

An Analysis of Venture Capital Contracts in Iran

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Abstract

This study aims to explore the dynamics of financial contracting in Iranian startups and high-tech companies, with a particular focus on the challenges posed by information asymmetry between investors and entrepreneurs. We

collected and analyzed data from 123 Iranian Shareholder Agreements (ShAs). We employed a range of descriptive statistics to provide a comprehensive summary of the data. Also, to explore the relationships between our variables, we utilized Ordinary Least Squares (OLS) regression. The terms and conditions of these contracts were examined to understand the diversity and influence of these terms and how they are applied in the real world in the context of Iran. We also investigated Iranian venture capitalists' behavior in obtaining cash flow rights and control rights, and a complete description is presented through various factors, including components of cash flow rights and control rights. Our analysis revealed a limited diversity in the terms and conditions of the contracts, suggesting a potential emulation of U.S. ShAs. We found that Iranian venture capitalists tend to secure maximum cash flow and control rights, exceeding their U.S. counterparts. Preferred stocks emerged as the primary choice for investing in startup companies. However, a detailed examination of the relationship between cash flow rights and control rights indicated a lack of a unified and coherent approach in contract design, reflecting a highly conservative stance among investors. This study contributes to understanding financial contracting dynamics in emerging markets like Iran. It highlights the gap between theoretical frameworks and real-world practices, shedding light on how these factors shape the relationships between investors and entrepreneurs.

Keywords: Control Rights, Cash Flow Rights, Shareholder Agreements, Agency Problem, Information Asymmetry.

Introduction

Startup companies and SMEs play a critical role in economic growth, creating higher rates of new jobs (Durrani & Boocock, 2006). Fundraising is a big challenge for startups, especially high-tech ones, to evolve and successfully complete their growth cycle (Chong & Luyue, 2014). Hence, startups need to secure enough funding, as it is one of the main prerequisites for developing their business.

Due to the high level of uncertainty, lack of financial records, and absence of collateral, it is rare to finance startups through conventional financial instruments (Gompers & Lerner, 2004). Therefore, to foster the startup ecosystem, specific tools and regulations are needed to finance startups through specialized mechanisms.

Financial contracting theories play a significant role in the field of finance. These theories provide frameworks and insights for understanding and

analyzing the complex relationships and agreements between different parties in financial transactions. In venture capital financing, information asymmetry, uncertainty, and agency problems reach their highest levels (Gilson, 2002). In that case, new financial tools and vehicles are developed to mitigate risks. Among those solutions, financial mechanisms and contracts, which align investor and entrepreneur motivations and reduce information asymmetry and risks (Triantis, 2001), are considered to be explained in this article.

Financial contracting theories aim to answer three main problems, namely, the selection problem (it is hard to find the best investment case and prepare a suitable order among investor and investee), the agency problem (how to minimize it), and the execution problem to manage collaborations, reduce transactional, and operational costs, and taxes (Sahlman, 1990). Several control mechanisms embedded in venture capital contracts address incentive problems and opportunistic behaviors, particularly in uncertain situations (Scherler, 2000). Numerous research studies have been done to cope with the challenges in venture capital contracts, particularly theoretical ones. These researches mainly focused on types of securities, control mechanisms, agency problems, and cashflow rights (Aghion & Bolton, 1992; Gompers, 1997; Holmström, 1979). These theories offer valuable insights into the complex relationships and agreements in financial transactions. They provide frameworks for understanding how contracts can be designed to align the interests of different parties, reduce information asymmetry, and mitigate risks.

This study aims to address the gap in understanding how financial contracting theories can be applied to mitigate the challenges faced by startups, particularly in emerging markets like Iran. A deeper understanding of these dynamics can help create more effective financial instruments and regulatory frameworks to support the growth of startups and SMEs. Our primary objective is to explore the role of financial contracting theories in addressing these challenges in the real world, mainly the Iranian Startups ecosystem. We aim to understand how these theories are applied in the Iranian Venture Capital contracts and how they can be used to design financial mechanisms and contracts that align investor and entrepreneur motivations, reduce information asymmetry, and mitigate risks. In summary, to understand how these mechanisms are deployed in the Iranian Startup ecosystem based on the specific circumstances of Iran.

This article focuses on data gathered by questionnaire after describing the current situation of Iranian venture capital contracts. It will investigate the possible correlation among different variables that influence the contract. Our findings will provide valuable insights for policymakers, investors, and

entrepreneurs in shaping the future of startup financing in emerging markets.

Literature Review

Investors are worried about unaccountable entrepreneurs, which could lead to investee benefits at the expense of investors. On the other hand, if investors adopt substantial rights, entrepreneurs may find themselves exposed to investor risks. Compromising and finding a sustainable balance between the two sides guarantee the execution process. Conflict of interest is a big obstacle for the financing process as it is possible to define completely different goals for each side (Ramsinghani, 2014).

Information asymmetry and agency problem solutions are suggested to address uncertainties, including stage financing, control rights, compensation plans, exit strategy, and conventional contracts (Gilson, 2002).

In the financial contracting area, there are two main categories: cash flow rights and control rights. The separation of cash flow and control rights is a noticeable achievement of contracting theories. In that case, one with more cash flow rights (traditionally more shares) may have fewer control rights under specific conditions (Kaplan & Strömberg, 2003). Mechanisms and terms in a venture capital contract can be divided into cash flow and control rights. Cashflow rights deal with return on investment in liquidation events (trade sale, IPO, etc.), and control rights consider voting rights and decisions made (Feld & Mendelson, 2019).

Analyzing a comprehensive dataset of initial financing rounds, findings suggest an optimal equity split for success. Despite this, VCs leverage bargaining power for more investor-friendly terms, favoring their interests over maximizing startup values. While superior VCs enhance outcomes, reducing search frictions shifts power to VCs, disadvantaging entrepreneurs. The study underscores the significance of agent selection in contracting studies (Ewens et al., 2022).

Rauterberg (2021), based on a detailed dataset, highlights how shareholders extensively use contracts to reshape their control rights, including restricting share sales and negotiating voting dynamics. The findings prompt fundamental questions about the desirability of allowing shareholders to redefine corporate control through contracts, raising issues related to legal implications, welfare effects, and the governing law of such agreements (Rauterberg, 2021).

Bellavitis et al. (2019) argue that venture signals enhance the VC's ability

to screen and conduct due diligence pre-investment, but their effectiveness may diminish in transparent institutional settings. Similarly, contractual covenants to counter opportunism by ventures postinvestment are most effective in supporting shareholder rights enforcement. Analyzing an international sample of VC contracts, the study offers theoretical and practical insights on optimizing capital deployment in diverse institutional settings while fostering strong investor-entrepreneur relationships (Bellavitis et al., 2019).

Nahata (2019) examines the impact of prior entrepreneurship on financial contracting with venture capitalists, revealing that startups led by serial entrepreneurs secure more favorable contracts. Repeat founders and insiders maintain greater board control and experience less equity dilution in their interactions with VCs (Nahata, R., 2019).

Agency problem

The agency problem in venture capital investment concerns the potential conflict of interest between venture capitalists (VCs) and the entrepreneurs or firms they invest in. VCs, acting as agents for the providers of funds, are tasked with selecting high-quality business projects and providing them with financial resources, coaching, effective monitoring, and valuable business contacts. Agency problems are more severe for startups than mature companies due to the need for more financial records and strong corporate governance.

