focus of the research presented in this dissertation, as VCs can act in their self-interest more than investors. Therefore, agency theory is the most appropriate theoretical framework to examine which objective and subjective criteria VCs choose when making investment decisions on behalf of their principal investors. Additionally, how the use of those two divergent forms of selection criteria meant to align interests with the principal change as macroeconomic conditions change.

Constraining Economic Self-Interest

Berle and Means (1932) examined the rampant transference of private ownership of US firms into dispersed market ownership between the late 1800s and early 1900s. As private

ownership of corporations diminished, oversight and control of the corporations' actions were transferred from the owner to professional managers (Berle & Means, 1932; Dalton et al., 2007). Firms became increasingly management-controlled as dispersion increased (Bebchuk et al., 2017; Berle & Gardner, 1934). Furthermore, Berle and Means (1932) purported that the interests of managers and shareholders did not align once the two were no longer "housed" in the exact location (Bebchuk et al., 2017). This early work by Berle and Means (1932) extended the scope of agency theory to those who professionally managed the assets of others.

The insight gleaned from Berle and Means (1932) is that shareholder dispersion decreased the ability of principals to constrain the agents that were charged with acting in their best interest. As a result, managers increasingly exercised their autonomy to allocate and utilize resources, while shareholders' voices grew more distant (Bebchuk et al., 2017; Demsetz, 1983). Consequently, shareholders became increasingly apathetic as their control over strategic decision-making decreased, further empowering managers to engage in autonomous self-seeking behavior. The combination of apathetic shareholders and increasingly autonomous managers created an environment conducive to malfeasance behavior by those managers (Bebchuk et al., 2017). This trend is evident in contemporary agency-based empirical research.

The following section describes the evolution of agency theory, focusing on its constituent parts most applicable to this dissertation's research objectives and questions. Additionally, the section reviews contemporary applications of agency theory in business scholarship. Finally, the discussion logically flows into the section that reviews empirical literature, focusing specifically on the uses of the theory to examine phenomena specific to venture capitalists and their relationships with principals and other agents.

Foundations of Agency Theory

The foundation of agency theory is built on the risk-sharing literature of the 1960s and 1970s (Eisenhardt, 1989) that focuses on two central issues: (a) the desires and goals of the principal and agents, and (b) monitoring costs, which are expenses accrued as the principal monitors' the agents' activity to ensure goals are aligned. According to agency theory, agents act on behalf of the principal, such as an investor, entrepreneur, or another principal. Agency theory constitutes a theory of the firm where the agents within a firm are inherently self-interested, possess bounded rationality, and are risk-averse. The unit of analysis is the contract between the principal and the agent. Agency theory examines contracts governing the principal and agent relationship to efficiently organize information and risk-bearing costs (Panda et al., 2017). However, all contracts are perceived to be incomplete and cannot provide guidelines for all actions, including decisions. Specifically, the principal and agent's perceptions of self-interest, bounded rationality, risk aversion, goal conflict among members, and information often diverge (Parks & Conlon, 1995).

There are differences among theorists about how these constraints restrict agents to create efficiency, where these constraints stem from, and why these constraints are helpful. A contract regarding the agent's compensation is the most common method to restrict an agent's self-seeking behavior. The objective of using compensation to mitigate an agent's self-seeking behavior is to provide a monetary or non-monetary utility that the agent will perceive as more beneficial than alternative self-seeking behaviors (Solomon et al., 2021). Principal investors and VCs have a compensation agreement dictated by a contract. The contract between VCs and

investors is typically performance-based. VCs receive a management fee based on the percentage of capital they manage and profits earned from their chosen investments (Wright, 2022).

Agency theorists have described a core issue between principals and agents when the principal has imperfect information about the agent's intentions. The lack of information, or information asymmetry, creates the potential for the agent's self-serving and potentially opportunistic behavior due to a divergence between the interests of the principal and the agent's interests (Dalton et al., 2007; Eisenhardt, 1989; Fama & Jensen, 1983). Agency theorists purport that the divergence of interests between these actors, exacerbated by the agent's inherent self-seeking behavior, leads to a disequilibrium that can only be efficiently governed through a contractual relationship (Jensen & Meckling, 1976; Fama, 1980; Dalton et al., 2007).

Agency scholars purport that there are interventions that can effectively mitigate the agency problem. However, a scholarly consensus on the most effective intervention to mitigate this phenomenon has yet to transpire, which is highly unlikely, given the complexity of the associated phenomena and empirical inconsistencies across studies (Dalton et al., 2007; Denis, 2001). The empirical inconsistencies stem from different assumptions resulting from often conflicting perceptions of human behavior.

Human Behavior-Rationality

While most agency theorists agree that human beings, or economic actors, have some degree of rationality, there is a lack of consensus about the scope of human rationality in decision-making. Early theorists argued that economic decision-makers received *perfect* information, could interpret that information to make optimal decisions, and understood the implications of those decisions (Fama, 1980). Moreover, all actors were entirely rational in their

decision-making, meaning all of their decisions were made to maximize the benefits of their principals (Maialeh, 2019). However, that assumption is easily disproved in everyday life. People do not always act rationally and are often affected by emotions or situational factors such as limited time or energy (Singh et al., 2021). Later, Management and Strategy scholars expanded the conceptualization of rational human behavior, characterizing it as *bounded rationality*.

Bounded rationality represents a school of thought contrasting greatly with the previously described *rational actor*. The construct of *bounded rationality* incorporates risk and uncertainty that affect human decision-making (Jones, 1999). Similar to the rational actor perception of human decision-making behavior, theorists of bounded rationality perceive human beings as goal-oriented but also acknowledge the cognitive limitations that all humans possess. This perception of human rationality also acknowledges that people do not always make the best decisions, whether out of self-interest, lack of information, a failure to understand their options or a limited understanding of the scope and implications of the decision they are presented (Cohen et al., 2019; Hallen & Pahnke, 2016).

This school of thought is vital to our understanding of the relationship between VCs and investors because it acknowledges situations in which human agents do not make entirely rational decisions and may choose to make decisions based on *gut feelings* or rules of thumb when faced with decisions that may seem overwhelming, resulting in cognitive dissonance (Mudu, 2023). Cognitive dissonance refers to situations where humans have too many decisions to make at a given time or require much cognitive effort (Akerlof & Dickens, 1982). Therefore, there is the potential for a moral hazard or a situation where decision-makers use less cognitively

taxing decision-making tools, such as subjective methods, to make those decisions (Fatima, 2019).

Venture Capital and Agency Theory

Venture capital (VC) is a type of private equity financing that provides funding to early-stage, high-potential, and high-risk startups. Venture capitalists serve as the agents for principal investors in these startup firms, charged with a fiduciary duty to act in their best interest (Manigart & Sapienza, 2017). However, like any agent, they are prone to self-seeking behavior, including investing in startups that they have not intensely vetted on behalf of their principal (Manigart & Sapienza, 2017; Panda, 2018; Van Osnabrugge, 2000).

The two primary causes of conflicts between venture capitalists and investors are the misalignment of goals and risk-sharing conflicts (Van Osnabrugge, 2000). These two conflicts lead to two agency problems: moral hazard and adverse selection (Panda, 2018). A moral hazard occurs when an agent fails to exert the effort they agreed to in the contract. Adverse selection is when an agent misrepresents their abilities to perform the task that they were contracted to do (Van Osnabrugge, 2000). This dissertation focuses exclusively on moral hazard, which refers to a venture capitalist's propensity to exert less effort and shirk their fiduciary duties to the investors to maximize their self-interest; specifically, a VC's propensity to choose subjective selection criteria over more cognitively taxing objective criteria when faced with multiple options and fewer resource restrictions.

The inherent information asymmetry in their contractual relationship exacerbates self-seeking behavior, as venture capitalists are privy to more firm-specific information than investors (Van Osnabrugge, 2000). Moreover, this information asymmetry significantly affects

the contractual relationship between VCs and investors, as poor investment choices disproportionately affect the investor (Norton, 1996). VC investing is inherently risky for investors because startups often have untested business models and operate in dynamically competitive environments (Kollmann & Kuckertz, 2010). Moreover, once an investment has been made into a startup, returns are not realized for several years, making VC investing illiquid for some time (Khanin et al., 2008).

While some of the risks that startups possess are discussed in this section, the following section describes all of the categories of investment risks associated with venture capital decision-making. These investment risks characterize the overall risk landscape of venture capital deals, yet principal investors are disproportionately affected. However, the VCs make the investment selection decisions that most affect those investors (Panda, 2018)

Venture Capital Investment Risks

The following list of investment risks is inherent in all venture capital investment decisions. Still, it is especially prominent and impactful in startup firms because of a lack of a previous performance history (Cochrane, 2005). This lack of previous performance necessitates other methods to evaluate the potential future success of startups, such as firm valuation methods using publicly traded firms as proxies or subjective evaluations that rely on VCs' perceptions of potential success, such as the entrepreneur's personality, education, notoriety; and similar characteristics of the top management team (Solomon et al., 2021). Additionally, selective criteria to mitigate these risks include VCs' perception of product differentiation, strategy, and untested business plans (Cochrane, 2005).

Financial risks involved with VC investing have a high risk of failure. The SBA reports that approximately 50% of all new businesses fail within the first five years, and the rate of startup failure is even greater at approximately 90% (SBA, 2023). In addition, VC investments are generally illiquid. Unlike other investments, such as stocks or bonds, VC investments must often be held for years before the investor realizes a profit which can cause liquidity issues for the VC firm and reduce the capital available for more attractive investment opportunities (Cumming et al., 2005). There is also financial risk associated with VC concentration; VC firms often specialize in one market or industry, leaving these firms vulnerable to the industry's overall performance (Hopp & Rieder, 2011). Finally, even those VC firms that have managers with more diverse experience often have conflicting perceptions of future startup success (Solomon et al., 2021).

The execution risk of VC relates to issues that arise from management's inability to fully or properly execute the business plan. These risks include issues related to product development, such as unforeseen technical and logistical challenges during development or production, operational execution, scaling the business and managing cash flow in early-stage operations, and talent acquisition and retention, the ability to attract and retain the talent necessary to manage a startup at the executive level (Kaplan & Strömberg, 2004).

Market risks are external factors that affect the broader market, not just the startup invested in. These risks include changes in consumer demand, particularly in technology-related startups, which may experience rapid initial growth that cannot be sustained as user preferences shift. Another important external factor is the overall economic health of a startup's market or markets. For example, during a recession, smaller companies may not have the liquidity or

operating flexibility necessary to sustain long periods of weakened consumer spending (Fiet, 1995). However, some startups may thrive in recessions because their product differentiation strategy is focused on low-cost products (Audretsch & Acs, 1994).

Competitive risk is a multifaceted concern for venture capitalist investing. These risks come from established players with brand recognition and an established consumer base or other startups that saturate the market with similarly novel products (Cantamessa et al., 2018). Competition risk also relates to the risk associated with emerging or non-proprietary technology or products that can be developed by a competitor or made obsolete by newer products (MacMillan et al., 1985).

Regulatory risks can also threaten VC investments by changing laws and regulations associated with taxes, intellectual property, data privacy, and industry regulations and standards. For example, changes to tax codes can affect tax credits and deductions that favor startups and small businesses. In contrast, intellectual property regulations affect a startup's ability to maintain a competitive advantage by maintaining ownership over new technologies and products it develops (Lerner & Tåg, 2013). Startups that collect user data, such as social media and other technology startups, may also be affected by changes to data privacy laws, such as the EU's General Data Protection Regulation (GDPR) and the assortment of data protection and privacy laws in the United States, such as California's Consumer Privacy Act (CCPA) (Lambrecht, 2017). Changing industry regulations may also affect the standards to which production methods and products must adhere and can cost a business both time and capital (Avnimelech & Schwartz, 2009).

In this age of rapid technology and growth, startups are particularly vulnerable to changes in the technological landscape, and VC investment is also vulnerable to such changes (da Reuver et al., 2009). VC investments in technological firms must assume some risk for a technology that does not meet the investor's expected quality or is quickly obsolete by a similar or more advanced technological development (Cumming et al., 2005). Startups that rely on proprietary technology are also vulnerable to theft or infringement of intellectual property by competitors, particularly in markets that have not granted the firm sole IP rights, such as international markets (USPTO, 2019).

This multitude of risks associated with venture capital investments necessitates various strategies to mitigate risks yet still provide investors' required rate of return on their investments. VCs' steps when evaluating risk and developing strategies to mitigate those risks are consistent in the industry (Giardino et al., 2014). However, some VCs are more adept at different stages of risk evaluation. The effort put forth during these vital stages of risk assessment varies widely with VCs because management preconceived the entrepreneur, top management team, firm notoriety, and business strategy (Harrison et al., 1997).

Strategies to Mitigate Risk

Given the significant risks involved in VC investing, venture capitalists use multiple risk evaluation and mitigation methods or rely on more subjective assessments of investment quality. To align with investors' risk preferences, VCs will evaluate risk and mitigate that risk in the following ways:

1. Due diligence – Venture capitalists conduct thorough due diligence on investment opportunities, which may involve the evaluation of companies' finances, business

models, management teams, market opportunities, and other key investment factors deemed critical by individual VCs (Metrick & Yasuda, 2021).

2. Diversification – Venture capitalists typically invest in a varied portfolio of companies rather than investing their capital into a single company to mitigate the risk of a single company failure (Tian et al., 2016). While this strategy is common in financial markets, VCs can miss vital opportunities in dynamic markets (Manigart & Sapienza, 2017).
3. Active management – Venture capitalists will often take active roles in managing their investments, such as working closely with the management teams of their vested companies to aid in identifying growth opportunities and navigating challenges. However, subjective preconceptions of the startup can limit VC involvement during a critical stage of risk management (Bonini & Capizzi, 2019).
4. Investment staging – Venture capitalists will often invest in a company in stages by providing additional capital as a company reaches set milestones and proves it has the potential to succeed. These milestones are not fixed and are set by VCs based on their risk assessment, which could be skewed by the degree of subjectivity in the focal startup's risk and return assessments (Manigart & Sapienza, 2017).
5. Structured investments—Venture capitalists can structure investments to protect them if an investment underperforms expectations. These structured investments may include negotiating for preferred stock or convertible debt, which gives them priority in the event of liquidation (MacMillan et al., 1985). Nevertheless, as previously mentioned, startups are often illiquid, rendering this risk mitigation strategy minimally effective (Manigart & Sapienza, 2017).

While VC investing is inherently risky, it can also offer a significant reward to any investors willing to take on the risk of investing in early-stage startups. To mitigate these risks, venture capitalists use several methods, such as performing due diligence, diversifying investments, actively managing investments, staging investments, and structuring investments. While none of these methods can guarantee a venture's success, carefully evaluating and managing these risks can help increase the likelihood of success (MacMillan et al., 1985).

Venture Capitalists and Investment Selection

Venture capitalists (VCs) use a variety of criteria to evaluate potential investments. Typically, empirical research examining or exploring these criteria focuses on conventional methods of choosing appropriate investment opportunities for VC investors. According to Kohn (2018), these selection criteria include the following:

1. Team: The people behind the company are vital to VC investment decisions. VCs prefer a team with a strong track record, industry experience, and a clear vision.
2. Market opportunity: large or emerging markets with high growth potential are attractive targets for VCs and companies solving existing issues for target customers.
3. Traction: companies with a record of increasing revenue, customer growth, or corporate partnerships are targets for VC investment.
4. Scalability: companies with the potential for rapid growth and can scale up quickly.
5. Unique value proposition: companies with a unique competitive advantage that differentiates them from market competitors.
6. Exit potential: investments that will provide high ROI, including potential for an initial public offering (IPO), acquisition by a larger company, or other exit opportunities.

