



UNIVERSIDADE CATÓLICA PORTUGUESA

Financing and Investing Mechanisms in Swiss Sustainable Entrepreneurship

An exploratory case study

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Abstract

This Master's Final Work is aimed to present a holistic perspective on the Swiss Sustainable Entrepreneurial Ecosystem, and the respective Financing and Investing mechanisms behind the Capital Structure decisions of a startup.

The methodology used was based on an exploratory case study through empiric work on interviews, direct observation from conferences and network gatherings, participative observation through an internship in organizational context, and deeper research from benchmarking reports.

Moreover, from the findings and data collected, the main conclusions drawn are based on listed companies whose capital structure is not optimal targeted, but rather with a preference order and more likelihood to resource to debt given their high liquidation value, different from conventional startups, who have less collateral power and as so will resource less to debt. Finally, sustainable startups will suffer from greater market gaps so their financing decisions are trusted mostly on internal funds, resourcing to external equity only in case of crowdfunding or impact investing solutions.

Nevertheless, from the hypothesis theory and proposed model, there are still some managerial implications to bear in mind since it is a swiss specific case and an emerging market niche. As such, future research directions should focus on deepening the literature and impact investing measurement criteria and gaining practical knowledge in these fields.

Keywords: Entrepreneurial Finance, Alternative Finance Solutions, Sustainable Finance, Impact Investing, Swiss Startups, Capital Structure

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Sumário

Este Trabalho Final de Mestrado tem por objetivo apresentar uma perspectiva holística sobre o Ecossistema do Empreendedorismo Sustentável na Suíça, e os respectivos mecanismos de Financiamento e Investimento que suportam as decisões da Estrutura de Capital de *startups*.

A metodologia utilizada foi um caso de estudo exploratório através de trabalho empírico por entrevistas, observação direta em conferências e momentos de network, observação participativa através do estágio realizado em contexto organizacional, e por relatórios de benchmarking recolhidos.

Seguidamente, através dos resultados obtidos, as principais conclusões são referentes a empresas listadas no mercado que não têm estrutura de capital ótima, mas uma ordem de preferência de recorrerem a dívida, ao contrário das *startups* convencionais que possuem menor valor de liquidação e poder colateral. Já as *startups* de empreendedorismo sustentável, uma vez que sofrem maiores gaps de mercado, as suas decisões de financiamento são redirecionadas para fundos internos, e posteriormente para capital externo como *crowdfunding* ou soluções de investimento de impacto.

Todavia, pela hipótese de teoria proposta, há ainda algumas implicações a ter em conta, uma vez que é um caso de estudo específico à Suíça e retrata um nicho de mercado. Como tal, direções recomendadas para pesquisa futura prendem-se no aprofundamento da literatura e critérios de medição do paradigma de investimento de impacto, e ainda no conhecimento prático nestes setores.

Palavras-chave: Finanças de Empreendedorismo, Soluções de Financiamento Alternativo, Finanças Sustentáveis, Investimento de Impacto, Estrutura de Capital, *Startups* Suíças

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List of Abbreviations

VC – Venture Capital

BA – Business Angel

GEDI – Global Entrepreneurship and Development Index

IPO – Initial Public Offer

OECD – Organization for Economic Cooperation and Development

GIIN – Global Impact Investing Network

SECO – State Secretariat for Economic Affairs

SWOT – Strengths-Weaknesses-Opportunities-Threats

CEO – Chief Executive Officer

MVP – Minimum Valuable Product

PMF – Product Market Fit

Chapter 1

Introduction

With the economic revolution of entrepreneurial finance, the startup ecosystem has been skyrocketing through the last years and demanding a new mechanism for funding supply that traditional sources don't meet. The premise behind it is that financial constraints such as creditworthiness policies and information opacity are "precluding high-quality entrepreneurs with good ideas [...] from entering product markets because they are unable to access adequate capital to start a new business" (Kerr & Nanda, 2009, p. 1). The Alternative Finance Market has been backing up this with new financial solutions such as Venture Capital (VC), Business Angels (BA), and even Crowdfunding. However, there have been studies that show how economic disruption, as is the case of the current pandemic, and respective procyclical measures, can still downsize the funding of early-stage startups (Bhaird, Owen & Freel, 2019).

Macroeconomically speaking, with the current global pandemic, it is crucial to have a long-term perspective - there is a high future uncertainty arising with the instability of the economy and its evident crisis. One of the greatest concerns is the necessity to support struggling companies, specifically small and medium enterprises as startups, that are more exposed to this unsafe fast-changing environment. These are also the ones that have a transformative model thinking positively correlated with this emerging disruptive shifting, which has the logical implication of them being a key for the new post-Covid-19 era, allowing a progression into economic stability (Dominguez, 2017). To add to this research need, as funding is crucial to generate growth and future added value, the financial decisions taken within the capital

structure of these firms, are also a relevant study direction, since there are a few models that tackle this matter within the startup case, but not fully explore it.

In this landscape of entrepreneurial activity, Switzerland has become a logical background for further research. According to the 2019 Global Entrepreneurship and Development Index (GEDI), which measures the density of entrepreneurial activity in countries whose economy is primarily led by innovation, Switzerland is in second place right after the United States. Further deeper into the market of Alternative Finance, there is a recent niche of Impact Investing emerging, for which Switzerland is a pioneer and a global leader in this newly surfaced sector, being responsible for one-third of the capital allocated to its field (Sa, 2021). As such, a case study was developed to explore the alternative and impact finance swiss markets, attempting to define the strategic decision associated with the value creation of early-stage impact-led companies and the signaling approach for the investors. Hence the research question is: "What are the triggers for the adoption decision of alternative and impact-driven finance solutions, and the implications on the financing and investing mechanisms in the swiss entrepreneurial scene?"

With this study, the aim is not only to develop furthermore the literature existent on entrepreneurial funding but also to complement it with the new thematic of impact investing attempting to define the financial dynamic inside the decision-making process of a swiss sustainable startup. Additionally, it is expected to give the sustainable entrepreneurs and the impact investors communities emerging in Switzerland, a more holistic view of the market, the solutions available for each partaker, and the different scenarios and capital decisions that can unfold after the startup funding solutions have taken into place. It is expected that the study results can then expand and be applied to other innovation-led countries that need to mitigate their market gaps in entrepreneurial capital support.

For this research, the approach methodology used was based on an exploratory study with a case study on the Swiss landscape. As it is a rather recent topic emerging on the market, there is not much literature or quantitative data. However, to mitigate

this challenge, extensive qualitative research was made through interviews and direct observation with conferences and workshops to get a first-hand experience of this paradigm. Additionally, an internship in an organizational context took place in a swiss business consultant for startups – 7Generations in Bern – to have as well participative observation.

Throughout this study there will be a chapter dedicated to the literature review of both corporate and entrepreneurial market structures, exploring their funding systems and financial decisions taken within big and small companies. Still in that section, a first approach to the sustainable finance emerging niche of impact finance will be introduced. There will be as well included a theoretical framework in the chapter. Developing the methodology used and the case study explored, it will unfold into an extensive section dedicated to analysis and discussion of the proposed theory discovered through the exploratory study results. Finally, to conclude, there will be a moment to point out a summary of the findings, overall contributions, and possible directions for further research.

Chapter 2

Literature Review

2.1 Capital Structure in Corporate Finance

The capital structure of a company is symbiosed with the financing and investing decisions. It refers to the mix of debt and/or equity allocated to assets and operations financing. The capital structure has always been a controversial topic, where there is no common acceptable theory. More than that, when considering the various available models, some of them lead to contradictory results and conclusions, and the assumptions are not always satisfactory. Looking at the Capital Structure theory, from Modigliani and Miller (1958), under certain suppositions, in perfect and efficient markets, “the costs of different forms of finance do not vary independently and therefore there is no gain from opportunistically switching among them” (Baker & Wurgler, 2002, p. 1), hence, the market value of a firm is independent of its capital structure. Moreover, with the Kraus and Lintzenberg Trade-off Theory (1973), it was added the market imperfections of transaction costs, there was a balancing determinant relationship between bankruptcy costs and tax-shield benefits. Firms financing policy regarding the debts’ tax advantages as well as bankruptcy disadvantages influence the financing mix that determines a company’s capital structure and its insolvency state (Ghosh & Sinha, 2009).

Nonetheless, with the market imperfections analysis, there is also the emerging subject of information asymmetry in the economy, hence, the importance of the market information quality and the financial behavior of economic agents. This relationship is directly connected with the agency theory (Jensen & Meckling, 1976), which supports

the paradigms of transactions costs but ultimately, and more importantly to this scenario, the paradigm of information asymmetry.