Hassan and Leece (2007) examined venture capital firms' varying strategies and techniques to address market imperfections and value privately held companies. It investigated the distinct valuation behaviors among various venture capital firms, emphasizing the significance and application of independent accounting data. The findings highlight the critical role of information gaps and agency problems and how these factors differ based on the firm's organizational structure, funding, and investment stages. Venture capitalists (VCs) sometimes have more or different information than the entrepreneurs, which can cause disagreements. For instance, a VC might advocate for tactics that boost short-term value but harm long-term growth, or the entrepreneur might make decisions that are beneficial to them personally but detrimental to the company or its investors. This type of conflict, the agency problem, is a significant hurdle in venture capital investments.

In the venture capital finance world, it is mainly accepted that convertible preferred equity is the optimal form of finance. This conclusion mostly comes from the empirical research done in the USA. However, other ideas challenge this optimality and explain other reasons for the observations of the US data

set. Cumming argues that the preferred equity selection in the USA is related to other factors such as (1) security design as a response to expected agency problems, (2) capital gains taxation effects, (3) learning effects, and (4) market conditions (D. J. Cumming, 2005).

Information Asymmetry

The dissemination of information between venture capitalists (VCs) and entrepreneurs is typically not balanced. VCs, with their expertise and professionalism in deal-making, stand in contrast to entrepreneurs who, while possessing a deep understanding of their ventures, often need more comprehensive knowledge about VCs' financing procedures and criteria. This information asymmetry favoring VCs can result in challenges for entrepreneurs securing funding, unfavorable conditions, or less-than-ideal experiences with startups. As venture capitalists mitigate information asymmetries and agency costs better, the chance of successful exit increases (D. Cumming & Johan, 2008).

According to research, as the risk associated with a venture increases, investors tend to enhance their mentoring and control functions (Khanin & Turel, 2013). Venture capitalists (VCs) are specialized financial intermediaries with a knack for identifying and overseeing projects with a high degree of information asymmetry. When concrete historical data about a potential investment company is lacking, VC firms typically rely on subtle cues to estimate risk. Information asymmetry risks are a common feature of projects funded by venture capitalists (VCs); however, the risk is even greater for projects funded by international VCs operating in countries other than their home base due to the challenges posed by geographical separation and cultural differences (Joshi & Bala, 2019).

In venture capital (VC) relationships, information is often unevenly shared between entrepreneurs and VCs. VCs possess extensive deal-making expertise, while entrepreneurs, despite their profound knowledge of their venture, may need more insight into the VC financing process. This information asymmetry can result in challenges for entrepreneurs, such as difficulty securing funding or encountering unfavorable terms. Glücksman (2020) explores how entrepreneurs navigate these challenges. Four key themes emerge: timing external capital raising, ensuring compatibility with the VC, understanding the VC process, and fostering open and honest relationships. Despite lacking formal tools, entrepreneurs leverage informal strategies based on collective experiences, suggesting a more active role in the VC-entrepreneur relationship

than previously assumed.

Potential investors should be geographically close and scrutinize past borrowing agreements to address information asymmetry. Trust is crucial as it reduces transaction-specific risks. A solution is to vary the shares owned by investors, with the first investor retaining a larger share, demonstrating confidence to others (Sufi, 2007).

Moral Hazard

The concept of moral hazard, initially stemming from insurance-related studies (Rowell & Connelly, 2012), has gained prominence in the fields of economic probability and decision-making (Hale, 2009). Moral hazard occurs when the agent (entrepreneur) does not act in the best interest of the shareholders. As it is often difficult to assess, it becomes crucial to establish a contract that aligns and maximizes mutual benefits. Therefore, the agent's motivation to perform optimally plays a vital role in value creation and the distribution of residual benefits to both parties.

Monitoring mechanisms are proposed to mitigate moral hazard problems, and these rights allow for intervention to reduce the risk in case of bad performance (Aghion & Bolton, 1992; Dewatripont & Tirole, 1994). On the other hand, monetary incentives that make the ex-post compensation related to the performance and outcomes are helping to tackle the moral hazard problem (Holmström, 1979).

Birton et al. (2020) suggest that in the context of unicorns (startups valued over \$1 billion), the agency problem - a situation where the interests of principals (investors) and agents (entrepreneurs) diverge - could be beneficial if both parties are aligned towards market disruption. This contradicts the traditional view that sees the agency problem as a cost. The principals of unicorns desire their agents to take risks that are more significant than usual with their investments to disrupt a specific market. This leads to the introduction of a new concept, "agreeable moral hazard," which applies to the unicorn scenario.

Adverse selection

This problem happens before the deal. The type of contract influences the agents, and specific contract terms will absorb exceptional entrepreneurs. Take the example of debt vs equity financing. Startups with fewer risks may enjoy debt financing while riskers may look for equity financing, and risk transfer

could happen (De Meza & Webb, 1987; Stiglitz & Weiss, 1981).

There is concern that these subsidies may attract individuals with limited entrepreneurial skills, leading to businesses with low survival rates and minimal impact on job creation, economic growth, and innovation. The study suggests that the gaps in business outcomes may be attributed to restricted access to capital and differential business strategies and dynamics (Caliendo et al., 2020).

Incomplete contracts

Firms like to issue non-voting shares to raise external funds, but this is unacceptable to outside investors. Two options for the firms are issuing debt and accepting the risk of bankruptcy or issuing equity and diluting their ownership rights. The choice of control allocation determines the firm's financial structure (Aghion & Bolton, 1988). The conflicting objectives of investors and entrepreneurs can be answered optimally when the control rights are allocated contingently (Aghion & Bolton, 1992).

Over time, contracts become more complete as the contracting costs decrease (Iyer & Sautner, 2018). Incomplete contracting theory predicts VC cashflow rights, such as liquidation preference, could be renegotiated. Common shareholders sometimes get payment before VCs' liquidation preferences are passed, although unimportant (Broughman & Fried, 2010).

Xie et al. (2020) demonstrated that trust serves as an informal contracting mechanism, mitigating the challenges of incomplete contracts and promoting innovation. Trust is crucial without formal laws and regulations, which encourage collaboration and foster a tolerance for failure, ultimately enhancing innovative efforts.

Research background; financial contracting issues

VC financing happens through specific characteristics, and they separate cash flow rights, board rights, voting rights, liquidation rights, and other control rights (Kaplan & Strömberg, 2003). Firstly, entrepreneurs have control rights, and if they perform poorly, these rights transfer to the investors. If the entrepreneurs perform very well, the VCs retain their cash flow rights and abandon most of their control and liquidation rights (Kaplan & Strömberg, 2003).

More experienced VCs, with more interventions, obtain weaker downside

protecting contractual cash flow rights than less experienced ones. VCs with better governance abilities focus less on demanding downside protections and ask more for other aspects, such as board representations (Bengtsson & Sensoy, 2011). Convertible securities are widely used to finance risky assets, and an explanation is exit challenges and control rights for investors, which are better answered (Bascha & Walz, 2001).

Haydari and Mohammadi (2017) emphasized that a business's growth trajectory is a crucial factor influencing the adoption of appropriate strategies at each stage. They argued that the investor's approach changes as businesses evolve, influenced by shifts in entrepreneurial skills, risk types, and business development components. Environmental factors, such as financial market conditions, government involvement, legal weaknesses, and cultural infrastructures, also impact contract approaches.

