THE CIRCULATION OF WEALTH

EMERGENT MODELS OF FINANCIAL INTERMEDIATION FOR INNOVATIVE COMPANIES:
FROM VENTURE CAPITAL TO CROWDFUNDING PLATFORMS

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Preliminary remarks and abstract

The recent financial crisis has accelerated the changes with regard to the spatial organization of financial channels. In direct investments, the venture capital industry in Switzerland used to be connected to national and international financial markets. Today these traditional direct investment players decline because their traditional business model is no longer suited for the current economic context. Instead, a new business model for direct investment has recently emerged while revitalizing this financial sector: crowdinvesting platforms exploit more intensively the possibilities opened by ICTs and of specialized, but dispersed, expertise. The paper highlights the strengths and weaknesses of both business models as well as their contrasted time and space ways to deal with uncertainty.

Key words:
venture capital
start-up
crowdinvesting platform
private investors
financial intermediation
direct investment

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INTRODUCTION

The causes of the global financial crisis which erupted in 2008 have been widely analysed and debated over the past five years. The growth of market finance and the financialisation of economic activities have stimulated the accumulation of financial capital, thereby creating a rift between finance and real economic activities (Boyer, 2011). In Switzerland, institutional investors such as pension funds have gradually moved from the internal management of portfolios composed mainly of domestic property and bonds to asset management delegated to financial intermediaries with portfolios of liquid financial assets on a global scale (Corpataux et al., 2009; Theurillat et al., 2006 b). This preference for liquid investments through the financial markets can be explained in part by a radical shift in the assessment of the risk borne by the investor. In the current financial system, the concept of the risk has been almost completely removed in the eyes of investors. Thanks to the diversified portfolio theory (Markowitz, 1959) and to sophisticated financial analyses based on probability, financial risk has been perceived as probabilisable, transferable and manageable.

However, the stock market crash of 2008 was followed by a crisis of confidence in this system, and by a loss of legitimacy for the major financial institutions. In 2008, Swiss pension funds, which had placed a substantial proportion of their capital in equities and bonds, made a net loss of CHF 76.2 billion (13% of capital) on their equity investments (OFS, 2010). Thus the financial crisis revealed the gap in risk assessment between concrete and direct investments and complex financial products (the well-known subprime asset-backed securities), which were supposed to reduce the global risk of an investment portfolio.

The present article starts from the assumption that this financial crisis is structural in nature. The investment channels established from the 1980s onwards, focusing on the financial markets, are no longer able either to fulfil their role in financing the real economy or to meet the expectations of investors.

Here we shall approach this issue through the question of financing innovative start-ups and expanding SMEs in Switzerland. In the financialised system of the past twenty years, this role has been fulfilled by venture capital (VC) or private equity (PE) funds. VC and PE funds raise capital from institutional investors (for instance, pension funds) and invest it directly in enterprises. A world leader in terms of innovation and competitiveness, Switzerland offers favourable framework conditions for the development of the ecosystem for technological and innovative start-ups. Against this background, venture capital companies could play a key role as intermediaries responsible for
the capital of institutional investors that might be more inclined to prioritise this type of investment as an alternative to investments through the financial markets.

So do institutional investors invest directly in start-ups and SMEs more? Our research has shown that this is not the case. In the wake of the heavy losses suffered after 2008, institutional investors have become extremely cautious and are reluctant to entrust their capital to VC and PE funds. Furthermore, they lack the necessary industrial skills and hence continue to invest in the financial markets on the basis of the portfolio theory.

Further, it has been observed that the venture capital industry in Switzerland is currently in a phase of decline. The results of our research suggest that the obstacles encountered by investment players in start-ups are structural in nature. Faced upstream with growing uncertainties as to their ability to raise new funds from institutional investors, venture capital companies are also experiencing great difficulties in identifying 'sound' start-up projects to build a successful portfolio. With no room for failure lest they lose the confidence of investors, Swiss venture capital funds are abandoning the early stage start-up market in order to concentrate more on the very competitive market of expanding companies that already have proof of product and proof of market. In this article we suggest that the traditional venture capital model may be regarded as outdated and too restrictive in relation to today's growing number of start-ups. Taking this as our starting point, we ask where and how these start-ups can find finance.

The past two years have seen the emergence of crowdinvesting platforms, which today represent new ways of financing innovative projects. Based on a case-study of a crowdinvesting platform in Switzerland, the new multi-sided investment platform business model is contrasted with the traditional venture capital business model. We will show that investment channels are evolving fast at the initiative of private rather than institutional investors, both in terms of risk management methods and the types of players and their rationale, and from the point of view of the spatial and temporal organisation of the investment process.

The paper is structured as follows. After explaining our methodology (Section 1), we examine the evidence of the venture capital slowdown in Switzerland (Section 2). This article then introduces the concept of intermediary platforms (Section 3) and contrasts the temporal, spatial and procedural dimensions of a crowdinvesting platform with the traditional VC business model (Section 4). In the Section 5, we present our findings regarding the reasons for the decline of venture capital in Switzerland. Finally, we discuss key features of the hybrid investment model of the Investiere crowdinvesting platform, showing how this still-emerging model is based on a radically new approach (Section 6).
1. RESEARCH QUESTIONS AND METHODOLOGY

Despite the rapidly-expanding research on many aspects of intermediary platforms, there is still much scope for studies in this field (Chemmanur and Fulghieri, 2014). In addition, far too little attention has been paid to the reasons for the decline in venture capital since 2008, notably from the institutional and geographical perspective. The aim of this study is therefore to understand the slowdown of the venture capital industry in the Swiss context and to explore to what extent the recently created crowdinvesting platforms represent a new “updated” form of venture capital for early-stage start-up financing. The current research is based on a case study of traditional venture capital industry and new crowdinvesting platform in Switzerland.