Finally, according to the Pecking Order Theory of Myers and Majluf (1984), who stated that there is an order of preference while deciding the financing policy for new projects, as referred by Donaldson's work (1961) when listed companies design their strategic decision, they will not target an optimal capital structure, but rather establish an inclination order of financial resources: "firms prefer to finance new investments from retained earnings and raise debt capital only if the former is insufficient" (Antoniou, Guney & Paudyal, 2002, p. 2), recurring to external equity as the last source.

2.1.1 Research Gaps

The Pecking Order Theory of Myers and Majluf (1984), is mostly used when approaching listed firms, yet there is still left to research on the relevance and applicability of this theory for small businesses' capital structure and how it signals potential investors (Hahn & Kwon, 2017). According to Antoniou, Guney & Paudyal (2002), there is an attempt to adapt this model for small enterprises, as "the availability of internal capital (retained earnings) depends on the profitability of the firm, one could expect an inverse relationship between leverage and profitability" (Antoniou, Guney & Paudyal, 2002, p. 3), supported by their accessibility limitations to the financial capital markets.

Commonly the vast majority of studies discuss how these market asymmetries regarding information, creditworthiness policies, nature of assets, or even business models and economical life cycles can constitute blockages for the small businesses to grow added value on their company. Diving deep into the drawback of information asymmetry, more than acknowledging the importance of financial intermediaries as incubators and accelerators that "address information problems through the activities of screening, contracting and monitoring" (Berger & Udell, 1998, p. 2), providing a safe environment with mentorship on signaling business model plans for the funding entities and institutions, "one needs an overarching theory that links concepts such as

agency theory, transaction costs, asymmetric information, stewardship theory and human relationships” (Nascimento, 2021, p. 169) that presents itself as a trampoline step shifting from the capitalism valuation to a common and shared shareholder mindset of social and environmental goals (Nascimento, 2021), backing up the newly emerged solutions of sustainable investing and entrepreneurship.

Proceeding within this scope of incubators ecosystem, to tackle the financial constraint of funding access, a key to this market gap is through alternative financing that is more accessible to small companies, more efficient with bureaucracy, and a typically established partnership with accelerators and incubators. This is a rather recent market, which will be explored in the next section, that has been fast-growing exponentially, especially within the tech platforms and in a post-crisis scenario, with the economic regression and failure of traditional financing systems, the demand tends to search for this unconventional solutions (Allen, 2012), which only elevates its relevance on this economic cycle still adjusting to the global pandemic impact.

2.2 Capital Structure in Entrepreneurial Financing

On a time horizon span, the lifecycle of small businesses and startups is what signals their financing decisions, however, there is little consent on a universal definition. Having in mind that the focus of this study is on the Swiss Startups, the State Secretariat for Economic Affairs (SECO) in Switzerland defines it only using the criteria of the number of employees (The Federal Council, 2020). However, according to the Commission of the European Communities (2003), the following definition applies to the European Commission Members:

The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises that employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million (European Commission, 2015, p. 3).

Moreover, the European Commission adopted a new initiative, where it was defined a Startup as being an enterprise with an age younger than ten years, with

innovation in a product or business model, and the aim to scale. Despite Switzerland not belonging to the European Union, it has no standard legal definition and given the similarities with the Federal Council (2020) framework, the European Commission (2015) definition will be the one used in this study. This allows gathering a more universal scale for further comparisons. Size, age, and information availability are the variables that influence this evolution.

Through a synthetic infographic of the startup's economical lifecycle and respective sources of financing, presented in Figure 4 Appendix A, it's possible to have a clear holistic perspective on the different alternative financing solutions that startups resource. Despite the broad term that is "Alternative Finance", the Cambridge Center for Alternative Finance describes its terminology as "activities that have emerged outside the incumbent banking systems and traditional capital markets" (Ziegler, Shneur & Wenzlaff, 2021, p. 30). The most relevant taxonomy of Alternative Finance for this study is Venture Capital, where an investor buys a share in a venture idea, develops and natures it, and then exits with the support of an investment banker (Zider, 1998). It is a capital source to bridge the funding gap of traditional ones such as banks and internal funds. Moreover, Business angels are also an important alternative solution which consists of a source of consulting and financing through equity investment to make long-term profits (OECD, 2014). Finally, for crowdfunding sources, the same report proposes its definition as an assembly of people who invest small amounts in disadvantaged entrepreneurs and ventures, usually through the internet (OECD, 2014).

Berger & Udell (1998) solidify the perceived theory of small firms having extreme information opacity in the market, therefore not recurring to any kind of external financing until they make an offer to the public market through the Initial Public Offer (IPO). Hence, these firms mostly depend on initial insider financing in the very earliest stages of their lifecycle (Berger & Udell, 1998). Additionally, Robb and Robinson (2012) studied the capital structure decisions of new firms, based on a Kauffman Firm Survey data set, tracking up to 5,000 firms from their seed stage in 2004 along the years,

until their early years of operation. This study presents a model that confirms how informational asymmetry can also lead to limited access to debt. Furthermore, on OECD (2006) it was verified how this gap of information with the lack of knowledge about financing sources and options is a limitation and constraint for Startups and SMEs financing (OECD, 2006). At this stage, this type of companies usually have negative cash flows, uncertainty of future viability with market success, and unstable and raw business models, despite their high added value for the economy with elevated performance productivity and efficiency in cost management (OECD, 2006).

While they develop their formal business strategy and do a market prospection for product and client acquirement, angel investment financing will start to surface as a solution. This is complemented by the article published by Salomon (2016) which explains how, in Switzerland, in these more recent financial ecosystems, venture capital firms are experiencing difficulties with their investment strategy, so their target has been shifted from early-stage startups to companies whose expansion from the product and market fit are already being developed. As so, for pre-seed and seed startups, their funding source has also shifted from venture capital to crowdfunding platforms and angel investment. As Berger & Utell (1998) present, after a few rounds of business angels, venture capital usually comes later to finance product development costs and full-scale marketing.

After this deeper development and growth stage, as the firm gains maturity, private equity investors gain momentum. Brewer & Genay (1994) conducted a study that proves how private equity financing is allocated mostly to companies and activities that have few tangible assets, a high cost of debt financing, and little collateral power. Whereas, private debt is more used for the firms that behave the opposite.

Both Berger & Utell (1998) and Denis (2004) point out that after making to IPO and as startups gain more profitability and collateral power shifting their nature of assets into more tangible ones, they will leverage their financing decisions from mostly or only equity to have a percentage of debt financing as well. The theory defended is that

enterprises with higher risk, mostly with intangible assets, will often prefer external equity, as enterprises with lower risk, and as so, mostly with tangible assets, are more signaling attractive to receive external debt, which automatic correlates with the “notion of a financial pecking order” (Berger & Udell, 1998).

2.2.1 Research Gaps

Bhaird (2012) approached the negative financial exposures to economic cycles of credit expansion followed by periods of credit contraction for SMEs. As small firms usually don't have access to a great amount of diverse funding, there are already adverse effects which are then intensified in a period of economic recession. If there is a period of credit expansion before the recession, firms typically take the possibility to leverage their financing decisions by resourcing to debt finance, accumulating large debt-to-asset ratios, which has future negative detrimental effects when it is followed by an economic crisis and respective procyclical consequences (Bhaird, 2012). This will affect not only the small firms with non-diverse funding and excessively leveraged financing but also the ones with little collateral power. The author also explores how the investing decisions of the firms are postponed in a case of economic recession, and such, financing itself not being on the usual level of requirement (Bhaird, 2012). Another perspective to complement the market influence is presented by Bhaird, Owen & Freel (2019), where it is considered how the alternative finance solutions for early-stage firms, during an economic crisis, can partly contradict the negative procyclical effects. As the demand and supply for this type of source have been increasing rapidly in the last years, Barnett (2015) predicts that it might outcome the resource to traditional sources.

There is as well a new market niche emerging, which will be addressed in the next section – sustainable entrepreneurship. It has been surfacing and questioning both the attention of social and environmental entrepreneurs and impact investors. Mansouri & Momtaz (2021) find support for two theories that propose how “sustainable entrepreneurship achieves higher valuations in entrepreneurial finance

markets than conventional entrepreneurship does” (Mansouri & Momtaz, 2021). This study only enhances the attractiveness of sustainable entrepreneurship both for entrepreneurs and investors and how high its value is perceived on the market.

2.3 Sustainable Entrepreneurship – Impact Investing Market

Entrepreneurial activity and innovation have always been a major topic of discussion among various authors and extensive literature. Schumpeter (1942) introduced it as creative destruction. He underlines the negative effects of the powerful machine that is the entrepreneurial ecosystem, by enhancing and gathering diminishing aspects of the cost-efficiency business model, production process, consumption patterns, product characteristics, and market dynamics (Schumpeter, 1942), and surpassing them with what sustainable entrepreneurship can bring to the table, with social and environmental progress. There is no standard definition of this term, however, Schaltegger and Wagner (2010) refer to sustainable entrepreneurship as a “contribute to solving societal and environmental problems through the realization of a successful business” (Schaltegger & Wagner, 2010, p. 224), with the main goal of “creating sustainable development through entrepreneurial corporate activities” (Schaltegger & Wagner, 2010, p. 224).