Contracts differ across legal regimes, although more experienced VCs follow US-style contracts despite legal regimes. The failure rate for the VCs who do not use US-style contracts is significantly higher, consistent with efficient US-style contracts (Kaplan et al., 2007).

Corporate governance has been considered a solid tool to reconcile the conflicts of different beneficiaries, and regulation of extensive shareholder intervention may provide better protection to small shareholders. However, it could result in managerial discretion and scope for abuse (Becht et al., 2003).

The control rights approach is practical, in which managerial actions affect profitability and firm value depending on the allocation of decisions or control rights (Hart, 2001).

Despite VCs, angel investors rarely ask for board seats, invest in common stock, rarely stage financing and antidilution protection, and state-contingent control rights. Indeed, angel investors are close to the investors, which is a substitution of control mechanisms (Wong, 2002).

Good laws facilitate faster deal screening and origination, increase the probability of syndication, and help investor board representation. Thus there are country-specific distinctions in the law systems that affect entrepreneurial finance (D. Cumming et al., 2010).

Successful fundraising increases the pay of CEOs of venture-backed firms and the gap between them and other executives (Bengtsson & Hand, 2011).

Trust increases investment decisions in the venture capital industry. However, education and work experience reduce the effects of trust, but they do not eliminate it. Trust and sophisticated contracts are not substitutes but

complementary (Bottazzi et al., 2016).

Many Spanish venture capital contracts are homogeneous, although there are some differences in the design of contracts between public and private VCs (Ramón-Llorens & Hernández-Cánovas, 2013).

Control rights can protect venture capitalists from holdup problems by entrepreneurs and help VCs find a good management team (Hellmann, 1998).

Control mechanisms mitigate opportunistic behaviors and incentive problems for financing high-tech firms that invest in intangible assets. Whereas theories explain some mechanisms observed, others are still unexplained (Schertler, 2000).

Although Venture capitalists try to get friendlier contract terms, there is an optimal equity split among investors and entrepreneurs, which maximizes the startup value. Reducing search frictions increases the VCs' bargaining power at the expense of entrepreneurs (Ewens et al., 2022).

Type of securities

The distinctive feature of venture capital contracts is the greater use of convertible securities. The rational expectations model, especially analyzing information asymmetries, could not wholly explain contracting patterns (Triantis, 2001).

CV contracts, which involve debt and equity, are efficient and dominate pure-equity and pure-debt financing, and the optimal contract balances the investor's motivation to intervene and the entrepreneur's desire to control (Marx, 1998).

Preferred stocks lead to tax reductions for management compensation, which venture capitalists need. There is a solid need to illuminate the complexities of capital structure and security design (Gilson & Schizer, 2003).

VCs must tackle various motivation conflicts, from adverse selection and window dressing to moral hazard and holdup problems. Compared to much theoretical research done in 25 years, less satisfying empirical research is available (Burchardt et al., 2016).

Based on empirical research in the USA, there is no doubt about the optimality of preferred stock to finance new ventures. One hundred percent of financing rounds (1534 investments records) (Bengtsson & Sensoy, 2011) and 100 percent of 27 financing rounds (Sahalman, 1990) confirmed that the best

choice to finance is through preferred stock.

Covenants

Stage financing

Gompers reports that VCs do stage financing to keep the option of abandoning the investee when the milestones are not met. Findings showed the importance of staging as a control mechanism in early-stage ventures (Gompers, 1995).

Stage financing is affected by different features of the ventures, and it helps mitigate the commitment problem (Neher, 1999). It also plays two roles: controlling risks and mitigating moral hazards. When it is combined with sharing contract, it will be an effective complementary mechanism for controlling agency problems (Wang & Zhou, 2004).

Stage financing can be a valuable real option when facing external uncertainty, although it may induce VC holdup. Then, the entrepreneur may need to do his best. To reduce investor opportunism, residual cashflow rights must be contingent on verifiable milestones in the previous stage (Bigus, 2006).

Right of first refusal

As the investee performs well, VCs seek to preserve the option of investing more, so they adopt the rights of first refusal or pre-emptive rights (Sahlman, 1990).

Antidilution clauses

Almost 95% of VC financings use some antidilution clause (Kaplan & Strömberg, 2003). To protect investors' cash flow rights, along with control rights, there are

Liquidation Rights

In over 98% of deals, VCs ask for seniority in the residual benefits of the firm at least as much as they have paid if the value is low (Kaplan & Strömberg, 2003).

Board Rights

Boards can hire and fire top management and ratify significant decisions. Hence, venture capitalists preserved the right to have a representative on the board of investees as a condition of their financing (Fama & Jensen, 1983).

Automatic conversion

The mentioned covenants make the entrepreneur give up much control over the VCs. To motivate entrepreneurs to maximize value, VCs give the right of automatic conversion that forces conversion of VCs claim into common equity if predetermined milestones are achieved, particularly IPO, at a price of some benchmarks (Black & Gilson, 1998).

Non-compete clauses

Non-compete clauses are often included in venture capital (VC) financing agreements, particularly in employment contracts for founders and key employees. The purpose of these clauses is to safeguard the company by preventing these individuals from participating in any competitive activities with the company. At the same time, they are employed for a certain period after their employment ends. To mitigate the “holdup” problem, venture capitalists attempt to keep the entrepreneurs in the company or costly to leave for them (Roberts & Sufi, 2009). This problem refers to a situation where an entrepreneur can potentially take advantage of a VC investor. It arises when it is challenging to write complete contracts, and one party has made a prior commitment to a relationship with another party. Sometimes, the entrepreneur might have unique or specialized knowledge about the project that the VC investor does not have. After the VC investor has committed funds to the project, the entrepreneur could potentially use this asymmetric information to their advantage. For example, they might demand more favorable terms or make decisions that benefit them personally but are not in the best interest of the company or the VC investors (Tian & Huang, 2023).

Exit Rights

Based on theories, exit rights such as drag-along and tag-along can reduce the holdup problem. Venture capital contracts in Germany used exit rights when holdup problems were more likely. When information asymmetry increases, financing tends to be done through debt with reliable collaterals and less through common equity. While there is no reliable guarantee of getting into debt, equity with the features of debt is a solution. Thus, preferred stocks dominate in the early stage of startup. Debt and common are generally used more at a later stage under a lower probability of asymmetric information (Trester, 1998).

Research Methodology

This study aims to comprehensively investigate the characteristics of venture capital contracts in Iran, leveraging a unique approach that combines the analysis of actual contracts and data obtained through a confidential questionnaire. The first step involved thoroughly reviewing the existing startup contract terms and conditions literature. This review helped identify gaps in the current knowledge and provided a theoretical framework for the study. Based on the insights gained from the literature review and three expert interviews, a framework was created, including appropriate criteria and indicators to describe the startup contracts in Iran. We strictly adhered to previous research in measuring and quantifying the contract features. All the indicators used in the quantification process, either directly or indirectly, have references in the existing literature.

The research methodology is designed to offer insight into the contractual mechanisms between investors and entrepreneurs, considering the confidential nature of certain agreements. To uphold the confidentiality of contract details, we found it necessary to encode the identities of investors. However, it is immaterial for our study to ascertain the parties involved in the deal; our focus is on extracting and analyzing the specific attributes of both the investor and the investee.