7. Risk and reward: the risk of an investment relative to the potential reward. Assessments of financials, competition, and other factors are essential to determine the chance of a company's success concerning the risk of investing.

In addition to these factors, VCs consider their investment expertise, which may be related to a specific industry or company development stage (Solomon et al., 2021). Finally, they may also consider their ability to add value to the company beyond funding, which may also relate to their prior experience in the industry or the development of startups (Panda, 2018). Table 1 illustrates various objective or quantitative criteria VCs use to evaluate investment opportunities.

Table 1

Objective Criteria Used by Venture Capitalists

Idea/Product	Proprietary (protected)	Market acceptance	Development stage	Innovative	Global potential
Market	Fast-growing	Existing market	New market	Not much competition	Familiarity
Financials	Return within 5-10 years	Liquidity	Subsequent investment needs	Later round participation	Investment exceeding $1 million

Note. Adapted from Vinig & Haan (2008)

Venture Capitalists: Traditional Valuation Approach

Given the immense challenges analysts face in valuing startup companies, finding methods and solutions that offer them a valid valuation technique is standard practice (Panda, 2018). Unfortunately, many of these solutions result in errors commonly seen in startup companies' valuations. In the following section, the most common inefficiencies and problems

with the most common valuation method of startup companies—those used by venture capital firms, will be analyzed.

1. *There are inherent difficulties in estimating the details of cash flows and reinvestment for startup companies.*

Specifically, most valuation techniques employed by venture capital firms focus on revenues and earnings, usually equity earnings, with little attention (or no attention) paid to the intermediate items that separate earnings from revenue. Additionally, reinvestment requirements that separate earnings from cash flow are not considered sufficiently, skewing startups' value (Solomon et al., 2021).

2. *These standard valuation techniques focus on the short-term rather than the long-term. As time progresses, uncertainty increases.*

Therefore, it is common practice for analysts to shorten the estimation period, using only three to five years of forecasts in the valuation. However, this practice ignores longitudinal uncertainty, which could be significant in some firms (Rohm, 2018).

3. *Venture capitalists often combine relative valuation with intrinsic valuation*.

Unfortunately, analysts who value startup companies often misuse relative valuation as a quick fix because of the complexities in estimating cash flows beyond short periods. Thus, the value at the end of the short forecast period is estimated by applying an exit multiple to the expected revenue earnings. The value of the multiple is estimated by examining the performance of publicly traded companies in similar industries, which serve as proxies for the potential future success of startups with similar characteristics to the proxy firm. Therefore, the assumption is that the resulting intrinsic value of the startup will be similar to

that of the publicly traded firm. As previously discussed, this practice is highly problematic (Rohm, 2018).

4. *Discount rates become the primary measure for all forms of uncertainty*.

The risks associated with investing in a startup company include traditional financial factors, such as earnings volatility, sensitivity to macroeconomic conditions, and the likelihood that the firm will not survive. Therefore, analysts will frequently increase discount rates to reflect their concerns about the firm, including the likelihood of survival. However, as previously noted, discount rates are complicated to estimate with startup companies and do not contain all the risk factors that startup companies face (Driessen et al., 2008).

5. *Venture capital firms will often make ad hoc or arbitrary adjustments for the differences in equity claims that were previously discussed.*

As previously mentioned, these equity claims have different rights in terms of cash flow and control, as well as varying degrees of illiquidity. Unfortunately, when venture capitalists are faced with making judgments on the value of these differing claims on cash flows, control rights, and illiquidity, many analysts will use rules of thumb based on dubious statistical samples or arbitrarily practiced (Driessen et al., 2008).

Pitfalls in Venture Capitalists' Economic Valuations of Startups Explained

As previously discussed, valuing startup firms is problematic because venture capitalists are forced to project potential revenue and profits based on a vision communicated by the founder. Unfortunately, that vision can often be inflated due to many entrepreneurs' belief in their firms' future success (Haynes et al., 2015). Therefore, most venture capitalists will employ a traditional valuation approach based on multiples from publicly traded firms in the existing

market. While this method has limitations, such as subjectively choosing which publicly traded firms most represent the startup, it provides a basic guideline for decision-making (Panda, 2018; Solomon et al., 2021).

Once a publicly traded firm is chosen, venture capitalists value that firm using the following steps:

1) Venture capitalists must estimate potential future earnings based on the startup's anticipated success. Once the publicly traded firm is chosen, a forecasting period based on the startup's anticipated sell date is chosen. Most venture capitalists choose this forecasting period based on prior experience in the focal industry. However, a general guideline is two to three years (Janeway et al., 2021).
2) The venture capitalists calculate the expected earnings based on the chosen publicly traded firm's P/E (price to earnings) ratio. This calculation differs from the traditional firm valuation because the variables are subjective and based on the chosen proxy firms (Janeway et al., 2021). To determine equity value at the end of the forecast period, the following formula is used: Expected $Revenue_n$ * Forecasted P/E (based on the chosen publicly traded firm) = Equity at the end of the forecast period *t*. Alternatively, and shared among venture capitalists, is to utilize the enterprise value of the publicly traded firm. The formula would then be modified to Expected Revenue * Forecasted EV/Sales = Enterprise value at the end of the forecasting period *t*.
3) Subsequently, the present value of the startup's equity is calculated by the venture capitalist using a fundamental time value of money equation: PV= FV $(^1/(1+r)^n$,

where PV is the present value of equity, FV is the future value calculated in step 2, r is the required rate of return, and n is the number of periods chosen to forecast earnings. Table 2 illustrates the required rates of return typical among venture capitalists. However, it is essential to note that these rates of return are affected by macroeconomic shocks and stock market fluctuations (Miloud et al., 2012).

Table 2

Required Rates of Return for VC Stages of Development

Stage of Development	**Typical Required Rate of Return**
Startup	30%
First Stage	20-25%
Second Stage	20%
IPO (initial public offering)	12-18%

As firms move through each stage of development, the investment risk and failure rate decrease, leading to a direct decrease in the required rate of return. However, Industry Ventures, a venerable publication in venture capital, estimates that venture capital firms will earn an average of 25-30% of all growth stages achieved (Swildens, 2021).

Venture capital funding and investment emphasize their short-term role in firm development; therefore, yearly returns are calculated based on a 3, 5, and 10-year model (references?). Table 3 illustrates the anticipated returns venture capitalists earned during each period. While some studies include a 15 and 20-year holding period, those benchmarks are rarely

achieved as the average involvement of venture capital firms is much closer to ten years and rarely beyond that period (Cusumano, 2013).

Table 3

VC Anticipated Returns Over Time

Stage of Development	**3-year**	**5-year**	**10-year**
Startup	10.77%	14.55%	33.15%
First Stage	13.33%	19.88%	20.22%
Second Stage	12.45%	10.12%	8.5%
IPO (initial public offering)	3.60%	7.44%	2.1%

As indicated by Table 3, rates of return decrease dramatically at the ten-year mark. At the same time, there is a significant increase in the returns earned for startups between the fifth and tenth year of venture capital involvement. That period is most lucrative because the startup will exhibit increased earnings, and venture capitalists and the investors they represent expect to be paid back for taking on early risk by funding the startup. The risk decreases during later stages, but startups must repay the early investments that led them to success (Mann & Sager, 2007).

Subjective Approaches to Firm Valuation

The valuation approach discussed in the previous section is based predominantly on objective mathematical evaluations of future startup performance with minimal subjective criteria, such as venture capitalists choosing the publicly traded firm to calculate expected revenues and returns from startup investment. However, other, more subjective factors influence

venture capitalists' valuation of startup firms (Miloud et al., 2012). These factors include perceived product differentiation, industry growth, entrepreneurial resources, the top management team, and, most importantly, the entrepreneur (Mann & Sager, 2007).

Product Differentiation

Product differentiation refers to the novelty of the firm's product or service. Porter (1980) asserts that firms with low product differentiation result in retaliation from incumbent firms, resulting in much lower venture performance. This retaliation often creates barriers to entry that are difficult for startups to overcome because of a lack of capital and relationships with firms within the market ecosystem (Stringham et al., 2015). However, Bessen et al. (2021) suggest that early investing in advertising and marketing may mitigate the effectiveness of incumbent firms' retaliation attempts. Similarly, Singh et al. (2005) suggest that higher advertising and marketing intensity increases venture performance and returns for startup investors. Therefore, advertising or marketing intensity may serve as an effective strategy for startups to overcome the barriers of entry presented by incumbent firms.

Industry Growth

Porter (1980) argues that higher growth rates in a given industry result in decreased retaliation by incumbent firms because a larger market share supply is available to new entrants, increasing venture performance. Furthermore, with fewer barriers to entry, startups can acquire market share as a benefit of establishing product or service standards, reputation, higher consumer awareness, better control of scarce resources, and strategies for capturing new consumer demand (Miloud et al., 2012). VCs use growth potential as a critical selection criterion

to select startups they perceive as future successes in their respective industries (Solomon et al., 2021).

Entrepreneurial Resources

Entrepreneurial resources refer to the perceived quality of the startup's top management team and founding entrepreneur (Zarutskie, 2010). These critical resources are often cited as the most important and impactful to VCs' decision to invest in a startup (Patzelt, 2010). The top management team and the entrepreneur are evaluated based on multiple qualities, such as experience (Glucksman, 2020), education (Kuratko, 2003), previous successes and failures (Zacharakis et al., 1999), function within the firm (Zarutskie, 2010), personality (Kerr et al., 2018), and perceived reputation (Vaidyanathan et al., 2019). However, these perceptions are subjective and vary between VC firms and among VC managers. Therefore, there is no standardized list or concrete evaluative criteria, as the innate subjectivity of these perceptions varies significantly.

Due Diligence

Due diligence is a critical step in the venture capital investment process. Due diligence aims to identify and evaluate potential risks associated with the investment opportunity and gain a deeper understanding of the company, its business model, and its growth prospects (Panda, 2018). By conducting thorough due diligence, venture capitalists can make more informed investment decisions and minimize the risk of investing in companies that may not have a high likelihood of success (Wright, 1998).

According to Wright (1998), Panda (2018), and Solomon et al. (2021), venture capitalists conduct several types of due diligence during the investment process, including:

1. Financial Due Diligence –involves reviewing a company's financial statements and other disclosures. For example, venture capitalists may review revenue, expenses, cash flow, and other key metrics to determine whether a company is currently financially stable and has the potential to achieve profitability.

2. Market Due Diligence– involves evaluating a company's target market and competitive landscape. This evaluation includes an analysis of the market size, growth potential, customer demographics, and competitors' strengths and weaknesses.

3. Technology Due Diligence – involves evaluating a company's technology and intellectual property, including patents, trademarks, and other IP assets, to ensure the company has a robust competitive market position.

4. Legal Due Diligence – involves reviewing a company's legal and regulatory compliance, including contracts, licenses, and other legal documents. This review and analysis ensure that a company complies with local, state, and federal laws and regulations.

During the due diligence process, venture capitalists evaluate various factors to assess the potential risks and opportunities associated with the investment opportunity. As there are over 65 factors that VCs may use to evaluate firms during the due diligence process, only those pertinent to this dissertation are reviewed below (Howson, 2016). These factors typically include the following:

1. Business Model - The business model is the foundation of a company's success. Venture capitalists evaluate the business plan for viability and the potential to generate revenue and eventual profitability. The intensity of this assessment is often based on the

top management team and the entrepreneur's previous successes and failures with other startup ventures. Without this experience, the assessment of the quality of a startup's business model is highly subjective (Fazekas, 2016).

2. Management Team - A company's management team is critical to success. VCs will evaluate a team's track record of success managing other startup ventures to determine whether they possess the expertise and skills necessary to execute the business plan (Miloud et al., 2012).

3. Market Opportunity – The target market's size and growth potential are essential in startup evaluation. Therefore, venture capitalists evaluate the market opportunity to determine if a startup has the potential to capture a significant market share. Some VCs rely on more objective criteria from the chosen proxy firm. In contrast, others rely on subjective assessments, such as perceptions of future significant growth based on the opinions of industry insiders (Solomon et al., 2021).

4. Competitive Landscape – The competitive landscape is crucial to a startup's success. Venture capitalists evaluate a startup's strengths and weaknesses compared to competitors to determine whether the company has a competitive advantage. This evaluation focuses on financial multiples when VCs employ objective criteria, but subjective assessments can rely on any number of perceived attributes, such as an entrepreneur's personality (Kerr et al., 2018).

Due diligence is critical to the success of venture capital investing. It involves a thorough investigation of a company and evaluation of its suitability as a potential target for investment with the ultimate goal of uncovering any potential risks that could adversely affect the success of

the investment. Therefore, venture capitalists must be methodical in their evaluations when investing in early-stage, high-risk companies, as these companies may have significant risks that outweigh any potential returns (Baeyens et al., 2006). The following section describes commonly researched and practiced subjective judgments VCs use when making investment decisions about startup firms.

Subjective Judgements

VCs may receive many investment opportunities but only have the potential to invest in a few choices; this makes choosing those investments highly selective and requires intense scrutiny of a company's potential for success (Lin et al., 2021). This scrutiny is not limited to typical forms of evaluative criteria. VCs often employ subjective judgment criteria when selecting investments among several investment opportunities (Montani et al., 2020). Often, these judgments are based on the VCs' perception of various characteristics or traits of the startup's founder (Cope et al., 2004; Wright et al., 1997). These characteristics often require heuristics.

Additionally, an affective component drives venture capitalists' feelings about certain entrepreneurs, even if those perceptions are not based on objective information (Cable & Shane, 1997). Table 4 illustrates some subjective investment criteria venture capitalists use when evaluating startup firms' potential return for investors. These subjective investments emphasize the perceptions of the startups' founders, who serve as the foundation for subjective investment criteria.

Table 4

Subjective Investment Criteria of Venture Capitalists

Personality of entrepreneur or members of top management
Capable of sustained effort
Startup's ability to evaluate and respond to dynamic market changes
Executives or entrepreneur articulate the venture's vision, mission, and strategy well
Startup leadership's attention to detail
Leadership, specifically top management team's education, previous experience, and notoriety.
Reputation of leadership team or entrepreneur
Perceived motivation of entrepreneur and leadership team
Perceptions of leadership's personal integrity
Likability of leadership and entrepreneur
Entrepreneur's or leadership's previous successes and failures with various ventures
Education or prestige of previously attended educational institutions by various team members

Note. Adapted from Šarić (2015)

Resource Scarcity and Investment Criteria

Resource scarcity is referred to by early organizational scholars, such as March and Simon (1958), as a munificent of the environment (p. 14) or one in which firms do not need to compete for resources. The measure of resource scarcity or munificence serves as the driving force behind the competition. While a degree of munificence exists in all economies, decreasing resource scarcity changes behavior competitiveness. For example, Wiedmer et al. (2020) purport that competitive behavior can result in opportunistic behavior, hyper-competition, cooperation, or diversification strategies. However, other scholars suggest that reducing resource scarcity, specifically increasing investment capital, can result in moral hazard, poorly developed strategies, and irrational decision-making (Orihuela, 2018; Perroni & Proto, 2010). Given these assertions by resource scarcity scholars, it is logical to infer that venture capitalists may be less likely to be diligent in assessing an investment's ability to yield a favorable return by relying more on subjective rather than objective investment criteria. Klein (1990) purports that resource scarcity is correlated with motivation in an inverted U-relationship. As resource scarcity increases, marginal gains from accessible resources exceed those available, motivating people to work. Conversely, decreasing resource scarcity should discourage people's motivation to work. Therefore, increased PPP loan funding and increased investment capital stemming from decreased borrowing rates should decrease venture capitalists' motivation to work.