On the other side, impact investing has been a mainstream topic in the current years to back up the financial support needed for the regular operational cycle of sustainable firms and their investing decisions. Nevertheless, impact investing is not a synonym for sustainable finance, Sá (2021) refers to this investment concept as being one step further than sustainable finance. The Global Impact Investing Network (GIIN) and the Rockefeller Foundation define it as “investments intended to create positive impact beyond financial returns” (Morgan, 2010), for which the core characteristics that GIIN published on April 3, 2019, give ground for research expectations - intentionality, use of evidence and impact data in investment design, management impact performance, contribution to the growth of the industry.

This asset market is mostly dependent on private equity and private debt (Barber, Morse & Yasuda, 2019), however, there are few data sources available regarding the debt financing, as such, in this study, the focus will be targeted at private equity which is mostly venture capital and growth equity funds. Still, in the scope of the same study, it was conducted quantitative analysis on the willingness-to-pay willingness to payor impact from investors. Some investor groups exhibited a positive indicator as financial institutions like banks and insurance companies, public pension funds, investors in Europe, Latin America, and Africa, and development organizations and foundations. These last two groups showed a willingness-to-pay positive given their mission orientation, however small (Barber, Morse & Yasuda, 2019).

2.3.1 Research Gaps

What surfaces as a challenge from the sustainable entrepreneurship archetype, is the solidity and individuality of this new concept. Hall, Daneke & Lenox (2010) present an alluring perspective mentioning the Panacea Hypothesis – the belief in the potential of sustainable development and entrepreneurship for social transformation to mitigate fast industry and quick money mindsets - and the utopic illusory of this new paradigm, that lies behind a simple market pull. There is no constructed and tangible path to make the idea into realization, which the authors refer to as an obvious research gap. Sustainable entrepreneurs do not know yet how to exploit market opportunities as conventional ones do, and more than that, how their financing and investing decisions should move on the board that is the emerging market of innovation and development (Hall, Daneke & Lenox, 2010). As it is a rather recent thematic, the literature available on explanatory models for the capital structure inside social and environmental impact-led firms is still rudimental explored.

Nevertheless, when taking a look into the supply side, impact investors require sustainable enterprises to provide concrete and tangible indicators of the social and sustainable impact they aim to obtain, especially when regarding the GIIN chore

characteristics of impact investing. However, it is a rather complex process to know how can one measure the actual impact and what standard criteria make the fit.

2.4 Exploration directions

Following on the literature just reviewed, it will be explored how do the Pecking Order Theory (Myers and Majluf, 1984) and Denis (2004)'s Theory behave within the spectrum of swiss startups and their signal approach for possible future investors, focusing on the entrepreneurial ecosystem overall, but as well, particularly on sustainable entrepreneurship, and how can one measure its respective impact.

Nevertheless, another retrievable research direction lies mostly in exploring the capital market influence on the financing and investing decisions consequences for swiss startups after an economic crisis, as is the case of the current pandemic.

To fully understand the mechanisms of research, the next section presents not only the methodology taken into account during the thesis development but as well the arguments and motivations that led to the type of case study that was followed.

Chapter 3

Methodology and Case Study

3.1 Methodology

Having gathered the explorative direction through the analysis of the market and research gaps, this thesis will focus on unfolding the mechanisms present in the decision-making process of swiss startups and the reactive behaviors of investors to this capital structure signalization. The background will reach the entrepreneurial ecosystem of conventional (namely alternative finance market) and sustainable development (namely impact investment market) in Switzerland. As such, solidifying the research question: "What are the triggers for the adoption decision of alternative and impact-driven finance solutions, and the implications on the financing and investing mechanisms in the swiss entrepreneurial scene?"

With the following sub-questions:

- i. What is the strategic decision associated with the value creation of a swiss startup business model?
- ii. What are the motivations and indicators for each strategic decision?
- iii. How does the capital structure differentiate between conventional and sustainable entrepreneurship?
- iv. What are the patterned behaviors and preferences of swiss impact investors?
- v. What is the effect of the current pandemic on swiss startups?

As pointed out in the introduction chapter, this research has the motivation to expand the proposed theory into a wider spread of possible countries that need to mitigate funding gaps for small firms. As such, the methodology followed was through an exploratory case study, which by giving insights into the swiss entrepreneurial panorama, it is expected to constitute a driver pilot for other innovation-led potencies.

Despite the strengths of this method as the swiss market niche analysis of impact investing, the participative observation through an internship, and the direct onsite observation through conferences, workshops, and informal gatherings, it is also of matter to point out the respective weaknesses being it a study focused strictly in qualitative data since it is in a case study format and a rather recent topic, which makes the data available for quantitative data very limited. To notice that to tackle this blockage, benchmarking reports were reviewed and analyzed.

Some of the challenges that surfaced during the data collection period were the availability of interviewees in a pandemic scenario that had a willingness to participate in the study may it be with an offline or online configuration. Additionally, the short term of 4 months of participative observation given was not ideal for deeper research over a longer period. Another challenge that surfaced was the lack of knowledge available for early-stage entrepreneurs, which besides being a crucial trigger for the proposed theory, it impacted directly the study too.

Finally, as for the ethical and legal considerations that should be taken into account, to all the participants interviewed it was given a consent which entitled the confidentiality and anonymity status, for which was stated that the data gathered would be analyzed and presented for academic purposes only (Appendix B).

3.2 Case Study

As stated in the Introduction, the Swiss landscape was chosen based on its entrepreneurial hub and impact investing market niche. For a complete and narrow analysis of this dissertation proposition, within the suggestions purposed by Yin

(2009), a case study was developed to meet three necessities a) to answer how is the decision making process of resourcing to financing solutions within swiss startups and the decision making process of allocating capital investment within swiss investors, b) to answer why those decisions are made and what are the triggers that potentialize both, c) to cover contextual arguments of the swiss panorama for expansion of proposed theory applicability. The theory was complemented by touching the surface of impact investment measurement and the economic and financial effect of the pandemic on the swiss entrepreneurial landscape. As such the unit of analysis is the decision-making process of financing and investing decisions in the Swiss entrepreneurial ecosystem, particularly for startups, but as well for investors.

The first step is to provide a model for the conceptual framework (shown below) with the motivation to identify the participants of the study, the relationships between them, and the internal and external influencing factors. Secondly, it was developed a benchmarking segment for a brief contextualization of the swiss current economic and financial situation. Subsequently, before presenting the data collection, a segment for a sampling of all the participants is made. The data collection process took place in Switzerland having lasted 4 months from September 27th until January 27th and was made through own empirical work gathering information from 6 interviews, 1 conference, internship meetings, networking events, and other sources of evidence such as benchmarking reports.

After all these steps, the expected result is to have ground for analysis and discussion and a final process theory developed with all the findings (Langley, 1999).

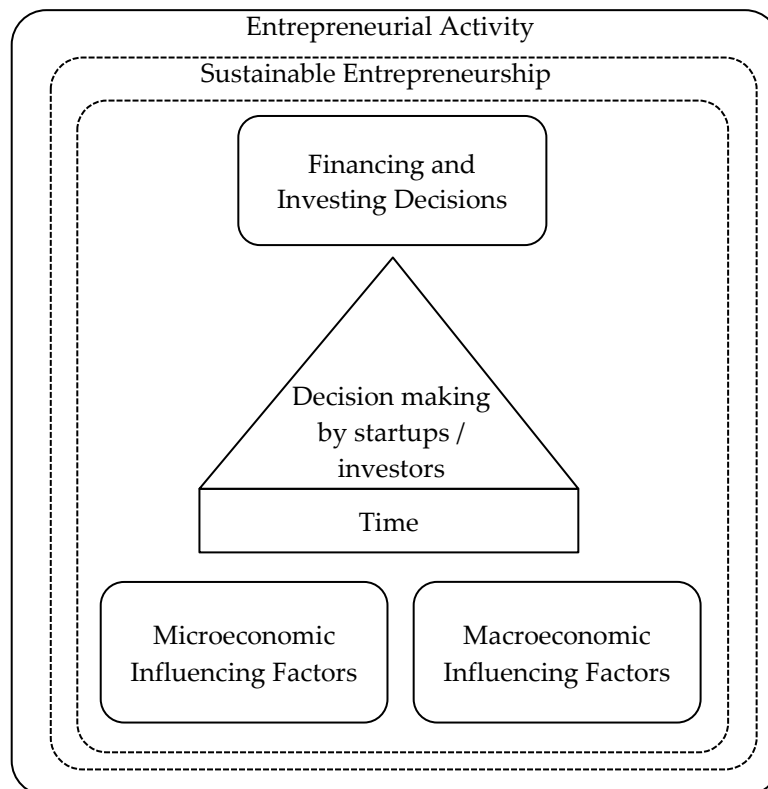


Figure 1: Conceptual Framework

Source: Adapted from (Baxter, 2003)

3.2.1 Benchmarking

The Swiss Federal Council Report (2017) sets the country with ideal framework conditions for fast-growing startups to set place, despite the low level of motivation for entrepreneurial careers among the swiss community. It is not perceived as a fear of failure or risk aversion profile, but rather as one more factor enhancing the idealistic conditions set on the entrepreneurial ecosystem as is the case of low rate of unemployment, high income, and high rate of market participation, making the creation of startups limited to only when necessary and when so, they are generated with high-quality business models (The Federal Council, 2017). "At the same time, the identification and realization of a good business idea require knowledge and skills which are also valuable on the labor market" (The Federal Council, 2017), commenting on the swiss information and educational gap. Moreover, within the venture financing,

while these funding constraints are noticeable, the venture capital market is up and running, making Switzerland second place within Europe in a ranking of percentage share of gross domestic product (GDP) that venture capital investments account for (The Federal Council, 2017).