Data Collection

Actual Contracts: Access to eight real contracts was secured to extract specific characteristics directly.

Questionnaire: For cases where confidentiality constraints limited direct access, a carefully constructed questionnaire was administered to 23 investors. This approach allowed for the collection of features from 115 actual contracts.

Sample

The research population encompasses all venture investors operating in Iran. Due to the challenge of identifying every venture investor, we relied on a list of registered investors within the Iranian Venture Capital Association as a reference for our study. Ultimately, we successfully collected information from 123 financing contracts involving 23 investors. The contracts' relationships were unclear and needed to be clarified, and we needed to know if some of these contracts represented a second phase of fundraising for particular

startups. However, we did not aim to assess these relationships. Another promising area for future research could be the evaluation of the terms and conditions of a startup across various series of the fundraising process.

Sample Bias

Collecting accurate contract data for this research was challenging and time-consuming, mainly due to the nascent state of the Iranian Innovation Ecosystem, which needs more structured data on deals and financial contract features. Due to our efforts to gather contract data from top venture capitals in Iran, an unavoidable bias may exist. However, we conducted a comprehensive survey, reaching out to significant venture capitalists within the Iranian Innovation Ecosystem. Therefore, we assert that the information gathered serves as a suitable proxy.

Methods

Due to the type of data that has been gathered for analysis and hypothesis testing, I selected the chi-square test and ordinary least squares (OLS) tests as the primary statistical methods employed in the research methodology of my paper. These methods were chosen based on the nature of the data and the research hypothesis posed in this study.

Descriptive Analysis: The initial phase involves a detailed descriptive analysis to provide a comprehensive overview of the gathered data, presenting key characteristics and patterns observed in the venture capital contracts.

Hypothesis Testing: Following the description, the study will test specific hypotheses formulated to assess relationships, shedding light on Iranian VC contracts. The chi-square test was used to examine the dataset's relationship between two categorical variables. This non-parametric test is based on the frequency distribution of the variables. It measures how observed frequencies compare to expected frequencies under the null hypothesis of no association. The OLS method creates a regression model to describe the relationship between a dependent variable and one or more independent variables. It finds the best-fitting line for data points by minimizing the residuals and the differences between the observed and predicted values.

Results

Sample Description

The table below Table 1 describes investors whose names are coded due to privacy issues, their experiences, the Net Asset Value of the fund/firm, and the shareholders of investors. The deals were conducted from 1395 to 1400.

Table 1. Description of Investors, their experiences, NAV, and Shareholders

	Investor Experience					PV of VC portfolio (Billion Rial)	Shareholder of Investors				Number of contracts
	Very Low Experienced	Low Experiences	Moderate Experienced	Experienced	Highly Experienced		Governmental Fund	Mostly Owned By Government	Mostly Owned By Private Sector	Fully Owned By Private Sector	
Investor 1				✓		680			✓		9
Investor 2					✓	1360		✓			7
Investor 3					✓	8500			✓		2
Investor 4					✓	2847		✓			24
Investor 5				✓		765			✓		11
Investor 6				✓		3400		✓			8
Investor 7					✓	850		✓			8
Investor 8			✓			425		✓			4
Investor 9	✓							✓			1
Investor 10		✓				204			✓		5
Investor 11		✓				2550				✓	2
Investor 12					✓	1190		✓			5
Investor 13		✓				340		✓			6
Investor 14		✓								✓	1
Investor 15		✓				76.5			✓		1
Investor 16		✓				425				✓	4
Investor 17					✓	765				✓	3
Investor 18			✓			425	✓				5
Investor 19		✓				170	✓				3
Investor 20			✓			170	✓				4
Investor 21				✓		340				✓	6
Investor 22					✓	1190			✓		4

Investor's experience was quantified as Very low experience = 1 (less than one year), Low experience = 2 (between one to three years), Moderate experience = 3 (three to five years), Experienced = 4 (five to ten years), highly experienced = 5 (more than ten years of experience).

Reference: Author's Survey

Table 1 displays the total present value of the VC portfolio of investors, which amounts to approximately 27000 B.Rials. Thirty-two percent of investors are highly experienced, the same as low experienced ones. Also, 18 percent, 14 percent, and 4 percent of investors had experienced moderately experienced and very low experienced levels, respectively.

Both fully private and owned mainly by the government comprised 36.5% of total investors, and fully governmental and mostly private investors comprised 13.5%.

Table 2 reflects contract features considering its growth stage, asset type, stage financing, and investor's shareholder vs industry of the funded startup.

Table 3. Analysis of Contracts based on growth stage, asset type, stage financing, and investor's shareholder vs industry of investee

		Industry of Investee								Total
		ICT	Health Medical	High-tech Equipment	E-commerce	Energy	Entertainment industry	Education	Others	
Growth Stage	Seed Money	11	7	4	3	3	5	3	1	37
	Early Stage	10	2	1	4	2	1	2	7	29
	Mid and Expansion Stage	19	6	1	4	1	2	1	2	36
	Late Stage	9	4	2	1	1	1	0	3	21
	Total	49	19	8	12	7	9	6	13	123
Asset type	Intangible	49	15	8	10	4	9	6	13	114
	tangible	0	4	0	2	3	0	0	0	9
Stage Financing	No	11	0	1	0	2	0	1	0	15
	Yes	38	19	7	12	5	9	5	13	108
Shareholder of Investors	Governmental Fund	1	1	2	3	0	0	1	4	12
	Mainly owned by the government	14	11	4	9	4	7	2	8	59
	owned mainly by the private sector	4	3	0	0	1	1	0	1	10
	Fully owned by the private sector	30	4	2	0	2	1	3	0	42

Reference: Author's Survey

This classification was derived from a review of the investors' missions. There are distinct differences for some of them, while for others, including the ICT, E-commerce, Education, and Entertainment industries, the boundaries are more blurred. In this context, we ensured that the participants understood the

questionnaire correctly. When we classify a contract under the eCommerce category, we refer to platforms for selling and online services that facilitate the sale of products. The entertainment industry, on the other hand, encompasses the gaming sector and the creative industry for leisure activities. Lastly, the education category is about creating new online platforms and simulations to enhance learning. This classification is tailor-made to clarify the contracts assessed more precisely.

The ICT and Health/Medical sectors have the highest number of contracts across all growth stages, with a total of 49 and 19 contracts, respectively. Early-stage and late-stage investments often involve stage financing. Intangible assets dominate across all industries, totaling 114 contracts. This indicates a focus on intellectual property and non-physical assets. The majority of contracts (108) involve stage financing. This suggests a common practice of providing funding in different stages of a business's development. The dominance of intangible assets and the prevalence of stage financing indicate a strategic investment approach. Other implications can be drawn from Table 2; we will omit the details in the summary for brevity.

According to the literature, the two main categories of rights in contracts are cash flow and control rights. Table 3 shows the components of cash flow right versus important independent factors such as growth stage, asset type, and entrepreneur capability.