However, to my knowledge, there is no empirical research on VC decision-making when resource scarcity is reduced, specifically during a pivotal economic phenomenon such as the COVID-19 pandemic. Moreover, agent decision-making viewed through an agency framework under these conditions also constitutes a salient gap in the literature stream. Moreover, the

venture capital literature stream lacks sufficient qualitative research examining subjective investment criteria, specifically when resource scarcity decreases. Our understanding of the type and use of objective and subjective criteria under various macroeconomic conditions is vital to expanding our understanding of venture capitalists' investment decision-making that affects the success of startups. These startups serve as a driving force in the US economy and provide a vital source of human capital in labor markets. Therefore, these gaps in empirical research in the venture capital literature stream led to the development of the following research questions:

Research Question 1: According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?

Research Question 1A: In what ways did their objective criteria change based on resource availability during the pandemic?

Research Question 1B: In what ways did their subjective criteria change based on resource availability during the pandemic?

Conclusion

The proliferation of venture capital firms and the meteoric rise in venture capital funding in startups has garnered the attention of industry insiders and academics. Previous research has examined various criteria venture capitalists use when making investment decisions on behalf of investors. However, most of that research assumed fixed macroeconomic conditions and the persistence of resource scarcity. Moreover, many empirical studies fail to examine the concomitant effects of VCs' objective vs. subjective selection criteria. However, macroeconomic

conditions are not fixed, and the COVID-19 pandemic elucidated dynamic swings in multiple markets and industries globally.

Nevertheless, the existing empirical research on VC investment decision-making fails to acknowledge those changing conditions and the implications on the agentic relationship between VCs and their principal investors. As economic conditions change, VCs may rely more heavily on one type of selection criteria over another based on these changing conditions. Therefore, moral hazard may influence those decisions more than any other factors despite contractual obligations and a fiduciary duty to investors. Lastly, the choice of a qualitative approach provided an underutilized rich data source and subsequent narrative of the decision-making experiences of venture capitalists, who may have relied on more subjective than objective evaluations of entrepreneurs and their ventures.

CHAPTER 3

METHODOLOGY

The research design, methodology, sampling methodology, pilot study with results, interview protocol, steps of data collection, and data analysis of the study are presented in this chapter. Additionally, the chapter summarizes the purpose of the study, presents the research questions that drive the study, and then provides a rationale for utilizing a qualitative research approach.

Background Summary

This qualitative case study examines the evaluative criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. Specifically, the research aims to gain additional insight into VCs' decision-making behavior during periods of changing resource availability using an agency theory theoretical framework.

As delineated in the problem statement in Chapter 1, the COVID-19 pandemic resulted in drastic changes in resource availability, presenting a novel situation to VCs. An increase in available investment capital, resulting from PPP loans and decreased interest rates, reduced the stringency of VC selection criteria. However, VCs have a fiduciary duty to act in their investors' best interest, not succumb to moral hazard by prioritizing their interests over those of their principals. Subjective evaluative criteria became used more frequently than the traditional objective criteria, consisting of financial metrics. Subjective evaluative criteria are based on perceptions of a startup's viability because of a VC's personal preferences, such as the entrepreneur's personality or the educational institution a top manager attended. Therefore,

gaining additional insight into VCs' reliance on objective versus subjective selection criteria for startups during changing resource availability is vital. The following section lists the research questions that serve as the central component of this empirical research study.

Research Questions

The following research questions drove the research design, data analysis, and subsequent analysis of the results in Chapter 4:

Research Question 1: According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?

Research Question 1A: In what ways did their objective criteria change based on resource availability during the pandemic?

Research Question 1B: In what ways did their subjective criteria change based on

Qualitative Research Methodology

The research design for this study is qualitative. Most studies conducted in the venture capital literature stream are quantitative. Still, this research aims to capture data related to venture capitalists' perceptions and personal experiences. Therefore, a qualitative approach is more conducive to examining emotions, perceptions, and human experience (Myers, 2019). The data will be collected through semi-structured interviews with venture capitalists. Finally, the researcher will employ thematic analysis to analyze collected data to develop a narrative that accurately reflects the lived experiences of venture capitalists.

Rationale

A qualitative descriptive design enables the researcher to gain meaningful data that provides vital information about the respondents' personal experiences and perceptions that quantitative studies cannot (Clandinin & Connelly, 2004). Merriam (2009) asserts that qualitative descriptive studies focus on experiences and how people perceive them more accurately than quantitative studies. In addition, a qualitative descriptive research study allows data to be analyzed with minimal assumptions to ensure trustworthiness in results (Chafe, 2017).

Semi-structured interviews allow the researcher to collect thick, rich data from respondents. This type of interview was chosen because it allows respondents to explain their thoughts and identify themes and topics most significant to their personal experience (Barclay, 2018). Moreover, semi-structured interviews have more flexible parameters but ensure that the topic studied remains the focus (Kaczynski et al., 2014). Finally, semi-structured interviews consist of open-ended questions, allowing the participant to expand on their responses if needed and the researcher to further inquire about the responses given, allowing for topics to be explored in greater depth and detail.

Thematic analysis is most appropriate for this study because its objective is to seek to discover using interpretations. Thematic analysis enhances understanding of the whole through systematic analysis of the frequency of a theme (Braun & Clark, 2009). The method confers accuracy and intricacy while enhancing the meaning of the research. Thematic analysis yields a broader, more in-depth understanding (Marks & Yardley, 2004). Guest et al. (2011) purport that thematic analysis "is most useful in capturing the complexities of meaning within a textual data set" (p. 10), which is consistent with the objective of the research.

Field Test

The researcher conducted a field test to evaluate the feasibility of the study and the quality of the semi-structured interview and focus group questions. Three participants were asked to respond to the semi-structured interview questions and subsequently evaluate the relationship between those questions and the posited research questions. Moreover, the field test allowed the researcher to develop unscripted follow-up questions and build rapport with participants.

The participants in the field study were three venture capitalists (VCs) at three boutique VC firms in the San Francisco Bay area. None of the participants were included in the main study's final pool of potential participants. Each of the VCs met the study's requisite inclusion criteria:

1. Participants must be at least 18 years of age
2. Participants must be currently employed at a venture capital firm
3. Participants are required to have at least five years of venture capital experience
4. Participants must have worked in venture capital between 2018 and 2023
5. Participants must be decision-makers with the authority to select potential deals, perform due diligence, and execute those deals.

All three participants completed the semi-structured interviews as if the researcher were collecting the data for the proposed study. Therefore, each semi-structured interview was between 45 and 60 minutes. Pilot studies in qualitative research are employed far less frequently than in quantitative research (Kezar, 2000) but provide multiple benefits for qualitative researchers and their research subjects (Thabane et al., 2010). Teijlingen and Hundley (2001)

purport that interviews used in qualitative research improve progressively because the researcher gains beneficial insight that improves scheduling, questions, and engagement with subjects. Therefore, the researcher used the pilot study interviews to obtain invaluable feedback about the questions from participants, gauge participants' fatigue, and test the efficacy of follow-up questions.

Tables 5 and 6 present the outcomes of the semi-structured interviews and participant demographics.

Table 5

Semi-Structured Interview Descriptive Data

Participant	Interview Duration (minutes)	Number of Single-Spaced Pages Transcribed	Member Checked Document
P1	49	28	Yes
P2	58	34	Yes
P3	53	31	Yes
Mean	53.33	31	N/A
Median	53	31	N/A
Total	160	93	N/A

The semi-structured interviews lasted between 49 and 58 minutes, with an average duration of 53.33 minutes, 53 minutes and 20 seconds, and a median duration of 53 minutes. The total duration of all three semi-structured interviews was 160 minutes, 2 hours, and 40 minutes.

The transcription of each interview was between 28 and 34 single-spaced pages with a mean and median of 31 pages and 93 total pages of transcription.

Table 6

Semi-Structured Interview Participant Demographics

Participant	Age	Gender	Race	Years in Industry	Years in Current Firm
P1	43	M	Caucasian	15	10
P2	38	M	Caucasian	13	8
P3	54	M	Caucasian	23	20
Mean	45	N/A	N/A	17	12.67
Median	43	N/A	N/A	15	10

The semi-structured interview participants were between the ages of 38 and 54, with an average age of 45 and a median age of 43. Participants had been working in the venture capital industry for between 13 and 23 years, with an average work experience of 17 years and a median of 15 years of experience. Participants reported working at their current firms for between 8 and 20 years, with a mean of 12.67 years and a median of 10 years. All participants in the semi-structured interview were Caucasian males, which was not unexpected but presented a salient limitation to the study.

Data Collection

The researcher contacted VC directors with whom he had a collegial relationship to request permission to recruit participants. Once permission was obtained, the researcher emailed

five VCs from three different VC firms, asking them to participate in the study. The email contained the research objectives, informed consent, and inclusion criteria. All five recipients responded to the email; however, only three participants met all inclusion criteria.

The researcher scheduled Zoom virtual appointments with each participant based on their availability. During the semi-structured interviews, the participants were asked all of the questions in the interview protocol. Upon completion of the interviews, the researcher presented each participant with the research questions for the proposed study, asking for participants' perceptions of the relationship between the proposed study's research questions and the interview questions. Two of the three participants critiqued the question, "Do you always make decisions that are consistent with the investment objectives of your investors?". Both participants expressed their concern about the sincerity of future participants, as their fiduciary duty binds them by law to act in such a way. Therefore, the question was removed. The final set of semi-structured interview questions is located in Appendix H. However, all participants agreed that the research and semi-structured interview questions aligned well with the objectives.

Data Analysis

The researcher transcribed the interviews and verified their accuracy multiple times by replaying the recorded audio of the interviews. Then, to maintain the trustworthiness of the results, the researcher sent the participants the transcripts for review to ensure accuracy. Member checking is a critical component in qualitative research, as a verbatim account of interviews is vital to developing an accurate narrative of participants' experiences (Candela, 2019).

Thematic Analysis

Lastly, the researcher used the data from the field test to practice the data analysis steps that will yield the final study's results. Using Nvivo software, the researcher scanned all transcribed interviews and performed each step of the thematic analysis delineated by Braun & Clarke (2006, 2012, 2022). While the researcher faced some technological challenges, the data analysis exercise provided an opportunity to explore different ways to move from initial codes to final themes.

Pilot Study Conclusion and Implications

The pilot study significantly benefited the researcher, study design, semi-structured interview questions, and future study participants. The insights gained from the pilot study were used to modify the existing semi-structured interview questions, adapt the pace of the interviews, and allow the researcher to practice the study's data collection and analysis phases. Finally, the researcher was able to evaluate the feasibility of the study, duration of interviews, and practice developing pertinent follow-up questions that effectively provided additional insight into participants' experiences.

Participants

The following section details the proposed participant selection strategy, anticipated sample size, inclusion criteria, and recruitment approach.

Participant Sampling Methodology

The researcher employed a purposive sampling methodology, which is non-probabilistic. Purposive sampling is a deliberate choice of participants due to their qualities (Campbell et al., 2020). The purposive sample consisted of venture capitalists who are decision-makers in their

respective firms and meet the requisite inclusion criteria. These venture capitalists were not self-selected, and the potential research sample was not limited to one geographic location, as other firms in other states were considered. Purposive sampling is a careful selection of participants based on a needed population with specific characteristics to answer the created research questions (van Hoeven et al., 2015). This sampling approach is also known as selective and judgmental or a non-probability sampling technique (Yin, 2011). Including criteria that reflect those participants' necessary characteristics and expertise is essential. This type of sampling allowed the researcher to interview participants with similar characteristics and expectations.

Sample Size

The final sample size for the study was 13. The final number was determined through data saturation. Once data saturation was achieved, the researcher ceased the semi-structured interviews. There is no scholarly consensus on the number of participants required for a qualitative research study to be sufficiently robust (Sandelowski, 1986, 2004). Qualitative research scholars purport that data saturation, not an a priori number of respondents, should drive the sample size used in qualitative research studies (Hennink & Kaiser, 2022). However, some scholars, such as Ellis et al. (2017), purport that descriptive case studies should have at least 10 participants. Wang (2013) concurs, emphasizing that with fewer than 10 participants, it is difficult for a researcher to achieve rich, thick data that reveals the social context and connections between data points. Therefore, the researcher aimed to obtain a sample size of at least ten participants.

Participant Selection Criteria

All participants met the following inclusion and exclusion criteria:

Inclusion Criteria

1. Participants must be at least 18 years of age
2. Participants must be currently employed at a venture capital firm
3. Participants are required to have at least five years of venture capital experience
4. Participants must have worked in venture capital between 2018 and 2023
5. Participants must be decision-makers with the authority to select potential deals, perform due diligence, and execute those deals.

Exclusion Criteria

1. Any participants under the age of 18
2. Participants who are not currently employed at a venture capital firm
3. Participants with less than five years of venture capital experience
4. Participants who did not have continuous employment at a venture capital firm between 2018 and 2023
5. Participants who do not have the authority to select potential deals, perform due diligence, and execute those deals.

Participant Recruitment Approach

The researcher contacted fourteen Directors of Venture Capital firms in the San Francisco Bay area to obtain permission to recruit participants within their firms using the site authorization template provided by the University of Pennsylvania's Institutional Review Board (IRB) (Appendix A). The email to the Directors included the study's purpose, research objectives, informed consent, and contact information for the researcher and the IRB at the University of Pennsylvania. Once permission was obtained, the researcher emailed 17 potential

participants (Appendix B) with similar details but included the full inclusion and exclusion criteria and a DocuSign link to a short set of screening questions (Appendix C) to ensure participants fit the inclusion criteria for the study. Additionally, the link directed participants to an attestation document (Appendix D), where participants affirmed that they met the inclusion criteria and failed to meet the exclusion criteria. Subsequently, those participants who qualified for the study were automatically redirected to the informed consent (Appendix E).

The informed consent included the purpose of the research, a confidentiality statement, participants' rights, and a statement indicating that participation is voluntary at all stages of the study. Additionally, the researcher included the data storage and management procedures and the member-checking process for the transcripts. Finally, participants were encouraged to ask questions or express concerns before agreeing to participate in the study.

Data Collection, Management, and Security

This section describes data collection, including data management and security, participant confidentiality, the development of the semi-structured interview protocol, and ethical considerations. Then, the steps for data collection are presented in more detail.

Confidentiality and Data Security

Each participant engaged in one virtual interview via Zoom, lasting approximately 45-60 minutes. These interviews were audio recorded and stored in a password-protected computer in a password-protected cloud computing drive. Then, participants were sent a copy of the transcripts of those interviews for member checking, ensuring that the transcripts of the audio interviews precisely reflected their responses in the interviews. The researcher did not employ any video recordings to increase participants' confidentiality. The only identifiers obtained from

participants were full names; these identifiers were subsequently replaced in study documents with a unique participant number (e.g., P1, P2, etc.).

The researcher employed a de-identification protocol (Appendix F), which reduced the likelihood that participants' identities could be surmised based on the study's results, including the transcripts of the semi-structured interviews. Re-identification risk, or deductive disclosure, occurs when a participant could inadvertently supply details about themselves or other participants, which could jeopardize participants' confidentiality (Pascale et al., 2022). Therefore, to protect participants' confidentiality further, the researcher redacted any information in the written transcripts and final data that could compromise participants' confidentiality, such as names, addresses, and firm names.

The collection and management of all data, confidential and otherwise, will be the sole responsibility of the Principal Investigator. Electronic copies of consent forms containing participants' full names were stored in a password-protected computer within a password-protected cloud computing drive. Virtual interviews conducted via Zoom were audio recorded, and the files were saved in a separate folder in the same password-protected drive. Data analysis was conducted using NVivo qualitative data analysis software. Participants were assigned a unique numerical identifier (P1, P2, etc.), and a list of those identifiers was kept in a separate password-protected folder within the cloud computing drive. Per the IRB guidelines and this study's data management plan, all data will be kept for three years, after which any paper records created (including the researcher's notes) will be shredded. All electronic files will be deleted and purged from the cloud computing software. No data will be disclosed to personnel not listed

in the data management protocol will be shared unless dictated by IRB guidelines or required by law.