Regarding the pandemic impact on the swiss market, Amrein & Dietrich (2021) commented how the online alternative financing solutions trampoline after the Covid-19, as a way to escape the limitations imposed by the crisis, namely through crowdfunding platforms (Amrein & Dietrich, 2021). This triggers the need for solutions that are easier and philanthropy alike, which is the case of impact investing – there is an ability to attract more investors to the social and environmental content of projects-to-fund, paving the way for the impact investment logic (Parente, Feola, D’Onofrio, Pellegrino & Marinato, 2017).

According to a study based on data collected from the European Union members, Switzerland, and the United States, it is estimated that 38% of sustainable manufacturing technologies with active usage across these countries are swiss, right after Finland and Romania (Urbaniec, 2017). Switzerland is said to be an ideal stage and ecosystem for further growth and development of impact investment. Sá (2021), explores how the swiss lead role in impact investing has grown and experienced an evolution from the market niche of constituting 1.3% of all managed investments in Switzerland by 2019, to have tripled in the following year (Sa, 2021). Since the surfacing of this new market, Switzerland has contributed on a global scale for the world to be closer to the UN Sustainable Development Goals by 2030. In fact, in 2003, the State Secretariat for Economic Affairs (SECO) invested 3 million in early-stage capital allocated for Responsibility, a Zurich-based asset manager with a microfinance fund directed at developing countries. Nevertheless, only recently have the swiss investors and asset managers turned their focus as well to swiss startup funding. By 2014 SECO provided capital to the Swiss Sustainable Finance association that addresses impact investing both in developing and developed countries (Sa, 2021). To recognize the patterns that made Switzerland such a successful case, SECO realized a

strengths-weaknesses-opportunities-threats (SWOT) analysis of the swiss impact investment ecosystem. Firstly as strengths, it was heightened as being one of the world's largest financial hubs specializing in asset management, then the innovation culture, and finally the location of important international organizations. However, as its weaknesses, it is pointed out the niche market that impact investment still constitutes, the microfinance trap for impact investors and the due diligence processes for this kind of investment (Sa, 2021). An important note is a clear correlation between these three negative aspects, and the blockages and market gaps imposed on conventional and sustainable finance. Nonetheless, a shift in the investor's and organizations' mindsets is laying the ground for impact investing opportunities, as social pressure for this commitment also imposes itself. Finally, a threat implicit to this environment development is the inconsistency in impact investment measurement definition and criteria (Sa, 2021), another market gap that is superficially explored in this research.

3.2.2 Data Collection

For the empiric work, the interviews were semi-structured for a) allowing the interview to gain momentum and explore different directions, and b) adapting and adjusting the interview guide (Appendix C, D, and E) according to different perspectives optimized from interview to interview. The interviewees were carefully selected with the ambition to obtain each role player in the market, may it be conventional or sustainable finance. Based on the startup lifecycle and funding rounds identified in Figure 4 Appendix A, it was gathered data from one early-stage startup, one impact startup, one crowdfunding initiative, one incubator, one impact intermediate, and one private equity firm of impact asset management, making a total of 6 interviews. The sample is provided in the sampling section. There was also a focus group discussion organized with all the intervenients, and others that would join internationally, which was planned to take place during a workshop that would be

hosted together with the 7Generations, however, due to Covid-19 regulations applied in the country at that time, the event was canceled.

Regarding the “Building Bridges” conference attended, the primary focus was on Sustainable Finance, namely impact investing measurement. This conference was in Geneva and extended over multiple days. The positive outcomes of this event were the opportunity to network with companies, CEOs, and startups in the area of research, to take insightful information for the data collection process, and the connection for a study interview with one of the speakers, the CEO of Private Equity Asset Management Firm – Asteria Obviam. I was able to network through other keynote events namely establish a connection with one of the biggest impact networks in Switzerland – Impactfellows – which was too a source of contacts.

3.2.2.1 Participative Observation – Internship Report

7Generations is a business tribe of consultants and facilitators with a Business School based in Bern, Switzerland with partners in Colombia, South Africa, Sweden, the USA, the Philippines, and Japan. Their mission is to build regenerative zero-companies and organizational structures and have been working internationally with partners and clients from all fields, namely MedTech businesses, government, and startups. Working closely with the company I was able to intensify my knowledge of startup finance and coworking environments which gave me fuel to deepen my research.

As for the internship meetings, I was allowed to work closely with the main team during each weekly team meeting and extra mentorship meetings provided. These mentorship meetings had dual targets, being the first one to evaluate and support the progress inside the company and the evolution of self-development skills, and the second one to align possible connections between the zero-company model of circular economy, and the thesis’s main research question. Consequently, I was able to generate a model purposing Regenerative Funding for Impact Startups. This is a project yet in the development stage and in a coworking status with 7Generations.

However, it is possible to harvest the main outputs and learnings from these discussions and mentorship meetings, such as the networking for interviews and conferences attended, the knowledge of the swiss sustainable entrepreneurship ecosystem, and guidance on the models that were continually purposed during my stay in the organization.

3.2.3 Sampling

The following sample is displayed with the description of each firm/organization/initiative that was interviewed, and an additional note on the conference sessions. It was considered an anonymous status during the interviews, and as so, the name of the individuals will not be disclosed, only information about the firms they represent.

Firm/Investor/ Initiative	Setting	Group	Interviewee Representative Role	Sector
Impact Hub Bern	Sustainable Entrepreneurship	Alternative Finance Intermediary	National project coordinator and local co-owner of innovation projects in Bern	Entrepreneurship
OpenFlow Labs	Conventional Entrepreneurship	Pre-seed startup	Company co- founder	IT Consultancy
Hauptstadt	Sustainable Entrepreneurship	Crowdfunding initiative	Project principal team	Not-for-profit media startup
Asteria	Sustainable	Impact Asset	Chief Executive	Impact
Obviam	Finance	Manager	Officer (CEO)	investment
Think Yellow GmbH	Sustainable Entrepreneurship	Fintech Startup	Co-founder and CEO	Gender Lens Investment Platform
Liechti Coaching	Sustainable Entrepreneurship	Coworking pre-seed Startup	Founder	Mindfulness Coaching

Table 1: Interviews Sampling

Impact Hub Bern is a local stream located in Bern from an international chain of incubators spread worldwide. Their goal is to build a bridge between entrepreneurs and investors, with the main target to have a part in Sustainable Entrepreneurship acceleration.

OpenFlow Labs is a pre-seed startup located in the coworking space of 7Generations Bern, Switzerland, and São Paulo, Brazil. Through consultancy and software engineering, the firm presents solutions to develop structured products and tools, with the help of information technology.

Hauptstadt is a not-for-profit media startup located in Bern that was a successful case of crowdfunding funding through a social initiative. They run a business model that is set on local journalism, which contributes to inclusive cultural initiatives.

Asteria Obviam is now a joint force of two big swiss impact asset managers, that is fully dedicated to impact investing with the portfolio spread in emerging countries, through mostly private equity.

Think Yellow GmbH is a fintech startup that is identified as a gender equality investment platform, and an impact entrepreneurship contributor.

Liechti Coaching is an early-stage startup also based on the coworking space of 7Generations Bern that offers mindfulness coaching for social entrepreneurship.

“Building Bridges” is a yearly conference that tackles the market gaps and accelerates sustainable financial systems in Switzerland and globally, through collaborative communities and events. The main sessions, “How to create and measure impact in liquid portfolios?” with Impact Hub and “Mainstreaming sustainability-themed investment products” with PwC, explored the thematic of Impact Investment Measurement.