Table 4. Cash flow Rights based on growth stage, entrepreneur capabilities, and asset type

		Growth Stage				Entrepreneur Capabilities		Asset type	
		Seed Money	Early Stage	Expansion Stage	Late Stage	Enough	Much	Intangible	tangible
Stock Type	Debt	0	0	0	0	0	0	0	0
	convertible note	7	1	0	2	6	4	10	0
	common stock	6	6	3	4	9	10	17	2
	preferred stock	24	22	33	15	35	59	87	7
Liquidation Preference	No	5	4	2	3	7	7	11	3
	1X multiple	17	12	12	13	25	29	52	2
	Bank Return	7	8	10	4	12	17	25	4
	1X-3X multiple	8	5	12	1	6	20	26	0
	3X+ multiple	0	0	0	0	0	0	0	0
Antidilution Right	No	16	11	10	4	15	26	36	5
	Weighted Average	0	0	4	3	0	7	4	3

		Growth Stage				Entrepreneur Capabilities		Asset type	
		Seed Money	Early Stage	Expansion Stage	Late Stage	Enough	Much	Intangible	tangible
	Full Ratchet	21	18	22	14	35	40	74	1
Redemption Right	No	35	29	30	16	49	61	104	6
	Yes	2	0	6	5	1	12	10	3
Employee Stock Option Right	No	8	3	8	3	9	13	19	3
	Yes	29	26	28	18	41	60	95	6
	Pre	14	11	7	1	17	16	31	2
Pool option size	More than 25%	1	0	0	0	1	0	1	0
	20-25%	0	0	0	0	0	0	0	0
	15-20%	3	0	1	0	2	2	4	0
	10-15%	5	5	4	1	7	8	14	1
	10% or less	22	21	23	17	32	51	78	5
Pay to Play Right	Yes	1	1	1	0	0	3	3	0
	No	36	28	35	21	50	70	111	9

Reference: Author's Survey

To ascertain the growth stage of each company receiving investment, we considered the investment amount specified in the fundraising process. If the investment is less than one billion tomans, it is categorized as seed money. Contracts involving investments between one and three billion tomans are in the early stages. Contracts with investments ranging from three to seven billion tomans are deemed to be in the expansion stage. Lastly, contracts with investments exceeding seven billion tomans are also classified as early stage. It is worth noting that the contract information pertains to the end of 1401. The assessment of entrepreneurial capabilities was subjective and entirely dependent on the participants' judgments in the survey. The type of assets determined the nature of the companies receiving investment. The asset type was considered intangible for those that were entirely service-based and raised capital solely for research and development activities. On the other hand, those working on physical products and needing funds to equip their labs or purchase materials were classified as having tangible assets.

Preferred stock is prevalent across all growth stages, entrepreneur capabilities, and asset types. The majority of contracts have a 1X multiple liquidation preference. This is typically stipulated when the investee is in the seed money stage, and the associated risks are high. Most contracts have a Full Ratchet form of antidilution right. Investors mostly waive redemption rights, which shows it is optional for them. Contracts frequently include employee stock option rights, indicating a common practice in these investment

agreements. The pool option size is typically 10% or less of the total. The majority of contracts do not include a pay-to-play provision. Table 4 presents the components of control rights versus important independent factors such as growth stage, asset type, and entrepreneur capability.

Table 5. Control Rights based on growth stage, entrepreneur capabilities, and asset type

		Growth Stage				Entrepreneur Capabilities		Asset type	
		Seed Money	Early Stage	Mid and Expansion Stage	Late Stage	Enough	Much	Intangible	tangible
Veto Right	No	7	6	9	5	9	18	24	3
	Yes	30	23	27	16	41	55	90	6
Issuing New Shares	No	6	5	3	5	9	10	17	2
	Yes	31	24	33	16	41	63	97	7
Drag Along	No	16	14	11	5	19	27	43	3
	Yes	21	15	25	16	31	46	71	6
Tag Along	No	13	8	6	2	10	19	26	3
	Yes	24	21	30	19	40	54	88	6
Voting Right	No	22	13	14	9	23	35	52	6
	Yes	15	16	22	12	27	38	62	3
Board Right	No	8	1	14	2	4	21	25	0
	Yes	29	28	22	19	46	52	89	9
CEO Replacement	No	24	17	22	17	37	43	77	3
	Yes	13	12	14	4	13	30	37	6
Right of First Refusal	No	12	7	9	3	9	22	27	4
	Yes	25	22	27	18	41	51	87	5
Information Right	No	8	2	9	4	7	16	22	1
	Yes	29	27	27	17	43	57	92	8
Registration Right	No	29	24	27	16	43	53	91	5
	Yes	8	5	9	5	7	20	23	4
Conversion Right	No	23	13	14	8	22	36	53	5
	Yes	14	16	22	13	28	37	61	4
Stock Lockup	No	22	6	9	7	18	26	38	6
	Yes	15	23	27	14	32	47	76	3

Reference: Author's Survey

Contracts often grant investors a veto right, and it is not sensitive to the factors mentioned. In most contracts, investors are not permitted to issue new shares, indicating the importance of controlling shareholder composition. Drag-along provisions are prevalent, allowing majority shareholders to force investors to join in the sale of the company—tag-along provisions protect investors by allowing them to join a sale initiated by entrepreneurs. Voting rights are more evenly distributed, with no distinct pattern based on growth

stage or entrepreneur capabilities. Investors commonly have board rights. Investors do not have the right to replace the CEO, particularly in companies with much entrepreneurial capability. Right of first refusal provisions are standard, allowing investors to purchase shares before offering them to others. Information rights, allowing investors access to certain company information, are prevalent. Conversion rights, allowing convertible securities to be converted into common stock, are not asked as much as other control rights. Stock lockup provisions, restricting the sale of shares for a certain period, are asked but not in a particular manner. If we pay attention to the pattern of control rights provisions, we see that there needs to be a clear logic related to theory and international experiences. Obtaining maximum control rights indicates the absence of well-designed contracts and mimicking contract templates.

After collecting contract data, it was essential for us to investigate whether there is any significant correlation between the contract designation and the provisions considered for risk coverage with the success of the investment and achieving profitability. To address this, we designed questions to gather information, as represented in Table 5. However, given that providing this information was contingent on exiting the investment and realizing gains or losses, the responses provided by investment managers were based on their intuitive understanding rather than actual data. From this perspective, the reliability of these data may be biased to expert judgment.

Table 6. Investee performance based on growth stage, entrepreneur capabilities, and asset type

		Growth Stage					Entrepreneur Capabilities		Asset type	
		Seed Money	Early Stage	Mid and Expansion Stage	Late Stage	Total	Enough	Much	Intangible	Intangible
New Financing Rounds	No	9	8	7	5	29	16	13	27	2
	Yes	16	11	10	3	40	22	18	39	1
Investor Exit	No	17	13	14	4	48	26	22	45	3
	Yes	8	6	3	4	21	12	9	21	0
Downside	No	25	19	15	8	67	38	29	64	3
	Yes	0	0	2	0	2	0	2	2	0
Return	0	1	1	2	0	4	2	2	4	0
	Less than 0	1	0	0	0	1	1	0	1	0
	0- 20%	6	4	2	1	13	10	3	13	0
	20-30%	4	4	2	6	16	5	11	14	2
	30-50%	6	1	6	1	14	5	9	13	1
	>= 50%	6	3	2	0	11	7	4	11	0

Reference: Author's Survey

In the 'New Financing Rounds' section, 9 cases at the 'Seed Money' stage did not have new financing rounds, while 16 cases did. Similarly, for 'Investor Exit,' 17 cases at the 'Seed Money' stage did not have an investor exit, while 8 cases did. The 'Return' section categorizes cases based on the level of return, from 0 to more than 50%.