During the research process, confidentiality was maintained by keeping all study-related documents in a locked filing cabinet, which means the researcher would not share information with others. The collected data will be kept for three years after completing the study. After three years, the researcher will shred all materials and delete all digital data. Finally, any unanticipated breach of confidentiality will be immediately addressed by contacting the researcher's advisor and the IRB within ten business days, as delineated by the study's Breach of Confidentiality and Adverse Events protocol (Appendix G).

Development of the Semi-Structured Interview Protocol

The researcher developed semi-structured interview questions using an interview guide developed by Kallio et al. (2016), tested the questions in a pilot study, and reviewed the results with an expert panel to revise the interview questions and solicit feedback about the researcher's performance. The interview guide was developed based partially on the work of Kallio et al. (2016), in which a five-phase framework is developed to increase the rigor and trustworthiness of data collection. These steps included: 1) identifying the prerequisites for using semi-structured interviews; 2) retrieving and using previous knowledge; 3) formulating the preliminary semi-structured interview guide; 4) pilot testing the guide; and 5) presenting the complete semi-structured interview guide.

The semi-structured interview protocol (Appendix H) was developed based on previous knowledge of the subject matter and phenomenon. Therefore, the researcher aptly created semi-structured interview questions that provided the participants with guidance on what to talk about,

but not in a rigidly structured way (Gill et al., 2008). The guide contains specific guidance on the appropriateness of questions, ensuring that only questions that elicited the *necessary* information to complete the study were included (Gibbs et al., 2007).

Ethical Considerations

Ethics drive participant safety when conducting a research study. Qualitative studies may exhibit ethical problems in data collection and publication of findings because inferences and generalizations of data are necessary (Gentles et al., 2015). The research process involves generalizing participant responses, which can create tensions when human participants are involved. Researchers must protect participants' rights to maintain privacy and avoid harm by applying appropriate ethics (Orb et al., 2001). Therefore, site authorization and an expert panel were used to aid the researcher in ensuring that ethics served as the foundation of the research study.

Data Collection Steps

Several steps were required to collect the necessary data for this study. This section will detail step-by-step how data was collected:

1. All participants who participated in semi-structured interviews met all the inclusion criteria and failed to meet the exclusion criteria.
2. The data collected was meant to answer the research questions posed within the dissertation.
3. The researcher contacted fourteen Directors of Venture Capital firms in the San Francisco Bay area to obtain permission, or site authorization, to recruit participants from within their firms via email. The email to the Directors included the study's purpose, research

objectives, informed consent, and contact information for the researcher and the IRB at the University of Pennsylvania.

4. Once permission was obtained, the researcher emailed 17 potential participants (Appendix B) with similar details but included the full inclusion and exclusion criteria and a DocuSign link to a short set of screening questions (Appendix C) to ensure participants fit the inclusion criteria for the study. Additionally, the link directed participants to an attestation document (Appendix D), where participants affirmed that they met the inclusion criteria and failed to meet the exclusion criteria. Subsequently, those participants who qualified for the study were automatically redirected to the informed consent (Appendix E).
5. The researcher sent reminder emails to all participants one week, three days, and one day before the interview.
6. The interviews were held virtually via Zoom using only the audio feature. Therefore, participants were in their chosen environment for the interview.
7. The interviews were performed according to the interview protocol developed for this study.
8. The audio from the semi-structured interviews was digitally recorded and transcribed.
9. The transcripts were sent to participants for member checking. The final transcripts used for data analysis included any revisions or additions requested by participants.
10. Data was stored according to the "Data Collection and Management" section.

Data Analysis

The researcher employed thematic analysis, a data analysis technique developed by Braun & Clarke (2006, 2012, 2022), to develop an accurate narrative that depicts the participants' experiences. This section describes the six phases of thematic analysis.

Braun and Clarke (2006) delineate six phases of thematic analysis that form the foundation of the data analysis procedures in the research presented here. These six phases are (1) familiarizing yourself with your data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report (p.90).

1) Become familiar with the data: All semi-structured interviews were transcribed. The researcher reviewed the data intently to become familiar with the breadth and depth of the data. By reading through the data several times before coding, the researcher gains a more comprehensive understanding of the phenomenon and is better equipped to recognize patterns and nuances, which will assist the researcher in the coding phase (Braun & Clarke, 2006).
2) Generating initial codes: After becoming familiar with the data, the researcher generated an initial list of ideas about the data, including potential patterns. Then, the researcher created initial codes from the data. Codes were generated based on what was most interesting to the researcher and which patterns emerged. Tucker (2005) asserts that this data analysis phase involves organizing data into meaningful groups. The researcher incorporated coding techniques from Braun and Clarke (2006), including (a) coding for as many potential themes and patterns as possible, (b) coding extracts of data inclusively with any relevant context, (c) accepting some level of

inconsistency and adapt groups as necessary to account for those inconsistencies (p. 93). After an extensive list of codes was identified across the data set, the initial codes were created to prepare for identifying themes in the next step of the data analysis. (Braun & Clarke, 2006)

3) Searching for themes: After all the data were initially coded, the codes were sorted into different themes. The relevant coded data extracts were collated within those identified themes. In this phase, the researcher began conceptualizing the relationship between codes, themes, and different levels of those themes. For example, the initial codes form the main themes or sub-themes. In contrast, others are sorted into a 'miscellaneous' theme category to determine later if they should be discarded (Braun & Clarke, 2006). However, codes were not discarded at this phase, as connections between and among codes may arise later in the data analysis.
4) Reviewing themes: The researcher refined themes in this phase if initial candidate themes did not have enough data to support them or were too diverse. Some themes were combined into a single theme if those themes were sufficiently similar. However, other themes were separated into distinct themes (Braun & Clarke, 2006). The researcher incorporated Patton (1990) for dual criteria judgment categories, i.e., internal homogeneity and external heterogeneity, to combine or separate distinct themes. The combined themes should have meaningful connections, while different themes should have clear and identifiable distinctions.

   This phase consists of two levels of review and refinement. The first level involved the researcher reviewing all the collated extracts for each theme and determining if a

coherent pattern was present. The second level consisted of the researcher refining existing themes. Suppose the candidate themes did not form a cohesive pattern. In that case, the researcher determined if the theme was problematic or if the data extracts within that theme did not fit. If the latter was the case, the researcher formed a new theme, placed that theme into an existing theme, or discarded that theme (Braun & Clarke, 2006).

5) Defining and naming themes: The researcher defined and named themes for data analysis in this phase. Braun and Clarke (2006) describe this phase as "identifying the essence of what each theme is about (as well as themes overall) and determining what aspect of the data each theme captures." (p. 92). Braun and Clarke (2006) purport that themes should not be too diverse or complex. To avoid stretching the bounds of themes, the researcher continued to go back and forth with the collated data extracts for each theme and organized them into a coherent and internally consistent account of the phenomenon using a narrative (Braun & Clarke, 2006). The researcher maintained collated data extracts as critical references to ensure the themes remained coherent and internally consistent.
6) Producing the report: Finally, the researcher produced the data report. The objective of writing an adept thematic analysis is to tell the complicated story of the data to convince the reader of the merit and validity of the analysis (Braun & Clarke, 2006). To accomplish this task, the researcher incorporated the strategic use of vivid examples, quotes, and extracts that captured the essence of the data without creating complexity. In addition, selected extracts were embedded into an analytic narrative

that illustrated the data's story while creating an argument concerning the researcher's specific research questions.

Validity and Mitigation

Validity was achieved in this study by following data collection and analysis procedures developed by leading qualitative researchers. These procedures were developed scientifically and have been tested and validated multiple times. However, semi-structured interview transcripts that do not accurately reflect participants' statements could significantly undermine the study's results. Therefore, the researcher used member checking to ensure that the data collected from participants during the semi-structured interviews accurately reflected their words. Noble and Smith (2015) assert that member checking increases credibility because participants can ensure that the transcripts are accurate and credible to them. None of the participants requested any changes to their semi-structured interview digital transcripts.

Finally, the lack of statistical testing could be perceived as problematic. Making casual inferences and relationships among variables can be more complicated than quantitative research (Lambert & Lambert, 2012). Therefore, the researcher avoided making these causal arguments and focused the analysis and results on the participants' perceptions of their lived experiences, not the researcher's.

Conclusion

This chapter provided a comprehensive overview of the key components of the study's research methodology, data collection and management, data security and participant confidentiality, and data analysis using thematic analysis. Additionally, critical information about the problem and objectives of the study were described. Finally, justification and rationale

for methodological choices were included. The results of the proposed study will be presented in Chapter 4.

CHAPTER 4

RESULTS

The objective of the qualitative case study was to evaluate the criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. In particular, this qualitative case study examined how venture capitalists changed their decision-making behavior, specifically their reliance on subjective vs. objective criteria, as resource availability changes. The researcher utilized semi-structured interviews with thirteen VC decision-makers via Zoom. Next, digital transcripts of the interviews were sent to participants for member checking. After all participants approved their transcripts, the researcher employed thematic analysis to develop a thick, rich narrative to answer the study's research questions through an agency theoretical framework.

Research Questions

The following a priori research questions were developed after identifying gaps in the literature to expand the depth and scope of our knowledge of the criteria used by venture capitalists to choose startup firms that they perceive to have the most potential for future success.

Research Question 1: According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?

Research Question 1A: In what ways did their objective criteria change based on resource availability during the pandemic?

Research Question 1B: In what ways did their subjective criteria change based on resource availability during the pandemic?

Data Collection

The data collection for the study is delineated within this section of the dissertation. The data collection section describes the study's participant recruitment and selection process and then presents interview and participant data.

Recruitment Process

The researcher began the data collection portion of the dissertation by creating a list of all Venture Capital firms that operated in the San Francisco Bay Area between 2019 and 2023. Next, the researcher narrowed those results based on those VC firms with whom he had a professional relationship. Because of the nature of the study, recruiting participants randomly would not have been fruitful. Potential participants needed a researcher with whom someone in their firm had a collegial relationship before they would commit to revealing confidential or potentially damaging information. That list was reduced to 14 VC firms.

The researcher contacted fourteen Directors of Venture Capital firms in the San Francisco Bay area to obtain permission, or site authorization, to recruit participants from within their firms via email. The email to the Directors included the study's purpose, research objectives, informed consent, and contact information for the researcher and the IRB at the University of Pennsylvania. Subsequently, the VC Directors that did agree to allow the researcher to solicit participants supplied VC decision-makers' email addresses. These potential participants were sent emails with a more detailed description of the study, inclusion and exclusion criteria, links to the screening questions, attestation form, informed consent, and finally, to the scheduler to finalize a Zoom appointment day and time with the researcher.

Participants were sent 7, 5, and 3-day reminders before their Zoom meeting. The researcher began meetings by reminding participants only to utilize their pre-assigned alphanumeric pseudonyms and discussed their right to withdraw voluntarily at any point without supplying the researcher with a reason. Finally, all Zoom meetings were conducted with the video feature disabled to increase participants' confidentiality and build trust with the researcher. The following section presents the study's recruitment data.

Recruitment Data

The researcher contacted fourteen VC Directors at fourteen San Francisco Bay Area firms for permission to recruit VC decision-makers from within their respective firms. Thirteen of those Directors responded to the researcher's email requesting authorization. The researcher sent thirteen requests for site authorizations in the form of digital signatures through Docusign before beginning any participant recruitment. Eleven Directors of VC firms returned those signed site authorization forms. Therefore, the final number of VC firms used to recruit VC decision-makers was eleven. Table 7 illustrates this stage of the data collection process.

Table 7

Site Authorization

Emails sent to Directors of VC firms	Responses from Directors	Requests for Site Authorization	Directors who signed Site Authorizations	Total Number of VC firms used in the study
14	13	13	11	11

Seventeen total VC decision-makers were contacted from eleven firms, with fifteen respondents expressing interest in participating. After the respondents completed the initial

screening, thirteen potential participants were found to meet the inclusion criteria, while two did not meet the inclusion criteria. The inclusion criteria for the study were:

1. Participants must be at least 18 years of age
2. Participants must be currently employed at a venture capital firm
3. Participants are required to have at least five years of venture capital experience
4. Participants must have worked in venture capital between 2018 and 2023
5. Participants must be decision-makers with the authority to select potential deals, perform due diligence, and execute those deals.

The two participants who failed to meet the inclusion criteria did not possess the requisite decision-making authority; specifically, both participants did not perform due diligence for selected deals. All thirteen participants who met the inclusion criteria reviewed and signed the informed consent documents. Subsequently, the researcher finalized the list of participants, identified through alphanumeric pseudonyms. Table 8 provides the study's participant recruitment data.

Table 8

Participant Recruitment Data

Recruitment emails sent to VC decision-makers	Responses from potential participants	Potential participants meeting the inclusion criteria	Potential participants who did not meet the inclusion criteria	Participants who reviewed and signed the informed consent documents
17	15	13	2	13

As indicated in Table 9 below, all thirteen participants scheduled and completed the semi-structured interviews. As stated in Chapter 3, there was no a priori number of participants for the study. The researcher continued the interviews until data saturation was achieved. The researcher determined that data saturation was achieved after twelve semi-structured interviews. However, to ensure that data saturation was achieved, the researcher completed the thirteenth interview.

Table 9

Semi-Structured Interview Scheduling and Participation

Number of semi-structured interviews scheduled	Number of participants who completed semi-structured interviews	Number of participants at data saturation
13	13	12

Semi-Structured Interview Data

As depicted in Table 10, thirteen semi-structured interviews were conducted, with a median duration of 52 minutes and a mean duration of 52.23 minutes. The total duration of all interviews was 679 minutes, 11 hours and 19 minutes. The median length of the interviews transcribed into single-spaced pages was 29 pages, with an average of 29.31 pages and 381 single-spaced pages for all interviews. All participants completed document member checking. None of the participants requested changes to their digital transcripts.

Table 10

Semi-Structured Interview Descriptive Data

Participant identifier	Duration	Number of pages single-spaced	Member checked document

P1	55	30	Yes
P2	53	29	Yes
P3	57	34	Yes
P4	50	27	Yes
P5	45	25	Yes
P6	47	26	Yes
P7	51	29	Yes
P8	55	30	Yes
P9	58	34	Yes
P10	60	36	Yes
P11	49	27	Yes
P12	52	28	Yes
P13	47	26	Yes
Median	52	29	N/A
Average	52.23	29.31	N/A
Sum	679	381	N/A

Table 11 provides more detailed participant data, including age, gender, race, and experience. While these factors were not the study's primary focus, they reveal interesting data that reflects the demographic landscape in this population of VC firms and decision-makers and the typical demographics of VC firms.

Table 11

Participant Demographics

Participant identifier	Age	Gender	Race	Years in industry	Years as a VC decision-maker
P1	58	M	Caucasian	30	19
P2	52	M	Caucasian	21	13
P3	49	M	Caucasian	20	12
P4	55	M	African-American	29	18
P5	47	F	Caucasian	20	12
P6	44	M	Caucasian	20	10
P7	52	M	Caucasian	27	16
P8	53	M	Asian	26	17
P9	43	M	Caucasian	19	11
P10	60	M	Caucasian	35	22
P11	42	F	Caucasian	17	10
P12	48	M	Asian	25	15
P13	51	M	Caucasian	28	17

Median	51	N/A	N/A	25	15
Average	50.31	N/A	N/A	24.38	14.77
Sum	N/A	N/A	N/A	317	192

The median age of participants was 51 years, with an average of 50.31. Participants had a median of 25 years of experience in the industry, with an average of 24.38, representing a collective 317 years of industry experience. Participants had a median of 15 years of experience as VC decision-makers, averaging 14.77 and 192 years collectively. It is evident from Table 11 that participants were overwhelmingly Caucasian men. The participants' sample lacked diversity yet accurately reflects typical VC firms. In the researcher's experience, there are few women in VC firms and fewer with decision-making power. This salient issue will be discussed further in the section dedicated to "Areas of Future Research" in Chapter 5.