3.2.4 Findings

The assembling process was constant and simultaneously with the data collection. After gathering and digesting the information that each source of evidence gave me, I used an inductive method of manual coding technique, together with a thematic

intersectionality (Williams & Moser, 2019) supported by the Grounded Theory Methods, to obtain rigorous, reliable and funnel focused codes (Charmaz, 2008). The process trailed a linear approach of open codes with the various concepts collected, followed by an axial coding into categories, then a selective coding into themes, and finalizing with the constructive meaning for the theory preposition (Williams & Moser, 2019).

Finally, by the end of the data collection process, the outputs were transcript into the MAXQDA2022 software. This package allowed me to process the data into a coding system to organize the codes, sub-codes, and respective segments into a final scheme (presented below) through the logic of the case study conceptual framework.

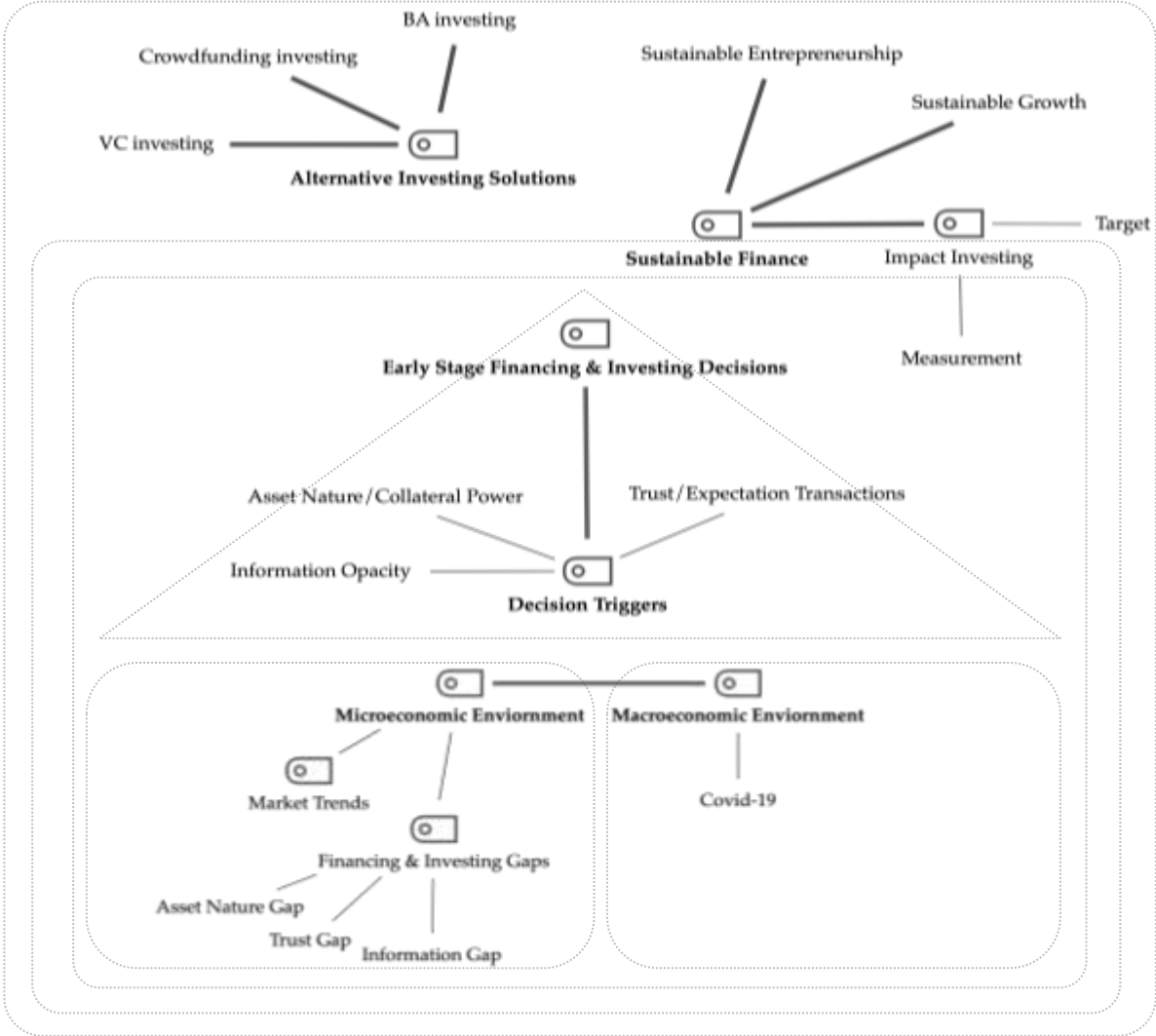


Figure 2: Code proximity co-occurrence model

Chapter 4

Analysis and Discussion

4.1 Analysis and Hypothesis Theory

To develop the hypothesis theory, each code segment of the co-occurrence model is analyzed. This model enables the possibility to visualize the analysis steps to establish the influence of the macro and microeconomic factors in the relationship between the financing and investing decisions, and respective triggers, both in the sustainable and conventional entrepreneurial ecosystem.

4.1.1 Macro and Microeconomic Factors

Reviewing the macroeconomic spectrum to have, the current pandemic was a recurring topic, in which the participants pointed out how with the Covid-19 crisis the main priority is to use the capital on what the company needs, rather than on growth developments. As for the participants in the investors' groups, it was enhanced how their portfolio strategy suffered an obvious shift that was dependable on the pandemic course and legal framework as well. Secondly, analyzing the microeconomic ecosystem, some market trends have been surfacing through the last years with the merging of philanthropy philosophies in the investing market, making the new concepts of sustainable entrepreneurship and impact investing paradigms to look out in the future. However, market unreadiness and constant gaps are appearing during this shift in the market trends. This blockage can be profiled through funding and investing gaps. On the first hand, we have limited funding access to companies whose

asset nature is mostly intangible and nontech, as the majority of early-stage social and environmental startups. Even if there is an accessible and small investment, this capital is mostly allocated for early-stage tech startups and not non-tech ones. This challenge extends with the lack of support from incubators and accelerators. Overall, this assessment might indicate an obstacle to funding access that depends on the business model of the company, which will lead to privileged and underprivileged groups in the capital market, translating into the “Asset Nature gap” coded group. Furthermore, the gap expands when we unfold the business model blockage into the goals of the company. This correlates with another topic that surfaced during the interviews, the perception of trust that entrepreneurs have in the market and the fear of losing ownership rights and incurring into expectations misalignments if receiving capital from investors. Nevertheless, investors also express mistrust regarding the information that most early-stage companies are willing to disclose on behalf of their financial documents and accounting reports. Therefore, it all comes down to the currency exchange that is implicit in this business transaction, as it could be either financial return, social/environmental return, or in this case, belief and trust. One of the interviewees in the entrepreneur’s group developed the issue expressing that the problem was that to gain capital for the product, one would have to retrieve and sacrifice something from it, may it be ownership or goals aspects. This reflects in the “Trust gap” coded group. To complete the funding gap, the information opacity as well surfaces as a limitation on the market for both sides of the capital market as mentioned before. There is a gap in the quantity and quality of data disclosed which not only causes blockages for small firms to access the market, gain awareness on how to start a business, and develop know-how on the business model presentation for investors but as well for asset owners and managers to invest and avoid extensive due diligence processes, leading us to the “Information Gap”. In fact, on the other hand, to finalize the overall market gap, one should be aware as well of the investing gaps such as the impasse for the private sector to access nonlisted and microfinance companies, as was pointed out during one of the conference sessions.

4.1.2 Triggers and respective Financing and Investing Decisions

All of these micro and macroeconomic factors will influence the market mechanisms and respective financing and investing decisions. As such, the next step is to analyze the triggers that motivate them, followed by the outcome evaluation of those decisions. There is a direct linear correlation signaled by the incubator and entrepreneurs group regarding the relationship between the micro and macro market gaps and the decision triggers. The main coded groups that can be retrieved are the “Asset Nature/Collateral Power trigger”, the “Trust/Expectation Transactions trigger” and the “Information Opacity trigger”, which are correlated respectively with the “Asset Nature gap”, “Trust gap” and “Information gap”. The interviews showed that the type of funding startups is willing to have depends mostly on the type of assets and business model the firm has. If the firm has a product-based model it will be more important to raise external money and because we’re dealing with tangible assets the collateral power will be higher and, therefore, easier to access capital. However, if the firm is service-based and with non to few tangible assets, such as nontech or sustainable entrepreneurship, the funding will be mostly internal as there is a financial constraint to obtain capital due to the “Asset Nature gap” that activates a negative response into the financing and investing decision. Secondly, to back up this condition, this last type of firm will have the entrepreneur mindset with less willingness to expose their company mission, services, and goals to the investing market if it signifies translating them into the conventional and standardized business model acceptable for funding viability, aligning expectations and trust with the partner through extensive legal processes. Thus reflecting once again the “Trust gap” into the “Trust/Expectations transactions trigger”, leading to a negative outcome. Finally, this mirror effect is also noticed in the “Information gap” that inducts a negative effect on the capital structure decisions since quality information and data are necessary to have a correct perception of the adequate funding source that is dependable on the firm strategy and goals, complementing the last “Information opacity trigger” coded group.