Data Analysis

For all the above tables, statistical tests have been conducted. As is evident, there are no transparent relationships among the features of contracts, particularly for the control rights provisions. For instance, the literature demonstrates that when investors are experienced, they focus on gaining more control rights by sacrificing cash flow rights, specifically those that protect them in down-round fundraisings (Bengtsson & Sensoy, 2011). We generally investigate all features of contracts as a sample and test them. Table 6 presents the results.

Table 6. Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1.	The categories of Stock Type occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
2.	The categories of Liquidation Preference occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
3.	The categories of Antidilution Rights occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
4.	The categories of Participation Rights occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
5.	The categories defined by Redemption Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
6.	The categories defined by Pay to Play Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
7.	The categories defined by Employee Stock option Right = Yes and No occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
8.	The categories defined by Veto Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
9.	The categories defined by Issuing New Shares = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.

	Null Hypothesis	Test	Sig.	Decision
10.	The categories defined by Drag Along = Yes and No occur with probabilities .500 and .500.	One-Sample Binomial Test	.007	Reject the null hypothesis.
11.	The categories defined by Tag Along = Yes and No occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
12.	The categories defined by Voting right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.589	Retain the null hypothesis.
13.	The categories defined by Board Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
14.	The categories defined by CEO Replacement = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.001	Reject the null hypothesis.
15.	The categories defined by Right of First Refusal = Yes and No occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
16.	The categories defined by Information Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
17.	The categories defined by Registration Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.000	Reject the null hypothesis.
18.	The categories defined by Conversion Right = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.589	Retain the null hypothesis.
19.	The categories defined by Stock Lockup = No and Yes occur with probabilities .500 and .500.	One-Sample Binomial Test	.002	Reject the null hypothesis.
20.	The distribution of total Control Rights is normal, with a mean of 3.55 and a standard deviation of .79517.	One-Sample Kolmogorov-Smirnov Test	.000a	Reject the null hypothesis.
21.	The total Cash Flow Right distribution is normal, with a mean of 3.61 and a standard deviation of .56988.	One-Sample Kolmogorov-Smirnov Test	.000a	Reject the null hypothesis.

Reference: Author's Survey

Table 6 presents the results of various statistical tests conducted on different categories related to stock types, liquidation preference, antidilution right, participation right, redemption right, pay-to-play right, employee stock option right, veto right, issuing new shares, drag along, Tag along, voting right, board right, CEO replacement, right of first refusal, information right, registration right, conversion right, stock lockup, total control right, and total cash flow right. The tests include One-Sample Chi-Square Tests, One-Sample

Binomial Tests, and One-Sample Kolmogorov-Smirnov Tests. One-sample chi-square Tests have been conducted for categories such as Stock Type, Liquidation Preference, Antidilution Right, and Participation Right; the null hypotheses of equal probabilities are rejected, indicating that these categories do not occur with equal probabilities.

One-sample binomial Tests have been run for the null hypotheses for categories like Redemption Rights, Pay to Play Rights, Employee Stock Option Rights, Veto Rights, Issuing New Shares, Drag Along, Tag Along, Right of First Refusal, Information Rights, Registration Rights, and Stock Lockup are rejected, suggesting that these categories do not occur with probabilities of 0.5 and 0.5. Notably, the null hypotheses for Voting Right, Conversion Right, and Stock Lockup are retained, suggesting that these categories occur with probabilities of 0.5 and 0.5.

One-sample Kolmogorov-Smirnov Tests have been run to test the null hypotheses for the normal distribution of total Control Rights, and total Cash Flow Rights are rejected, indicating that these distributions are not normal.

While assessing financial contracting theories, we are examining the impact of various financial and control provisions on each other to determine how they can align the interests of investors and entrepreneurs. We create proxy variables for cash flow rights, control rights, and investor expertise to facilitate the analysis. Cash flow and control right variables are constructed by averaging all their sub-categories. In the case of investor expertise, it is calculated by taking the logarithm of the NAV of investors, normalizing it to the range of 1-5, and then averaging it with the investors' experience.

Table 7. Correlations

		Control Right	Cash Flow Right	Investor Expertise
Control Right	Pearson Correlation	1	.605**	.403**
	Sig. (2-tailed)		.000	.000
	N	123	123	122
Cash Flow Right	Pearson Correlation	.605**	1	.181*
	Sig. (2-tailed)	.000		.046
	N	123	123	122
Investor Expertise	Pearson Correlation	.403**	.181*	1
	Sig. (2-tailed)	.000	.046	
	N	122	122	122
**. Correlation is significant at the 0.01 level (2-tailed).				
*. Correlation is significant at the 0.05 level (2-tailed).				

The Pearson correlation coefficient between Control Right and Cash Flow Right is 0.605, indicating a strong positive correlation. The correlation is

highly significant at the 0.01 level (2-tailed), suggesting a robust relationship. The Pearson correlation coefficient between Control Right and Investor Expertise is 0.403, indicating a moderate positive correlation. The correlation is highly significant at the 0.01 level (2-tailed), implying a strong association. The Pearson correlation coefficient between Cash Flow Rights and Investor Expertise is 0.181, indicating a weak positive correlation. The correlation is significant at the 0.05 (2-tailed), suggesting a moderate association. A strong positive correlation between Control Right and Cash Flow Right indicates that as one variable increases, the other also tends to increase. A moderate positive correlation between Control Rights and Investor Expertise suggests a positive relationship between the level of control rights and investor expertise. A weak positive correlation between Cash Flow Rights and Investor Expertise implies a modest association between the level of cash flow rights and investor expertise.

To determine the effect of investor experience on control rights and cash flow rights, we conducted linear regression as follows.

Table 8. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.664	.193		13.798	.000
	Investor Expertise	.273	.057	.403	4.817	.000
a. Dependent Variable: Control Right						

The coefficient for Investor Expertise is 0.273. This represents the estimated Control Right change for a one-unit change in Investor Expertise. The standardized coefficient (Beta) is 0.403, indicating the change in Control Right in terms of standard deviations. The t-value of 4.817 is highly significant ($p < 0.001$), suggesting a strong and positive relationship between Investor Expertise and Control Rights. As Investor Expertise increases, there is a corresponding increase in the estimated value of Control Rights, highlighting the importance of investor expertise in influencing control.

Table 9. Coefficients of a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.336	.149		22.367	.000
	Investor Expertise	.089	.044	.181	2.019	.046
a. Dependent Variable: Cash Flow Right						

The P-value for 'Investor Expertise' (.046) is less than 0.05; we would

reject the null hypothesis and conclude that 'Investor Expertise' is a significant predictor of 'Cash Flow Right.' As Investor Expertise increases, there is a corresponding increase in the estimated value of Cash Flow Rights, suggesting that investor expertise plays a role in influencing cash flow rights.

From the literature, we know that the investee's growth stage significantly impacts contract provisions, and we will analyze them as follows.