Data Analysis

The following section describes each step of the data analysis process, which coincides with the requisite thematic analysis steps. Each phase contains a description of the researcher's data analysis approach and a table that depicts the iterative process inherent in thematic analysis.

Phase 1: Familiarizing Yourself with the Data

The researcher reviewed the audio recordings from each semi-structured interview at least twice to ensure the audio quality was sufficient to create accurate transcripts. Subsequently, the audio recordings were transcribed multiple times to ensure accuracy. The researcher then sent the transcripts to the participants for member checking. After the researcher completed member checking with participants and received their approval that the transcripts from the audio

interviews were accurate, the researcher reviewed the audio recordings one final time, cross-referencing them with the digital transcripts.

Finally, the researcher made handwritten notes about his overall impression of the data and interviews and listed interesting and meaningful elements. However, that list was not organized in a specific manner or into particular groups or categories. The objective of this stage of thematic analysis is to become familiar with the overall data, not focus on piecing together data elements. Moreover, the researcher needed to begin this process without preconceived notions of what themes may arise, as these could create self-seeking biases, which can distort the process and result in a narrative that fails to capture the participants' perceptions.

Phase 2: Generating Initial Codes

This stage of thematic analysis focuses on organizing the researcher's ideas and data perceptions from the first phase into meaningful codes using collated data extracts. Using collated data extracts is vital because it ensures that data are not analyzed in isolation but with associated relevant context. The researcher slowly began to develop codes and adapt them as inconsistencies arose. The result of this iterative process was an extensive list of initial codes. Notably, the researcher did not exclude codes perceived as potentially contradictory to preserve the integrity of the data. Codes that the researcher perceived as contradictory or appeared to be anomalies were placed into a miscellaneous group, which would be reviewed again.

Throughout this process, the researcher collected quotes from the semi-structured interviews that supported the respective groups of initial codes. Subsequently, quotes that reflected similarities to the initial codes or were similar to existing supporting quotes were placed into that corresponding group of codes. Again, quotes that appeared to fall outside the initial

codes' scope were not discarded. Instead, these quotes were separated, and ultimately, the researcher returned to them to ensure they did not contain similarities to the existing groups of codes. Lastly, the researcher finalized the list of initial codes. Table 12 illustrates some of the many initial codes that resulted from this data analysis stage.

Table 12

Examples of Initial Codes

An influx of investment capital
Decreased interest rates
Substantial increase in startups
Necessity to make decisions quickly
Confident
Celebrity
Well-liked
Easy to get along with

Phase 3: Searching for Themes

This phase required the researcher to conceptualize relationships among codes that resulted from the first two phases of data analysis. The researcher conceptualized these relationships based on their similarities within the context of the collated data extracts. After multiple iterations, the codes were placed into distinct categories. These categories were refined

through additional iterations, further distilling groups of codes into meaningful categories that captured the relationships among the constituent codes. All codes were assigned to distinct categories, and these categories were defined based on the shared meaning created by the participants' experiences and perceptions reflected in the collated data extracts. Table 13 provides examples of initial codes, which were grouped into distinct and defined categories.

Table 13

Example Initial Codes to Categories

Code Assigned	Category Assigned	Category Defined/Explained
Changes in Investment Capital Abundance of Investment Opportunities	Dynamic Decision Making	Venture capitalists' decision-making under rapidly changing investment conditions.
Likeability Confidence	Entrepreneur's Personality	The perceived characteristics and unique qualities of the founding entrepreneur.

Phase 4: Reviewing Categories and Creating Potential Themes

The objective of the fourth phase was to review the categories defined in Phase 3 to develop potential themes. While performing the secondary review of the existing categories, themes slowly emerged from the data. The researcher noted potential themes encompassing existing categories and accurately reflected the participants' experiences and perceptions. Notably, the researcher maintained the collated data extracts throughout Phases 1-4 to allow for reexamination of the selected potential themes to ensure their integrity and consistency with the

emerging narrative. Phase 4 required several iterations, resulting in an initial group of potential themes.

At this stage, the researcher incorporated internal homogeneity and external heterogeneity of themes to ensure that themes were distinct and valid representations of participants' perceptions and experiences. Each candidate theme was examined multiple times, comparing themes to one another to ensure each was distinct and did not overlap with other themes. Candidate themes that did not meet the criteria of distinctness or accurate representations of participants' experiences and perceptions were removed from the list of candidate themes or incorporated into other themes via reassignment of their categories. Table 14 provides a list of example categories and subsequent themes to illustrate this process.

Table 14

Example of Secondary Code Cycling for Potential Themes

Categories Assigned	Potential Theme Assigned	Theme Defined/Explained
Investors' Risk Preference Dynamic Decision Making	Dynamically Aligned Investment Strategies	Investment strategies aligned with investors' preferences and risk levels in rapidly changing environments.
Entrepreneur's Personality Entrepreneur's Celebrity	Impact of the Entrepreneur	The effect that the founding entrepreneur has on VCs and potential principal investors.

Phase 5: Defining and Naming Themes

This data analysis phase required the researcher to refine and finalize the themes and then define them within the context of the narrative that emerged due to the qualitative data analysis. After thoroughly refining all candidate themes, four final themes emerged from the data that

accurately depicted VCs' perceptions and experiences of decision-making during COVID-19, a period marked by a dynamic shift in resource availability. These four final themes were: (1) Dynamically aligned investment strategies, (2) Efficacy of objective measures of success, (3) Necessary reliance on subjective criteria, and (4) Impact of the entrepreneur. Table 15 displays these four final themes and their respective definitions within the context of the narrative that emerged from the data and within the scope of the research questions.

Table 15

Final Themes

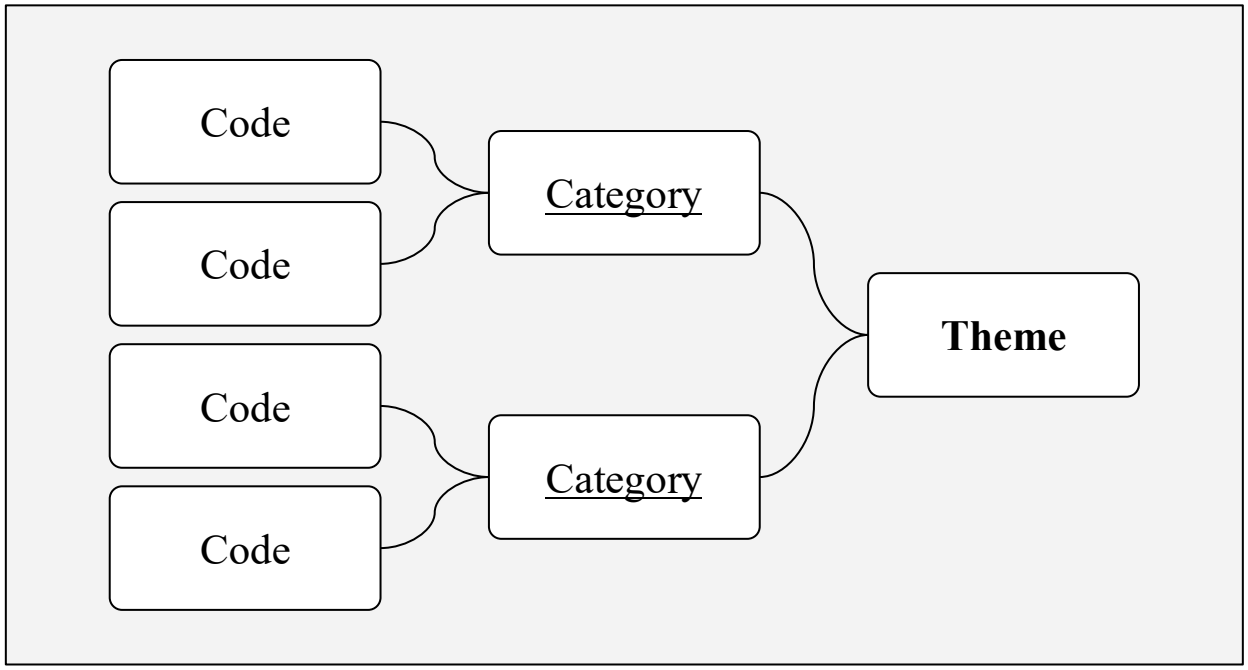
Theme	Definition
Dynamically aligned investment strategies	Investment strategies aligned with investors' preferences and risk levels in rapidly changing environments.
Efficacy of objective measures of success	The accuracy of typical objectives measures of a startup's future success, such as financial multiples, firm valuation based on similar startups in the same industry, market demand, and existing funding.
Necessary reliance on subjective criteria	Given the substantial increase in the number of startups in the same industry, subjective criteria became necessary to differentiate significantly similar startups.
Impact of the entrepreneur	

	The effect that the founding entrepreneur has on VCs and potential principal investors based on personality traits, behavior, celebrity, reputation, likeability, or any other characteristic perceived positively.

Figure 4 is a graphical depiction of thematic analysis, illustrating the process of distilling the qualitative data from codes to the final themes denoted and defined above.

Figure 4

Process of Distilling Codes to Themes



Phase 6: Producing the Report

This phase of thematic analysis required the researcher to compile the data into concise and informative charts that reflected the themes that emerged from the semi-structured interviews during the thematic analysis. Subsequently, the next section will depict the narrative of the participants' lived experiences and perceptions of their decision-making during the study

period based on the totality of the qualitative data, including quotes to support the theme and narrative. The final section is segmented by theme but discussed within the context and scope of the research questions and theoretical paradigm.

Theme 1: Dynamically Aligned Investment Strategies

During semi-structured interviews, VC decision-makers repeatedly asserted that their decision-making process aligned with their principal's (investors) investment strategies. VCs emphasized that investors became far less risk averse and were willing to take on additional risk because they had access to cheaper investment capital through low-interest borrowing and the proliferation of PPP funds. This belief is conveyed well in the following quotes from two participants, P3 and P6:

> Here's the thing. The entire investment landscape changed, and we had to change our strategies based on those changes. However, our investors were well aware of the environment that we were working in. They wanted in on the action and were way more open to investments that were obviously more risky than they would have invested into before. They had access to much more capital than ever before and were willing to invest in startups with no performance history. They knew what they wanted, and we acted on their behalf based on their feedback about the investment opportunities we had previously presented. (P3)

> Typical investors who work with venture capital firms already understand risk. They know that we work with firms that have difficulty finding funding or don't have the capital they need to survive the first year. Therefore, our investors knew that these startups were risky. Honestly, they didn't care much because they had much more capital to invest and were willing to take the hit if one of the startups failed. I let them know what I was doing and which firms I had chosen to meet their investment needs. Nothing should have been a surprise to them. (P6)

During the semi-structured interviews, some participants conceded that they had investors who had not previously worked with VC firms but asserted a general understanding of risk that any investor would understand. Participants asserted that investors knew they were

investing in startups and that their strategies were consistent with the risk level of those clients. The following quotes from participants 4 and 7 illustrate that notion well:

> Most of the investors and clients that we worked with at that time had previous experience working with VC firms. However, there were a few newbies, if you will, that had never worked with a VC firm. With that said, during our initial conversations with these investors, we emphasized—or at least I did—that these firms were all startups and there is always risk involved with a startup (P4).

> If you decide to invest in startups by providing capital to venture capital firms to invest on your behalf, there's no way you could be totally ignorant that these investments are risky. Moreover, I discussed my investment strategies with these clients, who agreed with my choices. Some even gave me full agency to make decisions for them without receiving any input or explicit permission beforehand. (P7)

Interestingly, almost none of the VC decision-makers perceived or expressed any regret or took ownership of their decisions. Even when VCs acknowledged the influx of capital from PPP loans or reduced interest rates decreased the level of monitoring by the principal (investors), they placed any blame not assigned to the investors on the government. This notion is illustrated well in the following quote by participant 1:

> Investors were given a lot of money from the government through PPP loans that were poorly monitored, might I add. Also, the Fed kept lowering the interest rates, and banks continued to allow investors to leverage their existing investments and borrow more money. The objective was to make decisions and take action quickly to get the economy back on track. We did our part by advocating for startups and providing investors with many investment opportunities in line with their expressed level of risk. (P1)

Theme 2: Efficacy of objective measures of success

Many VCs described the traditional objective measures commonly employed in the VC industry. Those included using financial multiples, market demand models, the startup's existing funding, and other firm valuation methods employing similar startups as proxies to determine the likelihood of future success. As Participant 11 described, those objective measures are common

and valuable. However, participant 11 did introduce an element of doubt in their ability to provide a holistic assessment of a startup's potential for future success:

> The typical and traditional measures that I use and would consider to be commonly used throughout the VC industry are, you know, financial multiples for early startups with some type of performance history, predictive modeling of market demand, and comparisons or valuations of these startups using other similar startups. These measures provide us with a great deal of useful information. However, just because one startup that looks almost the same in every way as another was successful, it doesn't mean this one will be (P11).

Participant 8 expressed similar sentiments about the use of objective measures of potential success for startups, adding that differentiating startups became increasingly difficult as the number of startups increased dramatically during the study period:

> There were so many more startups that presented us and our investors with an almost overwhelming number of options to choose from. I always, as do most guys I know, use the tried and true methods first. I use multiples whenever I can; I chat with the quant guys about the models they've created. But, during that period, that wasn't enough. We could weed out what we thought were bad investments, but the traditional methods don't capture everything when there are so many options. (P8)

According to many participants, the increasing number of startups, coupled with excess investment capital, significantly complicated the role of VCs. Some participants said they realized during this period that objective measures were not as efficacious as they had thought. The following quote from Participant 12 captures this notion:

> I have been in the industry for 25 years and have always relied heavily on traditional methods of measuring a startup's value and potential for future success. However, decisions needed to be made quickly. Investors became increasingly demanding, and objective measures no longer cut it. These tried and true measures sometimes convoluted our assessments of these startups, and that was the moment I realized that in a rapidly changing economy, these measures may be far less valuable than I had always thought. (P12)

Theme 3: Necessary reliance on subjective criteria

As previously alluded to in the previous theme by Participants 8 and 12, most VC decision-makers perceived subjective measures of potential success for startups as the best

method for differentiating startups. Additionally, some participants expressed that they perceived subjective measures as superior to traditional objective measures.

