

# Bachelor Thesis

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## **Executive Summary**

Start-ups are young companies that develop innovative products and aim at outstanding financial results. In the early pre-revenue product development stages, these companies are characterized by high financing needs, which are often covered by investors. Business angels and venture capitalists (VCs) are the most common providers of a start-up capital and they ask equity in return. Start-ups with a high growth potential represent an attractive opportunity for investors because of a steep increase in value at the time of an exit. However, these high-risk/high-return young companies, characterized by short operating and financial history, high uncertainty and instability, exhibit high level of information asymmetry, which gives rise to agency problems. The principal-agent theory illustrates a number of problems that may appear between shareholders and managers. It attempts to explain the causes and proposes tools to mitigate and possibly solve them.

The objective of this study is twofold: (1) to analyze agency problems in start-ups and (2) to present remedies that can be used to mitigate potential problems and conflicts between entrepreneurs (i.e. agents) and investors (i.e. principals).

On a first instance, a literature review on recent and old fundamental papers from business and financial journals has been carried out to analyze the problem from a theoretical point of view. Additionally, a number of targeted interviews to entrepreneurs and investors have been made to collect field feedback and to identify similarities with the agency theory.

More in particular, the literature review proposes an excursus on how managerial agency issues manifest in start-ups, on how they are perceived, and on which instruments are applied in practice to solve or mitigate these conflicts and problems. The interviews with entrepreneurs and investors are used to identify real evidences of the principal-agent problem and to discern mitigating mechanisms that are adopted in the real world. The interview sample consisted of 15 entrepreneurs from successful Swiss start-ups and of 20 most active investors in the Swiss as well as international investment arena.

Three categories of conflicts between investors and entrepreneurs are identified in the literature review:

- *Contractual conflicts*: they emerge because of the disability of the parties to perfectly prearrange and predict the process and the outcomes of the venture. For example, conflicts over financing and exit strategies.
- *Contextual conflicts*: they are related to the investors' level of involvement in the portfolio company and to the company's perceived performance. For instance, in firms in which the VCs are highly involved strategically but not managerially, the level of conflict is lower. Low levels of control encourage trust and confidence, while high levels of control have the opposite effect. Other contextual conflicts are related to strategic decision-making on R&D activities and marketing schedule.
- *Procedural conflicts*: they are connected with the information exchange between investors and entrepreneurs, which depends on trust and cognitive sharing of underlying contractual arrangements.

The following mechanisms are suggested to mitigate these conflicts:

1. *Financial contracts*: the cash flows and the control rights shall be allocated in such a way that the entrepreneur has an incentive to behave optimally.
2. *Due diligence*: the investor shall collect information on the venture before deciding whether to invest in it.
3. *Reporting*: information and monitoring shall be implemented on a regular basis during the course of the venture.

According to the principal-agent theory, entrepreneurs turn into self-serving, opportunistic agents and try to maximize their utility when they start sharing profits and costs of the venture with investors. Separation of ownership and control results in divergence of interests and the lack of a transparent information flow, i.e. information asymmetry. This originates the following issues:

1. *Adverse selection*: the principal (e.g. investor) is not able to differentiate between good and bad agents (e.g. managers) before closing the contract because of agent's hidden information.

2. *Moral hazard*: the agent benefits from the information that is not revealed to the investor, also referred to as “hidden information”, and from the actions that cannot be observed by the investor, also referred to as “hidden actions”.

More in detail, adverse selection, peculiar to the pre-investment phase, and moral hazard, peculiar to the investing period, can lead to the following phenomena:

- *Shirking*: the entrepreneur tries to pursue individual goals more than organizational goals.
- *Higher number of perquisites*: the entrepreneur tries to set more incentive schemes that maximize his personal wealth.
- *Managers want to remain in power*: entrepreneurs may hide underperformance in order not to be replaced by the VC.
- *Risk aversion of managers*: when the agency starts, the VC is risk neutral while the entrepreneur becomes risk averse.
- *Free cash flows problem*: the agent may alter the cash flows to hide a negative Present Value project or to reduce the returns for the VC.

These problems damage the wellbeing of the company: in fact, excessive monitoring and control may cause large losses. However, tools can be adopted to mitigate these issues, such as:

1. *Ex-ante due diligence*: principal screens the venture’s characteristics and potential before committing to an investment.
2. *Monitoring*: it reduces information asymmetry between the agent and the principal.
3. *Bonding*: it reduces agency problems by aligning the interests of the agent to those of the principal and it can be further divided into:
  - a. *Contracts*: they set a clear progression plan that can be easily monitored by the principal.
  - b. *Incentives*: they set rewards for the entrepreneur if the principal’s objectives are maximized.

These theoretical findings have been partly supported by the interviews. In fact, contractual and contextual conflicts occur also in practice while no procedural conflicts were identified. Most of the investors and entrepreneurs describe their relationship as

full of trust and confidence and with a high information exchange. In accordance with the theory, the interviews have shown that adverse selection problems occur. A large majority of investors consider that start-ups are overvalued while a large majority of entrepreneurs are of opposite advice. This type of situation leads both parties to potential conflicts, and generates disputes on company valuation and financing agreements. Prior to the investment decision, investors carry proper due diligence activities to estimate the real value of the company and both parties try to resolve this situation by choosing appropriate financing strategies.

Practically, moral hazard problems appear in a smaller degree. As for the entrepreneurs, most of them do not change their attitude after the financing rounds take place and neither entrepreneurs nor investors report that managers start to invest less effort and consume more perks. The most commonly reported change concerns only the incentive schemes, which entrepreneurs try to put in place such as rewarding managers and key employees with shares for achievements and utilizing Employee Stock Option Plans (ESOP). The majority of entrepreneurs believe that being compensated for the achievements increases their motivation, and most of the investors are of the same opinion.

Investors employ all the tools suggested by the literature to minimize the agency problems, the most common being monitoring, coaching, supervising, controlling, staged financing and ad-hoc contracts. It is interesting to note that investors do not consider convertible securities as the means to mitigate agency problems.

A great concern in agency theory is related to agency costs. However, the field survey shows that the majority of the investors do not have high concerns about them. The success of these companies depends on the investors' active involvement, and the cost is rather viewed as an investment or a contribution.

This work offers a number of suggestions for further research within the start-up domain, which should be of primary importance considered the fact that entrepreneurship is the motor of a world economy and often is the reason for drastic changes in our lifestyle and, overall, in the innovation.