Table 10. Coefficients of ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.316	.119		27.818	.000
	Growth Stage	.128	.046	.243	2.750	.007
a. Dependent Variable: Cash Flow Right						

The coefficient for the Growth Stage is 0.128, representing the change in the estimated Cash Flow Right for a one-unit change in the Growth Stage. The standardized coefficient (Beta) is 0.243, indicating the change in Cash Flow Right in terms of standard deviations. The t-value of 2.750 is significant at the 0.01 level, suggesting a moderate and positive relationship between the Growth Stage and Cash Flow Right. As the Growth Stage increases, there is a corresponding increase in the estimated value of the Cash Flow Right, suggesting that the growth stage plays a role in influencing cash flow rights, which seems unique due to the particular circumstances of the Iran Ecosystem.

Table 11. Coefficients of ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.245	.169		19.229	.000
	Growth Stage	.129	.066	.176	1.972	.051
a. Dependent Variable: Control Right						

The t-value of 1.972 suggests that the relationship between Growth Stage and Control Right is marginally significant ($p = 0.051$). As the Growth Stage increases, there is a tendency for an increase in the estimated value of Control Rights, suggesting that the stage of growth may play a role in influencing control rights, which is not consistent with the literature.

Discussion and Conclusion

Venture capital investors and entrepreneurs face numerous challenges and uncertainties in reaching a mutual agreement for investing and fundraising in startups. Financial contracting theories aim to identify financial mechanisms

that align both parties' common financial motivations and interests (Gilson & Schizer, 2003; Bienz & Walz, 2010).

VC contracts have generally been examined from theoretical and empirical perspectives. While various research has been conducted on theoretical aspects, there is a need for empirical research. VC contracts are strongly influenced by local factors arising from the economic environment, laws, tax regulations, culture, etc., necessitating indigenous and local research (Gompers, 1997; Kaplan & Strömberg, 2003). Nevertheless, some prior research has indicated that experienced VC investors in different countries structure their contracts similarly to American investors, resulting in higher success rates (Kaplan et al., 2007). Therefore, conducting empirical studies on how VC contracts are devised and done in Iran seems essential for developing this ecosystem. Although qualitative studies have been conducted in the past (Heidari & Mohammadi, 2017), and some articles to promote definitions and functions of cash flow rights or control rights have been reported (Soltani & Azampour, 2020), there has been a lack of empirical examination of the contracts entered into in the venture capital industry of the country. In this regard, this research has been conducted.

Given that 123 venture capital contracts pertain to 23 venture capitalists, addressing and analyzing all aspects of these contracts is a challenging task and beyond the scope of a scientific article. However, one of the most significant findings in this article is the high uniformity of contracts' terms. All contracts, regardless of the associated investor, share a considerable similarity in terms of content (Table 3 and Table 4). This indicates excessive imitation and repetition of contractual texts. Neglecting the necessity of designing contracts tailored to the venture-backed company and the entrepreneur's characteristics leads to the elongation of contract terms and prolonged, less effective negotiations.

It is crucial to initially formulate the business plan of the venture-backed company and reach an agreement between the investor and the entrepreneur. The parties should optimally outline their perspectives on existing risks and uncertainties and their specific features and constraints in the contract. While the main body of the contract may remain unchanged, at least 20 to 30 percent of the details will vary depending on the conditions of each entrepreneur in each contract.

Venture capital contracts in Iran, similar to their counterparts in the United States, predominantly rely on preferred shares to finance startups (Authors, Kaplan & Stromberg, 2003). Although Cummings (2005) has challenged this in the context of Canadian contractual data, some venture-backed companies in

Iran have yet to utilize liquidation preference rights, raising questions and ambiguity. However, investors have predominantly used 1x liquidation preference, which is unexpected given the inflationary conditions in Iran.

It was expected that investors' behavior in obtaining cash flow rights would reduce their cash flow rights with the company's growth stage and the reduction of operational and commercial risks (Bengtsson & Sensoy, 2011). However, such a trend must be identified in the analysis (Table 3). Antidilution rights were acquired maximally, regardless of the entrepreneur's capabilities or the company's growth stage. Redemption rights have received minimal attention from Iranian investors, even though this aspect should be carefully formulated considering the absence of suitable exit mechanisms. While entrepreneurs have limited bargaining power, given the capital scarcity in the Iranian market, paying more attention to pay-to-play rights may benefit them.

Like cash flow rights, control rights have been acquired maximally and without a meaningful and appropriate correlation with factors such as growth stage, entrepreneur capability, and the nature of the company's assets. This may indicate an overly conservative approach by venture capitalists. Although other factors, such as high government intervention in the innovation ecosystem and reduced risk-taking motivation among relevant managers, can be among the factors influencing venture capitalists' excessive approach to control and cash flow rights, this issue could be subject to investigation and examination in future research.

For future research, several recommendations exist: We can separate contracts and evaluate the patterns and dynamics of contract terms for each startup across various fundraising series. Another significant area of research could be a more detailed evaluation of the effectiveness of contract terms. These terms are implemented to foster trust and reduce transaction costs, but the degree of success achieved needs to be clarified. Furthermore, we need to concentrate more on specific industries and conduct research dedicated to a limited number of them to understand the industry effect better. This is also true for other criteria, such as growth stage, and other vital factors, such as conducting more comprehensive surveys.

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References

- Aghion, P., & Bolton, P. (1988). An "incomplete contract" approach to bankruptcy and the firm's financial structure.
- Aghion, P., & Bolton, P. (1992). An incomplete contracts approach to financial contracting. *The Review of Economic Studies*, 59(3), 473–494.
- Bascha, A., & Walz, U. (2001). Convertible securities and optimal exit decisions in venture capital finance. *Journal of Corporate Finance*, 7(3), 285–306.
- Becht, M., Bolton, P., & Röell, A. (2003). Corporate governance and control. In *Handbook of the Economics of Finance* (Vol. 1, pp. 1–109). Elsevier.
- Bellavitis, C., Kamuriwo, D. S., & Hommel, U. (2019). Mitigating moral hazard and adverse selection in venture capital financing: the influence of the country's institutional setting. *Journal of Small Business Management*, 57(4), 1328–1349.
- Bengtsson, O., & Hand, J. R. M. (2011). CEO compensation in venture-backed firms. *Journal of Business Venturing*, 26(4), 391–411.
- Bengtsson, O., & Sensoy, B. A. (2011). Investor abilities and financial contracting: Evidence from venture capital. *Journal of Financial Intermediation*, 20(4), 477–502.
- Bigus, J. (2006). Staging of venture financing, investor opportunism, and patent law. *Journal of Business Finance & Accounting*, 33(7-8), 939–960.
- Black, B. S., & Gilson, R. J. (1998). Venture capital and the structure of capital markets: banks versus stock markets. *Journal of Financial Economics*, 47(3), 243–277.
- Bottazzi, L., Da Rin, M., & Hellmann, T. (2016). The importance of trust for investment: Evidence from venture capital. *The Review of Financial Studies*, 29(9), 2283–2318.
- Broughman, B., & Fried, J. (2010). Renegotiation of cash flow rights in the sale of VC-backed firms. *Journal of Financial Economics*, 95(3), 384–399.
- Burchardt, J., Hommel, U., Kamuriwo, D. S., & Billitteri, C. (2016). Venture capital contracting in theory and practice: implications for entrepreneurship research. *Entrepreneurship Theory and Practice*, 40(1), 25–48.
- Caliendo, M., Künn, S., & Weissenberger, M. (2020). Catching up or lagging behind? The long-term business and innovation potential of subsidized startups out of unemployment. *Research Policy*, 49(10), 104053.
- Chong, Z., & Luyue, Z. (2014). The financing challenges of startups in China.