Participants 4 and 9 described the need to incorporate subjective measures of a startup's future success and which measures they felt were most reliable in the following quotes:

> Confidence and likeability became the way to differentiate these startups. If we had good vibes about an entrepreneur, the business plan, or the angle, we went with it. We have years of experience doing this; we can tell when someone knows and doesn't know what they're doing. (P4)

> There were far too many of these startups and a ton of excess investment cash floating around. The typical measures weren't working for us, so we went with our gut. You sort of develop good instincts after doing this for years. Some entrepreneurs were famous…famous for a reason. They were rock stars. Others had super-educated and successful members of management with many connections. (P9)

Participants consistently conceptualized subjective measures as "gut feelings", "intuition", or "instincts," and other similar terms. The overwhelming perception was that objective measures of future success were minimum criteria, and subjective measures separated those remaining investment opportunities. However, some participants expressed their decision to rely solely on subjective measures because they were given much more latitude with investors and found subjective measures more valuable than objective measures. The following quotes by Participants 2 and 5 illustrate that perception:

> I never really liked the traditional methods. Honestly, I looked at them like an antiquated way to pick winners. Truthfully, networking and connections bring about way more success than good multiples. Given the amount of money coming our way during this time, I relied on what I knew to be the best way to pick a winner—my gut. (P2)

> Now that investors were way less conservative, we could play the game the way that we know works. Investors weren't breathing down our necks, calling us constantly, or demanding to see the numbers or models. They wanted to make money, and so did we. I made my decisions based on what works…and what works is intuition, not estimating firm value based on some competitor. (P5)

Theme 4: Impact of the Entrepreneur

The final theme was persistent among the study participants, and many emphasized that the founding entrepreneur served as the core of their subjective measures of a startup's potential for future success. Most participants perceived the startups as a reflection of the founding entrepreneur. Therefore, subject measures of success were driven by an affective or emotional response to the founding entrepreneur's characteristics and personality. Many participants were willing to take additional risks if they perceived the entrepreneur to be highly sought after based on their unique characteristics or personality traits.

The perceived importance of the entrepreneur in VCs' decision-making is evident in the quotes by Participants 13, 2, and 11:

> The founder is the heart and soul of a startup. If people like the guy or you see your colleagues fighting to get a meeting with this person, there's a good reason behind that. The founder is the face of the company, and investors want that face to be desirable (P13).

> As far as I'm concerned, the founding entrepreneur is the make or break in this whole selection process. They don't necessarily have to be nice or outgoing, especially if they have star power. If a founding entrepreneur is famous or infamous, that attracts attention. That attention attracts investment capital, which is necessary for a startup's success. I even knew a few VCs who never even met with the founding entrepreneur but invested because this person was known to win no matter what. (P2)

> No one wants to work with an entrepreneur who doesn't appear to be brilliant and confident. If I sensed any doubt at all in their pitch, they were ousted. They were taken off my list of potential investment opportunities because we had tons of options and no time for founders who weren't totally confident about their businesses. If they showed enthusiasm and confidence, they garnered much more of my attention. (P11).

Finally, one VC expressed their concern about relying solely on the entrepreneur's characteristics or personality to make investment decisions for their principals. Participant 3

asserted that many of his colleagues relied far too much on the entrepreneur, to the point of ignoring salient issues that could compromise the future success of the startup:

> I considered the entrepreneur during my decision-making process, but not like many of these other folks. I had colleagues who were so starry-eyed and smitten with an entrepreneur's fame or infamy that they threw money at them. It was crazy to see a well-educated VC with experience throw a few million dollars on some 22-year-old kid who was the son of some successful entrepreneur. I don't necessarily think success is genetic. (P3)

Conclusion

The data analysis produced insightful data from the semi-structured interviews while elucidating the four dominant themes. These themes slowly emerged through the researcher's adherence to thematic analysis and commitment to developing a narrative that accurately depicted the experiences and perceptions of the study's participants. The results presented in this chapter will be discussed by comparing and contrasting this study's results with those of other empirical research in the literature stream in the next chapter. Finally, Chapter 5 will discuss these results in relation to the research questions more explicitly, as well as their implications, limitations, and areas for future research.

CHAPTER 5

DISCUSSION AND CONCLUSION

The objective of Chapter 5 is to expound upon the results presented in the previous chapter through a more in-depth discussion of each theme in terms of the a priori research questions and theoretical paradigm and compare and contrast this study's results with those of similar empirical and theoretical work reviewed in the literature review chapter of this dissertation. Lastly, the researcher will present scholarly and practical implications of the study's results, limitations, and areas for future research based on these results.

This qualitative case study aimed to better understand VCs' investment decisions when choosing startups based on their perceived potential for future success and whether those criteria are influenced as resource availability changes. In particular, it examined how venture capitalists changed their decision-making behavior, specifically their reliance on subjective vs. objective criteria, as resource availability changed. The themes that emerged from the qualitative data were presented in the previous chapter, as were other forms of data from the data collection process and sample population.

Those final themes were presented as the culmination of robust thematic analysis, but each step of the process revealed the constituent pieces of data that led to those themes. All data were analyzed using the thematic analysis algorithm developed by Braun and Clarke (2006, 2009, 2014) and viewed through an agency theoretical framework. The final four themes that emerged from the semi-structured interviews and subsequent thematic analysis were (1) dynamically aligned investment strategies, (2) the efficacy of objective measures of success, (3) the necessary reliance on subjective criteria, and (4) the impact of the entrepreneur.

The following definitions were developed and presented in Table 15 in the previous chapter for each of the themes identified in the thematic analysis:

Table 15

Final Themes

Theme	Definition
Dynamically aligned investment strategies	Investment strategies aligned with investors' preferences and risk levels in rapidly changing environments.
Efficacy of objective measures of success	The accuracy of typical objectives measures of a startup's future success, such as financial multiples, firm valuation based on similar startups in the same industry, market demand, and existing funding.
Necessary reliance on subjective criteria	Given the substantial increase in the number of startups in the same industry, subjective criteria became necessary to differentiate significantly similar startups.
Impact of the entrepreneur	The effect that the founding entrepreneur has on VCs and potential principal investors based on personality traits, behavior, celebrity, reputation, likeability, or any other characteristic perceived positively.

The study employed a purposive sampling methodology, yielding 13 VC decision-makers from 11 different VC firms in the San Francisco Bay Area who met the inclusion criteria and failed to meet the exclusion criteria. Additionally, all the participants completed the entirety of the study's requirements. These requirements included signing informed consent, participating in the semi-structured interviews, and member-checking transcripts.

The research objectives created goals for this study and parameters to aid the researcher in soliciting only data necessary to achieve the study's goals and provide responses to the a priori research questions. The study's research objectives are reiterated below:

Research Objectives

(1) Develop a rich, thick narrative that accurately reflects the lived experiences of VC decision-makers when economic conditions, specifically resource availability in the form of investment capital, change.

(2) Examine VC decision-makers' reliance on subjective vs. objective investment selection criteria.

(3) Explore the potential effects of overreliance on subjective investment criteria on investors.

(4) Determine to what extent VC decision-makers, who have a fiduciary duty to their principal investors, make decisions that maximize their investors' benefits over their own.

Finally, in the following section, the data results from the thematic analysis will be explicitly discussed in terms of the research questions that drove the study. The study's research questions were:

Research Questions

To effectively explore VCs' decision-making and investment choices when choosing startups as economic conditions change and resources become more abundant, the following primary and secondary research questions drove this study:

Research Question 1: According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?

Research Question 1A: In what ways did their objective criteria change based on resource availability during the pandemic?

Research Question 1B: In what ways did their subjective criteria change based on resource availability during the pandemic?

The thematic analysis results and supporting quotes presented in the previous chapter yielded the study's findings, which were directly related to the study's research questions. Those findings are discussed in the following section.

Findings

The four themes identified through the thematic analysis resulted in four primary findings corresponding to the research questions above. These four findings were (1) The objective criteria used by VCs when making investment decisions are traditional financial metrics commonly used in the VC industry, while subjective criteria tend to vary slightly based on a VC decision-makers beliefs and perceptions (2) Objective criteria were perceived to have limitations in a highly competitive and dynamically changing startup market (3) Resource abundance significantly increased VCs' reliance on subjective criteria when choosing startups with the most

potential for success (4) The founding entrepreneur's characteristics and personality traits were by far the most utilized subjective criteria used by VCs. The following section discusses each of those findings within the context of the research question to which they correspond.

Finding 1: The objective criteria used by VCs when making investment decisions are traditional financial metrics commonly used in the VC industry. In contrast, subjective criteria tended to vary slightly based on a VC decision-maker's beliefs and perceptions.

This finding provides insight into the first research question: *According to the experiences and perceptions of venture capitalists, which objective and subjective criteria do they use to evaluate successful entrepreneurial venture investments?* As delineated in the results section, VCs used traditional financial metrics common in the VC industry, such as financial multiples for startups with previous performance history, amount of existing capital the startup had, models of market demand, and firm valuation using similar startups with performance histories as proxies for future success (Adler et al., 2019). These criteria are standard across the VC investment landscape, and most investors expect to be presented with these measures before making an investment decision (Baeyens et al., 2006). However, subjective criteria tended to vary based on a VC decision-maker's beliefs and perceptions about the firm, market, and particularly the entrepreneur. These subjective decisions were far more affective or emotional and relied on heuristics and intuition.

Objective metrics are seen by investors as robust evaluations of investment opportunities and are meant to decrease the information asymmetry between the VC and the principal. Therefore, both parties involved in the decision-making have similar information and seemingly

similar access to it (Cummin & Johan, 2008; Glucksman, 2020; Trester, 1998). However, even these measures have their objective limitations (Zacharakis & Meyer, 2000).

Subjective measures of a startup's potential future success were employed less often before the pandemic than during this cross-sectional study's focus on the period that coincided with the pandemic. VCs admitted that intuition did play a role in decision-making and that characteristics such as confidence and likeability, the education and experience of the top management team, and the excitement with which the firm's vision and mission were pitched to the VC all played a role in the VC's selection process. Studies indicate that qualities associated with the entrepreneur, such as confidence and likeability, often increase engagement with investors and investments from VCs during the nascent stages of a startup's development and growth (Kohn, 2018; Kuratko, 2003; Montani et al., 2020). Therefore, these qualities significantly enhance the likelihood of a startup's success, as startups with venture capital backing are far likelier to succeed than those without (Jeong et al., 2020; Kerr et al., 2018; Khanin et al., 2008).

Finding 2: Objective criteria were perceived to have limitations in a highly competitive and dynamically changing startup market.

Finding 2 provides meaningful insight into research question 1A. VCs expressed their emerging trepidations and realizations that these objective measures of potential future success had more significant limitations than anticipated. However, some of these measures are consistently criticized by Finance scholars and industry practitioners, specifically the use of proxies to value startup firms (Cowden et al., 2020; Du et al., 2020; Kollmann & Kuckertz, 2010). Ultimately, the VC chooses the proxy firm and thus has a great deal of latitude in

presenting which firms are most similar to the focal startup. Therefore, the final firm valuation will reflect any miscalculation or misrepresentation (Arundale & Mason, 2020; Tian et al., 2018).

Most participants who expressed an epiphany about these objective measures had multiple years of experience in venture capital (mean of 19.3 years) yet asserted that they only realized the limitations when resources, specifically investment capital, became more abundant. A few VCs expressed their existing knowledge of the limitations of objective measures of future performance. However, they stated that those deficiencies in objective measures became more salient and far more challenging to overcome given the large number of startups, the competitive and dynamically changing investment landscape, and pressure from investors. Finally, as indicated in the results section, Participants 2, 9, and 12 asserted that subjective measures became increasingly necessary to make appropriate and effective investment decisions. However, Janeway et al. (2021) assert that these epiphanies or realizations about the limitations of objective measures of startup performance are far likelier to result from moral hazard or adverse selection, cornerstones of agency theory.

Janeway et al. (2021) acknowledge that a significant increase in the number of startups during any dynamically changing macroeconomic environment increases the pressure to choose those startups with the most likelihood of success but also increases the inherent self-seeking behavior of VCs. The more investment capital they secure from their investors and the larger the scope of their startup portfolio, the likelier they are to become personally enriched at the potential expense of their principal investors.

Finding 3: Resource abundance significantly increased VCs' reliance on subjective criteria when choosing startups with the most potential for success.

Finding 3 provided evidence and insight into research questions 1A and 1B. The data collected from participants elucidated a seemingly causal relationship between an increase in resource abundance and VC decision-maker's reliance on subjective criteria. Participants 2, 4, 5, 8, 9, and 12 are quoted in the previous chapter's results, attributing the increase in resource abundance to a need to rely on subjective criteria to either provide a definitive way to differentiate similar startups or to utilize measures they already perceived as superior to traditional objective measures.

As previously mentioned, Janeway et al. (2021) asserted that the overabundance of new startups in a highly competitive market created an environment conducive to moral hazard and adverse selection, tenets of agency theory. However, although Janeway et al. (2021) focus primarily on the economic incentives in making investment decisions based on intuition rather than more mentally taxing or labor-intensive objective measures of a startup's potential success, Akerlof & Dickens (1982) aptly developed an existing construct, *cognitive dissonance*, within the context of economic agents' decision-making. The economic consequences of cognitive dissonance provide a psychological mechanism that exacerbates the moral hazard inherent in economic agents.

According to Akerlof and Dickens (1982), cognitive dissonance in economic agents' decision-making is conceptualized as "people choose their beliefs as a compromise between the economic losses that result from mistakes in decision-making due to erroneous beliefs and the gain in happiness from beliefs that make them comfortable." (p. 11) The insight that Akerlof and

Dickens (1982) provide is that VC decision-makers in a dynamic environment, who are presented with multiple options, weigh the costs associated with mistakes and the gains they will receive in happiness, denoted as utility or financial gain, in making a good decision. They hope that the good outweighs the bad. Therefore, subjective measures of a startup's future success become increasingly attractive. They provide a less strenuous decision-making environment because these measures can yield quicker decisions and are less mentally taxing. Moreover, the abundance of resources and multiple decision-making opportunities increase the likelihood that VCs will have ample time to make up for any poor decision-making.

Finding 4: The founding entrepreneur's characteristics and personality traits were by far the most utilized subjective criteria used by VCs.

Finally, Finding 4 provides valuable insight to address all three of the a priori research questions that drove this study. While the founding entrepreneurs' characteristics and personalities were always part of the decision-making process, the results of the data analysis suggest that as resources became more abundant and VCs relied more heavily on subjective measures of a startup's future success, the founding entrepreneur's characteristics and personality were the most influential of those measures.

Quotes from Participants 2, 11, and 13 presented in Chapter 4 echo the seemingly overt reliance on the founding entrepreneur's characteristics and personality during many VCs' evaluations of a startup's potential future success. All three participants highlighted the significant influence perceptions of the founding entrepreneur's *celebrity* had on a VC's decision to invest in a startup. Participant 2 even stated that he knew of several colleagues who would invest millions of dollars of investors' money into startups because of the founding

entrepreneur's celebrity status, whether it stemmed from fame or infamy. Investment decisions driven by emotion are risky, but those driven by the perception of fame introduce another layer of risk that would not be conducive to most investor's risk preferences (Cope et al., 2004; Cumming et al., 2022; Glucksman, 2020). They are highly risky, and investors were likely unaware that celebrity was the primary or only criterion their agents used when choosing the potential future success of a startup (Du et al., 2020).

Areas for Future Research

The study's results and subsequent data analysis provided many areas for future scholarly inquiry. One unanticipated area for future research arose from the participant demographic analysis. Women are significantly underrepresented in the VC industry. Both of the women interviewed depicted the VC industry as male-dominated and even sexist. Future research should examine women's role in the VC industry and compare the performance of VC firms with more women in decision-making roles than others. The lack of diversity in the industry was astounding. There was a significant number of Caucasian men and two minorities out of all participants. One VC decision-maker who identified as an ethnic minority said it took him about five years longer to get promoted to a decision-making role than other, less qualified and experienced, Caucasian colleagues. The impact of diversity, a well-developed literature stream, should apply existing theoretical frameworks to the VC industry, examine the underlying mechanisms that drive the lack of diversity, and explore the effects of a lack of diversity in that specific industry.

Future researchers should examine the role of celebrity more closely in firms of varying sizes. The impact of the celebrity status of entrepreneurs of existing startups with a performance

history could provide insight into when or if celebrity has diminishing returns on performance. Additionally, a fruitful area of research could examine celebrity in different-sized firms with different types of investors, such as CEOs of publicly traded corporations and owners of small businesses. Finally, a longitudinal examination of this phenomenon in the VC industry could provide incredible insight into this increasingly common investment criteria.