4.1.3 Conventional and Sustainable Entrepreneurial Ecosystem

During the interviews, the capital supply side of investors was also briefly analyzed despite not being the focus of the main research question. However, it allows having a complete perception of the swiss conventional entrepreneurial ecosystem. Since the philanthropy mindset is gaining momentum in this market, crowdfunding investing was an important topic during the empiric study. During the incubator representative interview, it was revealed that this resource is a specific early-stage funding supply that allows tackling the firm needs and goals without losing trust or expectations alignment. In fact, through the crowdfunding initiative representative lenses, this source of capital was chosen because it permitted them to meet their values and do market testing on the “crowd” demand. However, they also exhibited concern regarding the high intermediary costs that crowdfunding platforms still have for this kind of initiative. In the long term, they hoped to succeed and reach the break-even point that enabled them to have less financial constraints and more financial support. Moreover, because of the external and internal information deficit that early-stage startups suffer from, the incubator interviewee disclosed how their consulting for small firms does not recommend Venture Capital at this pre-seed stage, but rather Crowdfunding.

Following up on the sustainable finance, social and environmental driven startups are not looking for fast growth and quick money, but rather for sustainable and constant growth, creating added value and momentum for future economic generations, as disclosed by two representatives of the entrepreneurial group. As for the investors in Impact Investing, the majority of the data was gathered by the private equity firm representative who advanced that the target is to have high performance and financial return while using capital to create change. Nevertheless, the reward must be proportional to the risk, if not so, the investor pipeline declines, which is also influenced by the asset owner standards. However, the interviewee also showed concern for the lack of quality data and the belief that the information gap is still very present in the impact investment market. The incubator representative enhanced how

even Business Angels are looking for this kind of investment, yet don't know how, where and whom to invest in. The challenge deepens when tackling the measurement of this impact which is still rather inconsistent and fragile since there is no standard impact measure. Furthermore, the asset management firm representative adds how the target group is mostly emerging countries or markets with high growth rates, which have a high transformative impact on their sector, attending to trigger and boost the economic growth. Nonetheless, there are still some extended credit lines from investors supported by development funds for low-growth companies loans. An additional and rather important note disclosed by this interviewee is how there is still not much demand from asset owners to invest in sustainable startups in Switzerland.

All in all, the early-stage impact startups are recurring to crowdfunding as their only and viable option. Simultaneously on the other side of the capital market, impact investing aligns with the philanthropy values that sustainable entrepreneurs and even crowdfunding initiatives cope with, but the supply still does not have a rigorous and solid response to this new market niche need for early and more developed stages of the startup economical lifecycle.

4.1.4 Hypothesis Theory

To help consolidate this proposed theory with solid theoretical background, it is important to bring back the mentioned Pecking Order Theory of Myers and Majluf (1984) that applies to listed companies whose capital structure is not optimal but rather directed at an order of preference. With this theory, we can establish a correlation between the triggers analyzed before, and their impact on the capital structure decisions. Since most of these listed firms have a higher level of tangible assets and therefore higher liquidation value, they have more probability of resource to external debt. As for startups within the conventional entrepreneurial scope, they have less tangible assets and there is a higher concern about the company's intellectual property. They will resource less to debt given their low level of collateral value and early profitability to meet creditworthiness requirements, hence will have high debt

nonpayment risk, and resource more to external equity. However, in this pre-seed stage of equity financing, trust and information opacity are already noticeable and as so, investors will have a greater risk of imposing a higher cost of equity. Enhancing the Denis (2004) theory, startups will only leverage their financing decisions by the last stages of the startup lifecycle recurring to banking loans and other sources of debt as their last choice.

Finally, it is only left to analyze the capital structure mechanisms for startups within the scope of sustainable entrepreneurship. Bearing in mind these two capital structure theories and following up on the market trends of impact investing and sustainable entrepreneurship that have been emerging, there is still a component of market unreadiness and a lack of solid ground to support and back up the financing and investing decisions in this environments. This is due to the negative impact of the micro and macroeconomic factors, namely the market gaps, and their effect on the decisions triggers that unlock the capital structure. If we look through the output processed information from the data collection and analysis process of the interviews and conference sessions, it is possible to establish a preference order for impact entrepreneurs, that has been slightly influenced by these new influencing factors. It also needs to distinguish between startups that have social and environmental services-driven business models and the ones that have product-driven business models. Since the product-based companies need capital to back up their quick growth and fast investment strategy, they will resource more on external capital and only on internal funds and outside debt if needed. As for impact service-led companies, in the swiss market, they have highly present the impact entrepreneurial mindset that relies more on slow investment, sustainable growth, and self-efficient organic business models. Furthermore, they have a high level of human-capital-specific assets, with even fewer tangible assets, for which the market will respond with less investment and information acknowledgment in this type of small firm, given their high risk of investment, slow expected financial return, and the fact that most asset owners and managers do not express likelihood on being involved either because of personal or

philanthropical motivations. Automatically, mistrust is triggered on disclosing information from the firm and on losing ownership rights and sustainable goals alignment. Given the greater levels of mistrust and information opacity, the swiss sustainable startups will resource mostly to internal funds and only to external equity if needed. In this case, the majority of external capital sources come from crowdfunding or impact investing since bigger investors such as Venture Capital, Business Angels, or even Private Equity ones do not oblige their financial needs, neither is their demand in the swiss market from the asset owners to invest in developed countries as Switzerland or swiss impact startups. Diving deeper and exploring even further this financing and investing dynamics in the swiss market one needs to still be aware of the macroeconomic conditionings that will influence the procyclical measures of the current pandemic and economic crisis making early-stage impact startups suffer the most, as explored in Bhaird, Owen & Freel (2019) study since from the investor perspective, they will require longer time to give financial return and therefore, not one of the most viable options to allocate capital.

A final process theory was developed to fully comprehend the mechanisms behind this proposed model in the swiss landscape, as demonstrated in the next figure.