- Cowden, B. J., Bendickson, J. S., Bungcayao, J., & Womack, S. (2020). Unicorns and agency theory: Agreeable moral hazard? *Journal of Small Business Strategy* (archive only), 30(2), 17–25.
- Cumming, D. J. (2005). Agency costs, institutions, learning, and taxation in venture capital contracting. *Journal of Business Venturing*, 20(5), 573–622.
- Cumming, D., & Johan, S. (2008). Information asymmetries, agency costs, and venture capital exit outcomes. *Venture Capital*, 10(3), 197–231.
- Cumming, D., Schmidt, D., & Walz, U. (2010). Legality and venture capital governance around the world. *Journal of Business Venturing*, 25(1), 54–72.
- De Meza, D., & Webb, D. C. (1987). Too much investment: A problem of asymmetric information. *The quarterly journal of economics*, 102(2), 281–292.
- Dewatripont, M., & Tirole, J. (1994). A theory of debt and equity: Diversity of securities and manager-shareholder congruence. *The Quarterly Journal of Economics*, 109(4), 1027–1054.
- Durrani, M., Boocock, G., Durrani, M., & Boocock, G. (2006). An Introduction to Venture Capital. *Venture Capital, Islamic Finance and SMEs: Valuation, Structuring and Monitoring Practices in India*, pp. 35–51.
- Ewens, M., Gorbenko, A., & Korteweg, A. (2022). Venture capital contracts. *Journal of Financial Economics*, 143(1), 131–158.
- Ewens, M., Gorbenko, A., & Korteweg, A. (2022). Venture capital contracts. *Journal of Financial Economics*, 143(1), 131–158.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Feld, B., & Mendelson, J. (2019). *Venture deals: Be smarter than your lawyer and venture capitalist*. John Wiley & Sons.
- Gilson, R. J. (2002). Engineering a venture capital market: lessons from the American experience. *Stan. L. Rev.*, 55, 1067.
- Gilson, R. J., & Schizer, D. M. (2003). Understanding venture capital structure: a tax explanation for convertible preferred stock. *Harvard Law Review*, 116(3), 874–916.
- Glücksman, S. (2020). Entrepreneurial experiences from venture capital funding: exploring two-sided information asymmetry. *Venture Capital*, 22(4), 331–354.
- Gompers, P. (1997). Ownership and control in entrepreneurial firms: An examination of convertible
- Gompers, P. A. (1995). Optimal investment, monitoring, and the staging of

- venture capital. *The Journal of Finance*, 50(5), 1461–1489.
- Gompers, P. A., & Lerner, J. (2004). *The venture capital cycle*. MIT press.
- Hassan, A. E., & Leece, D. (2007). Agency and information problems in venture capital markets: An empirical study of the information needs of UK investors and the demand for accounting information. *The Journal of Private Equity*, pp. 93–112.
- Hale, J. K. (2009). *Ordinary differential equations*. Courier Corporation.
- Hart, O. (2001). Financial contracting. *Journal of Economic Literature*, 39(4), 1079–1100.
- Hellmann, T. (1998). The allocation of control rights in venture capital contracts. *The Rand Journal of Economics*, pp. 57–76.
- Heydari, M., & Mohammadi, P. (2017). Agency Issues in Venture Capital Investment and Solutions to Address Them at Different Stages of Growth in Innovative Companies in Iran. *Innovation Management*, 6(3), 113-140
- Holmström, B. (1979). Moral hazard and observability. *The Bell Journal of Economics*, 74–91.
- Iyer, R., & Sautner, Z. (2018). Contracting between firms: Empirical evidence. *Review of Economics and Statistics*, 100(1), 92–104.
- Joshi, K., & Bala Subrahmanya, M. H. (2019). Information asymmetry risks in venture capital (vc) investments: Strategies of transnational vc firms in India. *Transnational Entrepreneurship: Issues of SME Internationalization in the Indian Context*, 117-142.
- Kaplan, S. N., & Strömberg, P. (2003). Financial contracting theory meets the real world: An empirical analysis of venture capital contracts. *The Review of Economic Studies*, 70(2), 281–315.
- Kaplan, S. N., Martel, F., & Strömberg, P. (2007). How do legal differences and experience affect financial contracts? *Journal of Financial Intermediation*, 16(3), 273–311.
- Khanin, D., & Turel, O. (2013). Conflicts between venture capitalists and CEO's of their portfolio companies. *Journal of Small Business Strategy*, 23(1), 31-54.
- Marx, L. M. (1998). Efficient venture capital financing combining debt and equity. *Review of Economic Design*, 3(4), 371–387.
- Nahata, R. (2019). Success is good, but failure is not so bad either: Serial entrepreneurs and venture capital contracting. *Journal of Corporate Finance*, pp. 58, 624–649.

- Neher, D. V. (1999). Staged financing: an agency perspective. *The Review of Economic Studies*, 66(2), 255–274.
- Ramón-Llorens, M., & Hernández-Cánovas, G. (2013). The venture capital contract and the Institutional Theory in a Spanish setting. *Intangible Capital*, 9(1), 322–340.
- Ramsinghani, M. (2014). *The business of venture capital: insights from leading practitioners on the art of raising a fund, deal structuring, value creation, and exit strategies*. John Wiley & Sons.
- Rauterberg, G. (2021). The separation of voting and control: the role of contract in corporate governance. *Yale J. on Reg.*, 38, 1124.
- Rowell, D., & Connelly, L. B. (2012). A history of the term "moral hazard". *Journal of Risk and Insurance*, 79(4), 1051–1075.
- Sahlman, W. A. (1990). The structure and governance of venture-capital organizations. *Journal of Financial Economics*, 27(2), 473–521.
- Sarah Glücksman (2020). Entrepreneurial experiences from venture capital funding: exploring two-sided information asymmetry, *Venture Capital*, 22:4, 331-354, DOI:10.1080/13691066.2020.1827502.
- Schertler, A. (2000). *Venture capital contracts: A survey of the recent literature*.
- Soltani, A., Azampour, M. , (2020). Control Agreements in Venture Capital Contracts. *Legal Research Quarterly*, 22(88), 201-228.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393-410.
- Sufi, A. (2007). Information Asymmetry and Financing Arrangements: Evidence from Syndicated Loans. *THE JOURNAL OF FINANCE* (2), pp. 1-40
- Tian, X., Huang, Z. (2023). Stage Financing in Venture Capital. In: Hammer, B., Cumming, D. (eds) *The Palgrave Encyclopedia of Private Equity*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-38738-9_48-1
- Trester, J. J. (1998). Venture capital contracting under asymmetric information. *Journal of Banking & Finance*, 22(6–8), 675–699.
- Triantis, G. G. (2001). Financial contract design in the world of venture capital. *The University of Chicago Law Review*, 68(1), 305–322.
- Wang, S., & Zhou, H. (2004). Staged financing in venture capital: moral hazard and risks. *Journal of Corporate Finance*, 10(1), 131–155.
- Wong, A. Y. (2002). *Angel finance: the other venture capital*. Available at SSRN 941228.

Xie, F., Zhang, B., & Zhang, W. (2022). Trust, incomplete contracting, and corporate innovation. *Management Science*, 68(5), 3419–3443.

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