A longitudinal study similar to this would expand our understanding of when VCs rely on subjective investment selection criteria over objective measures. Investors and scholars must understand when macroeconomic changes are most likely to induce cognitive dissonance or increase the likelihood of moral hazard in VCs with decision-making power so that they can anticipate the need for increased monitoring. Additionally, gaining a deeper understanding of trends in the reliance on subjective criteria over objective criteria for choosing startups despite changing macroeconomic conditions may indicate an overall trend in VC decision-making behavior.

Finally, it is vital to note that while agency theory is considered by practitioners as an academic term or removed understanding of how the real world works, it is not. Agency theory was developed through inductive reasoning. The central tenets of agency theory were developed from observations made by scholars in many industries, firms, and countries. The theory was borne out of practice, and this study's results provided significant support for assertions made by agency theorists.

Theoretical Implications

The study’s results provide robust support for agency theory because the findings reflect core tenets of the theoretical framework. One of the central propositions of agency theory is the

persistent misalignment between the principal and agent, requiring the principal to incur monitoring costs to ensure their interests are aligned with their agents. One of the study's final themes, dynamically aligned investment strategies, provides empirical support for this tenet of agency theory. The study's findings revealed that information asymmetry increased as investment strategies and market conditions became more volatile, resulting in a greater disparity between the principal and agent's interests. Therefore, the study revealed dynamically aligned investment strategies as a potential solution to an issue conceptualized by agency theorists in an enormous literature stream.

Finally, the study's results expand our understanding of the principal-agent dilemma within venture capitalism. VCs are tasked with fiduciary duties that affect not only one specific industry but also national economies. Therefore, an enhanced understanding of VC decision-making through an agency lens provides vital insights for academics, practitioners, and policymakers.

Implications for Practice

This study's results are incredibly beneficial for investors. These results indicate that many participants and their colleagues failed to make investment decisions that were consonant with those of their investors. These findings are consistent with the central tenets of agency theory. VCs have a fiduciary duty to safeguard their investors' capital and make the most appropriate decisions that align with their investors' risk preferences and best interests. This study's results indicate that VCs do not always perform their fiduciary duties and, at least some of them, flagrantly disregard the risk preferences of their principals and concede to taking advantage of naïve investors to maximize personal gains. This study's results provide empirical

evidence supporting the agency framework and have normative implications for practitioners. This knowledge can aid investors in learning to protect themselves from the inevitable misalignment of interests purported by agency theorists by increasing diligent monitoring of their investments, asking questions about the criteria used to make specific investments, and anticipating VC behavior during changing macroeconomic conditions.

The results of this study also have policy implications for regulatory bodies and government agencies. The US government should have increased monitoring of PPP loans and excluded or limited the use of government funds for risky investments. PPP loans were not given to investors or entrepreneurs to take immense risks without personal consequences. Therefore, future government intervention strategies should address the potential for similar abuses. Lastly, the SEC (Securities Exchange Committee) should investigate firms and VC decision-makers that took excessive risks to the detriment of the local and national economy, as many startups failed during this period.

Importance for the Learning Community

The findings of this study not only advance our understanding of venture capital decision-making processes but also have profound implications for the learning community, especially within leadership and management education. Through a constructivist lens, this research builds upon the foundational knowledge of agency theory and empirical insights to deepen our grasp of human behavior, decision-making dynamics, human relationships, and their collective impact on economic phenomena. This enriched understanding is invaluable for learners seeking to construct meaning and navigate the complexities of the business world.

Chief Learning Officers (CLOs) can leverage these insights to design and implement training programs that underscore the critical balance between objective and subjective criteria in decision-making. By emphasizing the human connection revealed in venture capital decisions—where choices are made based on a blend of analytical data and human criteria such as judgment, wisdom, and experience—CLOs can foster leadership qualities that resonate deeply with real-world business scenarios.

Application in Hiring and Talent Development

A pivotal area where CLOs can apply the study's findings is in enhancing organizational hiring and talent development strategies. Training programs can be developed to teach hiring managers and leaders to integrate subjective assessments, such as cultural fit and potential for innovation, with traditional objective criteria. This holistic approach to candidate evaluation mirrors the nuanced decision-making processes observed in venture capitalists, providing a model for making strategic, well-rounded business decisions.

Utilizing Real-world Case Studies

Incorporating case studies derived from this research into learning materials can offer learners practical insights into the delicate interplay between objective metrics and subjective judgment. These real-world examples can form the basis for interactive learning experiences, such as role-playing exercises, fostering a deep understanding of decision-making complexities in venture capital and beyond.

Broader Leadership Implications

This study’s insights extend beyond the specifics of venture capital, offering valuable lessons for leadership and management across various contexts. The ability to navigate decisions

in uncertain environments, balancing data with human insights, is a transferable skill that is crucial for today's leaders. Training programs that highlight these decision-making skills will prepare leaders who are adept at guiding their organizations through complex challenges.

Encouraging Continuous Learning and Exploration

Finally, this research emphasizes the importance of continuous learning and the pursuit of further research to enhance our understanding of business decision-making. By fostering a culture of curiosity and critical thinking, CLOs can encourage future leaders to explore new perspectives and apply innovative solutions to business challenges.

By integrating these elements into the learning community's discourse, this study not only contributes to a richer theoretical understanding but also to practical applications in leadership and management education, reinforcing the relevance and applicability of its findings in nurturing the next generation of business leaders.

Limitations

All studies have limitations, but the researcher took great care to mitigate those limitations. These limitations include sampling methodology, period examined, and geography.

The sampling methodology was purposive and, therefore, non-probabilistic. The firms chosen were among the firms with which the researcher was familiar. Therefore, the sample population was not as diverse as it could have been. It was limited to a few dozen firms. However, the researcher asked the directors to randomly choose VC decision-makers and not include those with whom the researcher has had any personal interaction at any time.

This cross-sectional study examined only one period characterized by one of modern history's most significant health crises that caused enormous global macroeconomic shocks.

Moreover, the pandemic affected everyone involved in the VC industry: decision-makers, entrepreneurs, investors, and other stakeholders who may not have made good decisions during such an unprecedented time. Therefore, a longitudinal study of similar phenomena may provide deeper insight into the underlying mechanisms that affect VC decision-making during times of resource abundance.

The study's results are indicative of VC decision-maker behavior in firms based in the San Francisco Bay Area. They may not apply to VC decision-makers or firms in other parts of the country or world. However, many VC decision-makers who participated in this study were from firms with offices in other parts of the country. Therefore, it is unlikely that this group of VC decision-makers from this region acted significantly differently than their colleagues from firms with similar organizational cultures.

Conclusion

This study examined VC decision-making behavior and the precise criteria employed when making investment decisions based on which startups were deemed to have the most significant possibility of future success. This study examined VCs' reliance on subjective over objective evaluative criteria during a period of resource abundance stemming from PPP loans and low borrowing rates from banks. The study's results provided significant insight into the shift from objective to subjective measures of a startup's future success based on the VC decision-makers' perceptions and experiences. The use of qualitative data filled a gap in the literature stream, as it provided more profound insight into VC decision-making as it became more affective and subjective rather than objective and measured. Therefore, quantitative data would not have captured the lived experiences and perceptions of those involved in the decision-

making process during that period, but qualitative data did. The research objectives and questions provided insight into this phenomenon and opportunities for future researchers. While the study had its limitations, it elucidated a gap in the literature stream filled with the study's results and analyses.

Subjective and objective evaluative criteria are intrinsic to human decision-making and play a particularly significant role in VC decision-making. While subjective criteria are arguably perceived as less rigorous, they provide the decision-maker evidence to make decisions in the absence of historical firm performance. A lack of firm performance is a pervasive and dominant obstacle VCs face when making investment decisions. However, when available, objective criteria serve as robust indicators that provide decision-makers with benchmarks for relative and absolute comparisons. The interaction between these evaluative criteria and their impact on VC decision-making was the impetus for this study because VCs play a vital role in the economy and consistently make these decisions. Therefore, their decision-making process and the degree to which they rely on these two selection criteria result in decisions that impact multiple stakeholders, such as investors, industry leaders, governments, economies, and private citizens.

Appendix A: Site Authorization Form

OFFICIAL SITE AUTHORIZATION FORM FOR RESEARCH

Date
Name of Venture Capital (VC) Manager
Firm Name
Full Address of the Firm
Firm Phone Number
Firm Fax Number

Dear [VC Manager's Name],

My name is Noah Pettit. I am a University of Pennsylvania's Graduate School of Education student, obtaining a Doctor of Education degree. As part of the requirements for my degree, I am conducting a research study that examines what evaluative criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. I am contacting your firm because at least some of your employees may meet the inclusion criteria for this study.

I am requesting your permission to screen potential participants by sending a recruitment email to those who could meet the study's inclusion criteria. If you agree, potential participants will be sent an email with screening questions to determine their eligibility for participation in the study. If potential participants meet the study's inclusion criteria, they will be asked to participate in a 45 to 60-minute audio-recorded Zoom interview. After the interview, the researcher will create a transcript and send it to participants for member checking—where they will review the transcript to ensure that it accurately reflects what they said during the interview.

However, before any interviews are scheduled or performed, participants will be sent a link to an informed consent document that describes the research, their right to withdraw at any point, and the safeguards that will be implemented to ensure participants' confidentiality. Additionally, your organization may opt out of this research within 30 days. Again, participation is entirely voluntary, and participants may discontinue their participation at any point without an explanation. Finally, participants will not be compensated for their participation.

Thank you for considering my request. If you choose to grant permission, please notify me by responding to this email directly. Please contact me at **noahjp@upenn.edu** if you have any questions or concerns**.**

Noah Pettit
Doctoral Candidate, University of Pennsylvania

Appendix B: Recruitment Email

Hello,

My name is Noah Pettit. I am a University of Pennsylvania's Graduate School of Education student, obtaining a Doctor of Education degree. As part of the requirements for my degree, I am conducting a research study that examines what evaluative criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. You have been contacted because you have been identified as an employee at a venture capital firm with decision-making authority.

I am recruiting individuals who meet all the following criteria:

1. Participants must be at least 18 years of age
2. Participants must be currently employed at a venture capital firm
3. Participants are required to have at least five years of venture capital experience
4. Participants must have worked in venture capital between 2018 and 2023
5. Participants must be decision-makers with the authority to select potential deals, perform due diligence, and execute those deals.

The study requires participants to participate in a confidential virtual Zoom interview, which will last approximately 45 to 60 minutes. After the interview, a written transcript will be sent for you to review to ensure the transcription is accurate. There is no compensation for participating in this study, and you are not expected to receive any direct benefits. If you do not wish to participate, you may delete this email, and no further communications will be sent.

Don't hesitate to contact me if you are interested in participating in the study or have any questions.

Thank you,

Noah Pettit

Ed.D. Candidate, Graduate School of Education, University of Pennsylvania

(415) 306-4888

noahjp@upenn.edu

Appendix C: Screening Questions

Screening Questions:

1. Are you at least 18 years of age or older?
2. Are you currently employed at a venture capital firm?
3. Do you have five years of venture capital experience?
4. Did you work in venture capital between 2018 and 2023?
5. Are you a decision-maker with the authority to select potential deals, perform due diligence, and execute those deals?
6. Are you interested in participating in a study about the venture capital industry and your personal experiences and perceptions?
7. Are you willing to sit for one 45-60 minute Zoom interview, then spend 20 minutes reviewing your interview transcript a few days later to ensure its accuracy?

Appendix D: Participant Attestation

This study examines what evaluative criteria venture capitalists (VCs) use when making investment decisions about a startup's potential for future success and whether resource availability changes those criteria. In particular, this study will examine how venture capitalists change their decision-making behavior, specifically their reliance on subjective vs. objective criteria, as resource availability changes. The study seeks more insightful data through a research approach that elicits detailed responses from VCs to develop a narrative that accurately reflects their lived experiences and thought processes.

Due to the nature of the data this study aims to collect, some potential participants may not be eligible for participation based on the criteria below. Please review these criteria to ensure that you meet all inclusion criteria and do not meet any exclusion criteria.

Inclusion Criteria

1. Participants must be at least 18 years of age

2. Participants must be currently employed at a venture capital firm

3. Participants are required to have at least five years of venture capital experience

4. Participants must have worked in venture capital between 2018 and 2023

5. Participants must be decision-makers with the authority to select potential deals, perform due diligence, and execute those deals.

Please stop here to ensure you meet ALL of the above criteria.

Exclusion Criteria

1. Any participants under the age of 18

2. Participants who are not currently employed at a venture capital firm

3. Participants with less than five years of venture capital experience

4. Participants who did not have continuous employment at a venture capital firm between 2018 and 2023

5. Participants who do not have the authority to select potential deals, perform due diligence, and execute those deals.

Please stop here to ensure you DO NOT meet ANY of the above criteria.

If you have any questions about the inclusion and exclusion criteria, the nature of the study, or the study procedures, please contact the Principal Investigator at (415) 306-4888. If you have any questions about your rights as a human research participant before, during, or after participation, please contact the Institutional Review Board (IRB) at (215) 898-2614 for assistance.

By signing this document, I affirm that I meet ALL stated inclusion criteria and do not meet ANY stated exclusion criteria and am eligible to take part in this research study:

X_____

Signature

Appendix E: Informed Consent

UNIVERSITY OF PENNSYLVANIA
RESEARCH PARTICIPANT
INFORMED CONSENT FORM

Protocol Title:	Venture Capitalists' Decision-Making Under Changing Resource Availability
Principal Investigator:	Noah Pettit (Chair: Michael J Nakkula) 3700 Walnut Street, Philadelphia, PA 19104 Noah Petit (415) 306-4888; Michael Nakkula (215) 898-5195
Emergency Contact:	Noah Petit (415) 306-4888

Research Study Summary for Potential Participants

You are being invited to participate in a research study. Your participation is voluntary, and you should only participate if you completely understand what the study requires and the risks of participation. You should ask the researcher any questions you have related to participating before agreeing to join the study. If you have any questions about your rights as a human research participant before, during, or after participation, please contact the Institutional Review Board (IRB) at (215) 898-2614 for assistance.

The research study is being conducted to evaluate the criteria used by venture capitalists when making investment decisions and how these criteria may change during times of changing resource availability. You are eligible for the study because you fit the inclusion criteria and have expressed interest in participating in the study.

If you agree to join the study, you will be asked to complete the following research procedures: One 45-to-60-minute virtual interview via Zoom and a review of your finalized transcript to ensure that it accurately reflects what you said during the interview.

Your participation will last 45 to 60 minutes to complete the Zoom interview and 20-25 minutes to complete the review of your finalized transcript developed from that interview.

You are not expected to receive any benefits from participating in this study other than providing data that will aid our understanding of venture capitalists' decision-making when resources, specifically financial, change. The most common risk of participation is the loss of confidentiality. However, the researcher has an extensive data management protocol to mitigate the likelihood of that occurring. Your confidentiality is critical to adhering to ethical standards of conduct and vital to the integrity of the study.

Please note that other factors must be considered before agreeing to participate, such as additional procedures, use of your personal information, costs, and other possible risks not discussed here. If you are interested in participating, a study team member will review the full information with you. You can decline or stop participation at any time during or after the initial consenting process.

Why am I being asked to volunteer?

You are being asked to participate in a research study because you have been identified as a decision-maker currently employed at a venture capital firm. Your participation is voluntary, so you can choose whether or not to participate. There are no repercussions to choosing to withdraw as a participant or engage in this process.