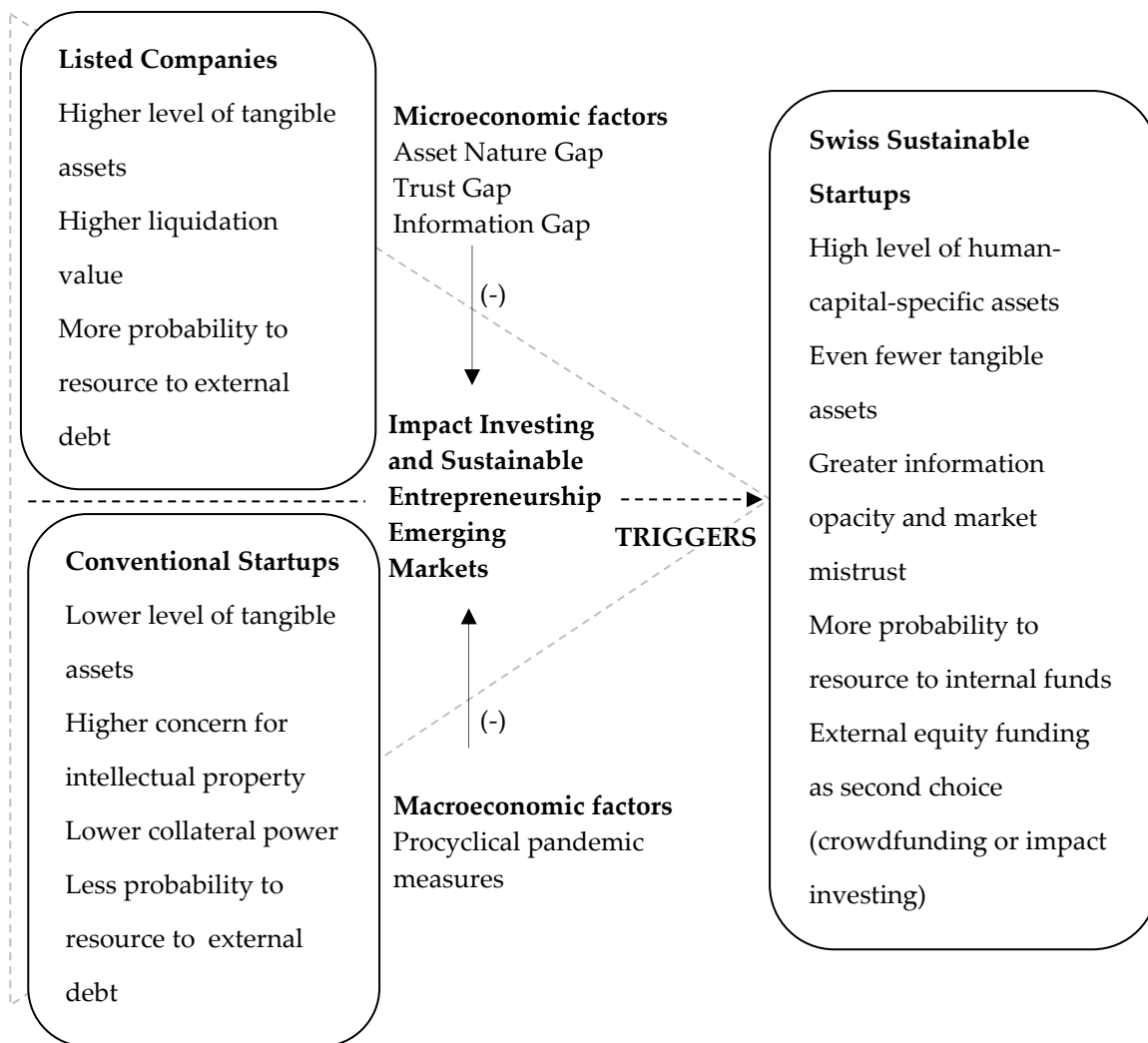


Figure 3: Final process hypothesis theory

4.2 Discussion

Putting into perspective the last section’s analysis of the main findings and results gathered from the data collection process, the outcomes are fairly conclusive for the brief exploration approach that this case study was, given the reduced data availability. It allowed identifying the main gaps and respective triggers that define the strategic decision associated with the value creation of a swiss (sustainable) startup business model while landscaping the supply side of the (impact) investors in the entrepreneurial market and giving a holistic perspective into the micro and

macroeconomic environment of the Swiss startup scene. Nevertheless, the contributions were not only met by answering the research and sub-research questions but as well by expanding the possibility to apply the hypothesis theory to other innovation-led countries that follow the same economical and financial indicators as Switzerland. Finally, by creating a clear model for the decision triggers that structure the financing and investing decisions within a swiss sustainable startup, it is possible to assume the various scenarios of decision-making processes that can unfold if the market gaps are mitigated, although not being able to predict the outcomes. Nonetheless, these findings come as useful for target groups as sustainable entrepreneurs who were limited by the financial constraint of information opacity, opening the path for knowledge on their business models created through the different financial available solutions for capital support and the market blockages they may encounter. Academically wise, the proposed theory allowed as well to explore the surface of this emerging niche market of impact investing and sustainable entrepreneurship, paving the way for further research directions, that will be explored in the next chapter.

Ultimately, the empirical work results confirm the overall literature review, namely the applicability of the Pecking Order Theory of Myers and Majluf (1984) and the Denis (2004) for startup capital structures resourcing mostly to external equity and only leveraging to debt in later stages. Additionally, it back up the crescent need for crowdfunding capital in the early stages of the firm, and the decrease in the venture capital funding need. Nevertheless, together with the benchmarking reports, it is stated how there is more investment in swiss startups, however, the results show how this is not the case of the investors' target for the swiss sustainable ones, enhancing the funding gap. Moreover, it contradicts also the resource for Business Angel capital in the early and pre-seed stages of the small firm, since interviewees both from conventional and sustainable entrepreneurship firms will only resource to this source of capital in later stages, explaining the information gap that angel investors experience when looking for seed impact firms to invest in.

Chapter 5

Conclusion

Reviewing the main findings of this research and exploratory case study, it is possible to summarize the financing and investing mechanisms for the three different types of companies explored according to their asset nature, trust perceived, and information available in the market. For listed companies, due to their high level of tangible assets, they resource mostly to debt financing because of their high liquidation value. For conventional startups, since they commonly have a lower level of tangible assets, therefore lower collateral power and higher concern for intellectual property, they resource less to debt financing only leveraging their capital structure further into the company development. Finally, for sustainable (swiss) startups, as they have a higher level of human-capital-specific assets, usually fewer tangible assets, and a greater risk of information opacity and market mistrust, they will most probably resource to internal funds, and possibly to external equity as crowdfunding or impact investing solutions. These conclusions are drawn after overviewing the influence of macro and microeconomic factors in the Swiss landscape.

Bringing back the research question and study motivations

What are the triggers for the adoption decision of alternative and impact-driven finance solutions, and the implications on the financing and investing mechanisms in the swiss entrepreneurial scene?

it is possible to assume that the conclusions drawn are aimed at the research and sub-research questions designed for the exploratory case study methodology approach. However, it is wise to rephrase the major challenges of limited data availability on

impact investing and sustainable entrepreneurship in emerging markets and the negative impact of the pandemic on the data collection and sampling process.

The theoretical framework gave a solid academic background to explore this surfacing research thematic and, together with the empiric work realized, provided viable arguments to back up the conclusions drawn. Moreover, the benefits harvested from the study mirror back this contribution for literature and academic purposes on different levels. Firstly, by providing a wider scope on the extensive literature on capital structure decisions and diversifying it into the sustainable entrepreneurial case. Secondly, by gathering a solid direct and participative observation and data collection that allows credibility and solid ground for further conclusions on the specific case study that is the swiss startup scene. Thirdly, by managing to give the target groups for which this research is useful, as sustainable entrepreneurs and impact investors, more available information on this new market niche momentum that has been surfacing in the last couple of years. These contributions were mostly enhanced by the concrete hypothesis theory proposed, for which there are some practical, theoretical, and methodological implications to bear in mind. It is a study developed with academic purposes, in an organizational and international environment, for which the data collected is merely as a sample and does not visualize the full spectrum of the matter in hands. In fact, for social/environmental entrepreneurs that wish to use this information, there is the possibility for adjustment of the capital structure triggers and respective financing and investing decisions depending on each case and the respective influencing macro and microeconomic factors as well as intra and inter-organizational conditions. This also applies to the benchmarking assumptions considered depending on the innovation-led country that one wishes to expand the model to.

Finally, on a self-assessment scope, this is a brief benchmark and analysis of the swiss entrepreneurial ecosystem for each a variety of further research directions can take place, namely the deepening of the literature available on sustainable

entrepreneurship, and the surveying of how can one establish standard measurement criteria and agreements for the newly come paradigm of impact investing.

References

- Allen, F. (2012). Trends in Financial Innovation and their Welfare Impact: an Overview. In *European Financial Management* (pp. 493-514). Blackwell Publishing Ltd.
- Amrein, S., & Dietrich, A. (2021). *Marketplace Lending Report Switzerland 2021*. Swiss Marketplace Lending Association.
- Antoniou, A., Guney, Y. & Paudyal, K. (2002). Determinants of Corporate Capital Structure: Evidence from European Countries. *SSRN Electronic Journal*, 1-31.
- Baker, M. & Wurgler, J. (2002). Market Timing and Capital Structure. *The Journal of Finance*, 1-32.
- Barber, B., Morse, A. & Yasuda, A. (2019). *Impact Investing*. Cambridge: NATIONAL BUREAU OF ECONOMIC RESEARCH.
- Barnett, C. (2015, March 26). *SEC Democratizes Crowdfunding with JOBs*.
- Baxter, P. (2003). *The development of nurse decision making: a case study of a four-year baccalaureate nursing program*.
- Berger, A. & Udell, G. (1998). The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle. *Journal of Banking and Finance*, 1-69.
- Bhaird, C. (2012, September 25). *Demand for debt and equity before and after the financial crisis*. Retrieved from Munich Personal RePEc Archive: <https://mpra.ub.uni-muenchen.de/62257/>
- Bhaird, C., Owen, R. & Freel, M. (2019). The evolution of entrepreneurial finance - 10 years. *The International Journal of Entrepreneurship and Innovation*, 235-238.
- Charmaz, K. (2008). *The legacy of Anselm Strauss in constructivist grounded theory*. Bingley: Emerald Group Publishing Limited.
- Denis, D. J. (2004). Entrepreneurial finance: an overview of the issues and evidence. *Journal of Corporate Finance*, 301-326.

- Domenichelli, O. (2008). The Pecking Order Theory in the Context of Small and Medium-sized Enterprises: A Note. *Rivista Piccola Impresa*, pp. 61-67.
- Dominguez, M. (2017, December 21). *The Agile Innovation of Startups*. Retrieved from ie university: <https://www.ie.edu/insights/articles/the-agile-innovation-of-startups/>
- Donaldson, G. (1961). *Corporate Debt Capacity: A Study of Corporate Debt Polic' and the Determination of Corporate Debt Capacity*. Boston: Division of Research, Harvard Graduate School of Business Administration.
- European Commission. (2015). *User guide to the SME Definition*. Luxemburg: Publications Office of the European Union.
- Genay, H. & Brewer, E. (1994). *Funding small businesses through the SBIC program*. Federal Reserve Bank of Chicago.
- Ghosh, S. & Sinha, P. (2009). Dynamics of Corporate Capital Structure Choices: Further Reconciliations and Tests. *International Journal of Financial Management*, 1-26.
- Hahn, G. & Kwon, J. (2017). *Startup Financing and Capital Structure: A Signaling Approach*. Korea.
- Hall, J., Daneke, G. & Lenox, M. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 440-447.
- Jensen, M. & Meckling, W. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 305-360.
- Kerr, W. & Nanda, R. (2009). *Financing Constraints and Entrepreneurship*. Cambridge: National Bureau of Economic Research.
- Kraus, A. & Litzenberger, R. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 911-922.
- Langley, A. (1999). *Strategies for Theorizing from Process Data*. The Academic Management of Review.

- Mac an Bhaird, C. (2012, September 25). *Demand for debt and equity before and after the financial crisis*. Retrieved from Munich Personal RePEc Archive: <https://mpira.ub.uni-muenchen.de/62257/>
- Mansouri, S. & Momtaz, P. (2021, December 31). *Financing Sustainable Entrepreneurship: ESG Measurement, Valuation, and Performance*. Retrieved from SSRN: <https://dx.doi.org/10.2139/ssrn.3997723>
- Modigliani, F. & Miller, M. (1958). *The cost of capital, corporation finance, and the theory of investment*. American Economic Review.
- Morgan, J. (2010). *Impact Investments: an emerging asset class*. Global Research.
- Myers, S. & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 187-221.
- Nascimento, A. (2021). *The Social Responsibility of the Firm: A corporate Governance Perspective*.
- OECD. (2006). The SME Financing Gap: Theory and Evidence. *OECD*, 89-97.
- OECD. (2014). *Policy Brief on Access to Business Start-up Finance for Inclusive Entrepreneurship: Entrepreneurial Activities in Europe*. Luxemburg: Publications Office of the European Union.
- Parente, R., Feola, R., D'Onofrio, T., Pellegrino, D. & Marinato, E. (2017). The Evolution of Crowdfunding Towards an Impact Investing Logic: The Case of Paulownia Social Project. *Journal of Modern Accounting and Auditing*, 19-34.
- Sa, L. (2021, 05). Impact Investing. *Die Volkswirtschaft*, pp. 1-8.
- Salomon, V. (2016). Emergent models of financial intermediation for innovative companies: from venture capital to crowdfundering platforms in Switzerland. *Venture Capital*, 21-41.
- Schumpeter, J. (1942). *Capitalism, Socialism, and Democracy*. New York: Taylor & Francis e-Library.
- The Federal Council. (2017). *Fast-growing start-ups in Switzerland*. Bern
- The Federal Council. (2020). *SME Portal for small and medium-sized enterprises*. Bern

- Urbaniec, M. (2017). *Sustainable Entrepreneurship: Innovation-Related Activities in European Enterprises*.
- Williams, M. & Moser, T. (2019). *The Art of Coding and Thematic Exploration in Qualitative Research*. International Management Review.
- Yin, R. (2009). *Case Study Research: Design and Methods*. Thousand Oaks: Sage.
- Zider, B. (1998). How Venture Capital Works. *Harvard Business Review*, 132-139.
- Ziegler, T., Shneor, R., & Wenzlaff, K. (2021). *The 2nd Global Alternative Finance Market Benchmarking Report*. Cambridge Centre for Alternative Finance.

Appendixes

Appendix A | Startup Economic Lifecycle

Pre-seed stage/early-stage	Seed stage		Growth/scale up stage	Series A/B	Series C/D
<i>1. Exploration</i>	<i>2. Valuation</i>	<i>3. Product development</i> <i>4. Market development</i>	<i>5. Growth</i>	<i>6. Mature</i>	
Business plan, Market Assessment	Minimum Valuable Product (MVP), Business Model, Early customer network	Product Market Fit (PMF), User acquisition and growth, Promotion	Product and market expansion, scale up to outside markets	Sustain profits and grow into IPO	
Zero revenues	First revenues and large clients	Growing revenues		Break- even/profitable	
Internal funds	Internal funds and crowdfunding	Business Angels Early VC Accelerators		Venture Capital Private Equity	

Table 2: Startup Economic Lifecycle - Stages, Milestones, Revenues, and Funding rounds

Appendix B | Interview Consent-To-Participate Form

1. General information

Dear Participant,

This interview aims to provide qualitative data collection for the case study on “Financing and Investing Mechanisms in Swiss Sustainable Entrepreneurship”. Additionally, it is intended to explore the entrepreneurship ecosystem in the swiss market when tackling questions about the funding resources and capital allocation decisions.

2. Technical Information

This study is made within the master’s final thesis as a Finance major student, from Porto Business School in Portugal, which is being developed by Joana Maria da Costa Ferrer, who will be conducting this interview as well. This research will be mentored by Professor Paulo Alves, Director of the Master in Finance.

Data will be collected at four points: firstly on an introductory part to recognize and identify the target sample; secondly and thirdly, on a more specific approach, questions will be made regarding the capital structure choices and value creation, and the adoption process of alternative finance solutions; and finally, there will be a conclusion note.

The interview is estimated to have a maximum duration of 30min-45min and will not be recorded by any device. The information that is going to be shared in this interview is confidential and can only be released in an academic context with an anonymous reference.

There are no risks involved and please do not hesitate to ask any questions.

3. Consent Form

I declare that:

- i. Received a copy of this document:
- ii. Read and understood the information that is explained in this document and was fully informed of the study aim and participation conditions on this study;
- iii. As so, I accept to voluntarily participate in this study.

Date:

The participant:

The interviewer:

Thank you for your participation.

Appendix C | Interview Guideline Incubator

Introduction: Thank you for your time. This interview is within the master's final work that aims to explore the influence and process of adopting sustainable and alternative financing solutions on the capital structure decision of swiss startups.

1. What is your role in the organization?
2. Could you describe a little bit more about your organization's business and purpose?
3. How do you select the seed projects to take upon your support?
4. In which stage of company development do you take action?
5. Do you do more of a continuous consulting process or temporary training?
6. What kind of alternative funding options do you usually present and recommend to your customer?
7. Do you have any criteria on which funding option to adopt, based on the type of customer?
8. Would you say that the asset nature of the business model is important when deciding on funding resources? What about regarding the information availability and market trust perceived?
9. How do you prospect that adoption into the support process that you give to startups?
10. Do you see any future implications or limitations on adopting these solutions?

Conclusion: Within these thematic, do you have any added information or question that you would like to share? There will be as well a workshop to present and discuss the summary of outputs gathered from the interviews, for which I will send you an invitation. Thank you.

Appendix D | Interview Guideline Startup

Introduction: Thank you for your time. This interview is within the master's final work that aims to explore the influence and process of adopting sustainable and alternative financing solutions on the capital structure decision of swiss startups.

1. What is your role in the organization?
2. Could you describe a little bit more about your organization's business and purpose?
3. What kind of financing do you support your company with?
4. Do you have any preference order of financing support available?
5. Which measure of value creation would you use for your company?
6. How do you retrieve value creation from your current financing policy?
7. When choosing the type of funding to obtain, which was your order of preference?
8. Would you say that the asset nature of the business model is important when deciding on funding resources? What about regarding the information availability and market trust perceived?
9. How did it affect the capital structure decisions?
10. Do you see any future implications or limitations for your company in the adoption of these solutions?

Conclusion: Within these thematic, do you have any added information or question that you would like to share? There will be as well a workshop to present and discuss the summary of outputs gathered from the interviews, for which I will send you an invitation. Thank you.

Appendix E | Interview Guideline (Impact) Investor

Introduction: Thank you for your time. This interview is within the master's final work that aims to explore the influence and process of adopting sustainable and alternative financing solutions on the capital structure decision of swiss startups.

1. Could you describe a little bit more about your company and yourself?
2. Where in Switzerland is the firm located?
3. In your portfolio strategy, you have three main streams: the financial returns, the impact investing, and the ESG criteria. Do you invest in companies with business models with intangible assets/services/nontech and Startups with a high collateral risk that prefer slow growth rather than quick growth?
4. In which company life cycle phase is the majority of your portfolio spread?
5. What are the challenges specific to the non-listed, microfinance and less sophisticated companies?
6. What do you believe increases the lack of data quality in the private sector?
7. If this gap was eliminated, do you believe there would be more impact investing?
8. In the conference session it was mentioned that there has been more investing in ESG than actually in impact, why do you think that happens if, as shown by your company's collected data, more impact direction-focused companies perform better and have less risk?
9. Following up on this, is there a need for more listed companies and IPOs ventures for impact investing?
10. There has been some discussion on the financial system structure here in Switzerland. It is pointed out that investing in sustainable companies isn't enough, what is needed is to have a sustainable investing system. what is your perspective on this paradigm?

Conclusion: Within these thematic, do you have any added information or question that you would like to share? There will be as well a workshop to present and discuss the summary of outputs gathered from the interviews, for which I will send you an invitation. Thank you.