If you do not understand what you are reading, do not provide your electronic consent. Please ask the researcher to explain anything you do not understand, including any language contained in this form. If you decide to participate, you will be asked to sign this form electronically via the DocuSign link at the bottom of this informed consent. A copy of the form will be given to you so that you can find contact information and answers to questions about the study. You may ask to have this form read to you.

What is the purpose of the study?

This study is being conducted as part of a dissertation in partial fulfillment of the requirements for the Doctor of Education (Ed.D.) degree from the Graduate School of Education at the University of Pennsylvania. The study aims to learn more about venture capitalists' criteria when

making investment decisions about a startup's potential for future success and whether resource availability changes those criteria.

How long will I be in the study? How many other people will be in the study?

The total expected duration of your participation in the study will be between 45 and 60 minutes to complete the interview with the researcher. Then, you will be asked to review the transcript from your interview to ensure that it is accurate and reflects your exact words. The entire study is expected to last less than two months.

There will be a total of 12-15 participants.

What am I being asked to do?

You will be asked to complete a virtual interview with the researcher via Zoom at the time and date of your choosing. You may complete the interview from any location you choose, and the interview is expected to last between 45 and 60 minutes. Additionally, you will be asked to review the transcript developed from that interview to ensure that it is accurate throughout.

What are possible risks or discomforts?

Please remember that with all research studies, the risk of a breach of confidentiality is feasible. However, the researcher has developed comprehensive protocols to mitigate these risks. Again, your confidentiality is paramount to the researcher, the department, and the university. Therefore, data security is a vital component to this research study.

How will I benefit from the study?

There is a potential benefit to society, and the VC industry realized from the knowledge gained from your participation in this study.

Will I be paid for being in this study?

No compensation is being offered for your participation in this research study.

Will I have to pay for anything?

The study requires Wi-Fi or cellular data to conduct the virtual interview, and you will be responsible for covering the cost of these services if necessary.

When is the Study over? Can I leave the Study before it ends?

This study is expected to end after all participants have completed all scheduled interviews and all data has been collected. This study may also be stopped at any time because:

- The Primary Investigator feels it is necessary for participants' welfare, rights, or safety. Such an action would not require your consent, but you will be informed if such a decision is made and the reason for this decision.
- The Sponsor or the study Principal Investigator has decided to stop the study.
- If you decide to participate, you can leave the study **anytime** for any reason without question. You may do this by contacting the investigator on page one of this form. Withdrawal will not interfere with your employment or affect your relationship with the University of Pennsylvania. Data from participants who withdraw from the study will be kept for three years by the study procedures. After this time, all physical records will be shredded, and all digital data will be securely deleted.

Could I be withdrawn from the study?

You could be removed from the study if you fail to complete your scheduled virtual interview or fail to review and approve your transcript from that interview. If you are removed from the study, you will be informed via the preferred contact method you provide to the researcher.

How will my personal information be protected during the study?

We will do our best to ensure that the personal information obtained during this research study will be kept private. However, we cannot guarantee total privacy. Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used. The Institutional Review Board (IRB) at the University of Pennsylvania will have access to your records.

All participants will be assigned a unique identifier, which will be associated with all interview data. Interview data or quotes will not include any personal identifying information or contain any information that would allow others to figure out that you are one of the participants. During the study, records will be kept in a locked filing cabinet, which only the researcher will have access to. Digital files will be kept in a password-protected cloud computing drive.

Will information about this study be available to the public?

The results of this study, which may include de-identified data such as direct participant quotes and analyses of the collected data, may be published and available to the public. However, personal identifying information, individual interview recordings, and interview transcripts will **NOT** be made available to the public.

What may happen, in the future, to my information collected on this study?

The data collected is coded. The data is assigned a unique random identifier separately linked to participant identifiers. There is very little risk of others being able to identify you based on any data collected from you and used in the study.

Future Use of Data

Your information will not be stored or shared for future research purposes.

Who can I call with questions, complaints or if I'm concerned about my rights as a research participant?

If you have questions, concerns, or complaints regarding your participation in this research study or your rights as a research participant, you should speak with the Principal Investigator listed on page one of this form. If a research team member cannot be reached or you want to talk to someone other than those working on the study, you may contact the IRB at the number on page one of this form.

When you sign this form, you agree to participate in this research study. This means that you have read the consent form, your questions have been answered, and you have decided to volunteer. Your signature also means that you permit the University of Pennsylvania to use the personal information collected about you for research purposes within our institution. You are also allowing the University of Pennsylvania to disclose that personal information to outside organizations or people involved with the operations of this study.

A copy of this consent form will be emailed to you immediately after signing it in DocuSign. The link below will take you to the DocuSign website to digitally sign this document and you will also be emailed a link to DocuSign that you may also use to access this informed consent.

Thank you,

Noah Pettit

Doctoral Candidate at the University of Pennsylvania

https://apps.docusign.com/send/templates/details/90bfbf96-1688-48aa-9a05-aa67a5d486e5

Appendix F: De-Identification Protocol

De-Identification Protocol

This study will utilize the Safe Harbor data identification method commonly used to de-identify PHI. The following data will either be (A) removed from any participant quotes to maintain confidentiality or (B) will not be collected during the research study.

(A) Names

(B) All geographic subdivisions smaller than a state, including
street address, city, county, precinct, ZIP code, and their
equivalent geocodes,
(C) All elements of dates (except year) for dates that are
directly related to an individual
(D) Telephone numbers
(E) Fax numbers
(F) Email addresses
(G) Social security numbers
(H) Medical record numbers

(I) Health plan beneficiary numbers
(J) Account numbers
(K) Certificate/license numbers
(L) Vehicle identifiers and serial numbers, including license
plate numbers
(M) Device identifiers and serial numbers

(N) Web Universal Resource Locators (URLs)

(O) Internet Protocol (IP) addresses

(P) Biometric identifiers, including finger and voice prints

(Q) Full-face photographs and any comparable images

(R) Any other unique identifying number, characteristic, or code

Specific steps taken to de-identify study data will include:

Reducing the precision of direct and indirect identifiers through aggregation

Specific City Name -> State or Geographic Region (ex. Los Angeles -> California or West Coast)

Generalization of detailed identifiers, ex. Detailed employee title -> area of expertise or general occupation name

Indicating where replacements have been utilized with [brackets].

Minimizing the use of replacements and pseudonyms to ensure data does not become ambiguous or misleading.

Maintaining a log of all replacements and pseudonyms used that will be kept in a password-protected file in a separate location from study-generated data.

Appendix G: Breach of Confidentiality or Adverse Event Protocol

While the researcher has included multiple safeguards to protect participants' confidentiality and safety, should any adverse or unanticipated event occur, such as a breach of confidentiality, the University of Pennsylvania's Institutional Review Board (IRB) will be notified within the timeframes mandated by the IRB. Any participants involved in such an event will be notified immediately. Additionally, all research-related activity will cease until the IRB has determined the appropriate steps to rectify the situation, ensuring the safety and confidentiality of all participants moving forward.

A breach of participants' confidentiality or any adverse event, as defined by the University of Pennsylvania's Institutional Review Board (IRB) as "an adverse event or other incident that has the potential to be classified by the IRB as an unanticipated problem posing risks to participants or others.". The IRB utilizes the following criteria to determine whether an event is an *unanticipated problem*:

- Is unexpected (in terms of nature, severity, or frequency) given (a) the research procedures that are described in the protocol-related documents, such as the IRB-approved research protocol and informed consent document, and (b) the characteristics of the subject population being studied;
- Is related or possibly related to an individual's participation in the research; AND
- Suggests that the research places subjects or others at a greater risk of harm (including physical, psychological, social, economic, legal, or informational harm) than was previously known.

All non-fatal incidents will be reported within ten business days. Any incidents that result in a fatality must be reported to the IRB within three business days.

Appendix H: Semi-Structured Interview Protocol

Semi-Structured Interview Questions

1. What is the role of a venture capitalist?
2. How would you describe the relationship between venture capitalists and the investors they represent?
3. How should venture capitalists select startups with the most potential for future success?
    a. What financial criteria are the most important indicators of a startup's future success?
    b. Other than technical analyses or financial criteria, what other selection criteria do you find most important when choosing a startup's potential for future success?
4. If a startup's founder has no experience running a company, what factors become most important in deciding whether to invest?
    a. What if the startup's founder's last venture failed?
    b. What if the startup's founder's last venture was a success?
5. When you meet a startup's founder, does their likeability or personality affect your investment decision?
    a. How about their education or where they went to school?
    b. How about their reputation among their peers?
6. How did the startup investment landscape change during the COVID-19 pandemic when additional investment capital was more abundant because of PPP loans and lowered interest rates?

a. Did your investors' risk preferences change when financial resources were more abundant?
    i. Did you feel that investors gave you a bit more leeway in making investment choices?
        1. If so, how?
        2. If not, why?
b. Were you willing to consider startups you may not have considered because investment capital was abundant in the economy?
c. Were you more open to investing in startups in diverse industries, some of which your firm didn't specialize in or have a great deal of experience with?

7. If you look back on the period we've been focusing on, do you think your investment choices garnered a higher, lower, or the same return as they have in the past year?
    a. Why?

Appendix I: Codes to Themes

Code	Category	Theme
Preference for high-growth potential startups	Investors' Risk Preference	**Dynamically Aligned Investment Strategies**
Willingness to invest in early-stage startups		
Emphasis on diversification to mitigate risks		
Seeking startups with clear exit strategies		
Alignment with long-term investment goals		
Changes in Investment Capital	Dynamic Decision Making	
Abundance of Investment Opportunities		
Adapting investment criteria to market trends		
Anticipating shifts in consumer technology demand		
Assessing startup's digital transformation readiness		
Changes in Investment Capital	Capital Availability Dynamics	
Abundance of Investment Opportunities		
Enhanced due diligence processes		

Shift towards digital platforms	Technological Adaptation	
Adoption of blockchain technology		
Integration of AI in decision making		
Increased market volatility	Market Response Strategies	
Consumer behavior shifts due to COVID-19		
Regulatory changes in data privacy	Regulatory Adaptability	
Environmental sustainability regulations		
Strategic partnerships for market expansion	Strategic Alignment	
Emphasis on startups with social impact	Social Impact Investment	
Focus on renewable energy sources		
Telehealth and remote care solutions	Healthcare Innovation Focus	
Financial technology advancements	Fintech Innovation	
Cybersecurity measures for startups		
Global market expansion opportunities	Global Market Dynamics	
Entry into emerging markets		
Competitive analysis for new sectors	Competitive Strategy Adaptation	

Identifying niche markets for investment	Market and Consumer Trends	
Investment diversification across sectors	Portfolio Diversification	
Risk management in uncertain economic conditions	Risk Management Strategies	
Mitigating risks in high-growth startups		
Monitoring startup scalability and growth	Growth Monitoring and Support	
Evaluating startup agility in market changes		
Evaluating entrepreneurial leadership during crises	Entrepreneurial Leadership Evaluation	
Impact of geopolitical tensions on investments	Geopolitical Analysis	
Legal considerations for international investments		
Focus on startups enhancing digital connectivity	Digital Infrastructure Investment	
Revenue growth rates	Financial Performance Metrics	**Efficacy of Objective Measures of Success**
EBITDA margins		

Cash flow projections		
Customer Lifetime Value (CLV)	Customer Metrics	
Customer Acquisition Costs (CAC)		
Churn rate		
Market size and growth rate	Market Analysis	
Market penetration rates		
Competitive positioning	Competitive Analysis	
Market share metrics		
Product differentiation analysis	Product Assessment	
Technological innovation assessments		
Intellectual Property (IP) portfolio strength	IP Valuation	
Patent filings and grants		
Regulatory compliance status	Risk Management	
Litigation risks assessment		
Environmental impact assessments	ESG Considerations	
Social governance standards compliance		
Scalability potential	Growth Potential	

Global expansion feasibility		
Exit strategy viability	Exit Strategy Evaluation	
Likelihood of IPO or acquisition		
Historical funding rounds success	Funding History Analysis	
Valuation multiples from past deals		
Operational efficiency metrics	Operational Excellence	
Supply chain robustness		
Cost structure optimization		
Partnership and alliance strengths	Strategic Positioning	
Strategic fit with industry trends		
Founders' and team's track record	Team Experience and Track Record	
Leadership experience in scaling startups		
Advisory board expertise		
Financial stability and runway	Financial Health	
Debt-to-equity ratio		
Bootstrap financing strategies		
R&D investment levels	Innovation Investment	

Time to profitability estimation		
Break-even analysis	Profitability Projections	
Gross margin improvement trends		
Unit economics analysis		
Founder's vision for the startup	Founder Characteristics	**Necessary Reliance on Subjective Criteria**
Entrepreneurial passion and motivation		
Resilience and ability to overcome obstacles		
Integrity and ethical considerations		
Personal commitment to the startup's mission		
Founders' adaptability to feedback and criticism		
Leadership style and its impact on team morale		
Team chemistry and ability to work under pressure	Team Dynamics	
Diversity of perspectives within the team		
Collaboration and conflict resolution skills		

Collective experience and complementary skills		
Leadership distribution and roles clarity		
Founders' intuition about market needs	Market Perception	
Awareness of emerging market trends		
Ability to identify untapped market niches		
Perception of competitive landscape		
Uniqueness of the product or service	Innovation and Product Potential	
Potential for technological breakthrough		
Creativity in problem-solving and innovation		
Product’s scalability and adaptability to change		
Vision for future product development		
Alignment of the product with current tech trends	Innovation and Product Potential	
Alignment with VC’s investment thesis	Strategic Alignment and Vision	
Long-term growth and scaling strategy		

Vision for the startup's role in the industry		
Effectiveness of the pitch and storytelling	Communication and Persuasion	
Clarity in communicating the business model		
Persuasiveness of the funding request		
Transparency and honesty in discussions		
Startup’s potential for social or environmental impact	Customer and Societal Impact	
Understanding of customer pain points		
Feedback from early users or beta testing		
Founders' perception of business risks	Risk Assessment and Management	
Strategies for mitigating identified risks		
Experience navigating previous startups through risks		
Willingness to take calculated risks for growth		
Confidence	Entrepreneur’s Personality	**Impact of the Entrepreneur**
Likeability		

Emotional Intelligence		
Passion for the venture		
Openness to feedback		
Decision-making style		
Media presence and public perception	Entrepreneur's Celebrity	
Influence within the industry		
Social media influence and engagement		
Recognition in prestigious industry awards		
Contributions to key industry publications		
Industry experience and knowledge	Background and Expertise	
Previous entrepreneurial ventures		
Technical skills or expertise		
Educational background		
Ability to set and communicate a clear vision	Leadership and Vision	
Inspirational leadership qualities		
Strategic thinking and planning		
Creativity in product/service development	Innovative Mindset	

Foresight in industry trends		
Capacity for problem-solving		
Approach to innovation and R&D		
Strength of professional network	Networking and Ecosystem Engagement	
Engagement with mentors and advisors		
Participation in industry events and forums		
Handling of past failures	Resilience and Perseverance	
Stamina through challenges		
Recovery from setbacks		
Adherence to ethical practices	Ethics and Integrity	
Transparency in business dealings		
Talent attraction and retention	Team Building and Management	
Team motivation and morale boosting		
Management of team dynamics		
Delegation and empowerment		
Conflict resolution		

Persuasiveness with investors and stakeholders	Communication and Influence	
Clarity and effectiveness in messaging		
Public speaking and presentation skills		
Negotiation abilities		
Responsiveness to market changes	Adaptability and Flexibility	
Willingness to pivot business model		
Adaptation to customer feedback		
Efficiency in resource management	Operational Acumen	
Execution of business operations		
Commitment to social or environmental causes	Social Responsibility and Impact	
Impact-driven business model		

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