Our main research questions can be formulated as follows:

- What factors explain the decline in venture capital in Switzerland despite the growing number of start-ups and the favourable framework conditions?
- To what extent do the new forms of financing innovative start-ups via crowdinvesting platforms bring into question the traditional venture capital model?

To answer these research questions, we have conducted a case study at two levels:

First, we conducted twelve qualitative interviews with various stakeholders from the Swiss pension fund sector: five pension fund managers, five investment advisers and two financial institutions managers. We believe that Swiss pension funds are good example, along with other institutional investors such as insurance companies and banks, because these investors have acquired a very powerful position in financial sphere and, with total assets of CHF 671 billion in 2012\(^1\), have the real ability to affect financial and real economic activities.

\[^1\] 2012 pension fund results, Swiss Federal Statistical Office (http://www.bfs.admin.ch/bfs/portal/en/index/themen/13/02/03.html)
The questions that guided our interviews related to the choice of investment strategies, particularly in the wake of the financial crisis of 2008. The main aim was thus to understand why funds have not changed their approach to allocating capital in the wake of the financial crisis, and the reasons why they seem uninterested in diversifying their portfolios with venture capital by investing more directly in the economy, especially at regional or national level.

Second, in order to understand why the traditional venture capital business model has failed, we conducted eight interviews with a range of players active in the market for direct investment in early-stage start-ups: management team members of three venture capital funds, two business angels clubs, and three founders of intermediary crowdinvesting platforms. Finally, we carried out a case study of the largest crowdinvesting platform in Switzerland, in order to compare its business model with the traditional venture capital model.

The questions addressed during the individual interviews aimed to highlight the shared and distinctive elements of traditional VC and crowdinvesting platform business models. By focusing on strategies for fund raising, deal sourcing and deal evaluation, we have tried to understand how far the new business model offered by crowdinvesting platforms would make it possible to manage better the problem of uncertainty during the selection and evaluation of innovative early-stage projects.
2. VENTURE CAPITAL DECLINE IN SWITZERLAND: INVESTOR MISTRUST AND BUSINESS MODEL WEAKNESS

Over the previous decade and, in particular, since the financial crisis of 2008, global venture capital activities have underperformed and have been shrinking both in terms of the amounts raised and the number of investment rounds (Chemmanur and Fulghieri, 2014; Harris et al., 2012). According to the recent study by Ernst&Young (2013), the global venture capital market suffers from unfavourable exit conditions reflected in a drop in the number of VC-backed IPOs and M&A. This trend affects all markets across all regions. In Europe, VC funds have shown less risk appetite by realigning their investment choices on later-stage companies and those already generating revenue (Ernst&Young, 2013). Furthermore, because of the poor performance of many VC funds during the six last years, they struggle to raise new funds, as institutional investors, disappointed by low returns, show a preference for the most successful large funds with a perfect track record. This slowdown particularly affects traditional venture capital investments, while, at the same time, the share of corporate venture capital has significantly increased, exceeding 15% of all venture capital investments by the end of 2012 (Chemmanur and Fulghieri, 2014; Ernst&Young, 2013).

In Switzerland, the venture capital market has also entered into a phase of decline and is losing ground in the financing of innovation. In fact, Swiss VC companies are suffering from a lack of investment capital and struggle to raise new funds. According to the Swiss Commission for Technology and Innovation (CTI, 2011), the amount of venture capital invested in Switzerland has shown a disturbing decline of about 40% during the last five years. Thus, venture capital investments in early stage start-ups fell by more than 50% from €161 billion in 2011 to €73 billion in 2012.

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2 Since 2006, global venture capital investments have declined by 20% and the number of VC investment rounds has fallen by 8% (Ernst & Young, 2013, Turning the corner. Global venture capital insights and trends 2013).

3 An initial public offering, or IPO, is the first sale of a corporation’s common shares to investors on a public stock exchange. The main purpose of an IPO is to raise capital for the corporation. While IPOs are effective at raising capital, being listed on a stock exchange comes with heavy regulatory compliance and reporting requirements (www.wikinvest.com).

4 Mergers & Acquisitions (M&A) is a general term used to refer to the consolidation of companies. A merger is a combination of two companies to form a new company, while an acquisition is the purchase of one company by another in which no new company is formed (www.investopedia.com).

5 15.2% of deals with corporate VC involvement (according to National Venture Capital Association statistics): http://www.nvca.org/index.php?option=com_docman&task=cat_view&gid=99&Itemid=317

6 http://www.kti.admin.ch/dokumentation/00077/?lang=en
2012 (Fig 1). In contrast, “later stage” participations grew by more than 50% in 2012 reaching €77 billion compared with €34 billion in 2011 (SECA, 2013). While the number of early stage transactions is falling, investment periods are tending to become longer (7 years instead of 4-5) and the capital gain smaller. This situation may seem paradoxical, since Switzerland has a surplus of capital compared with a small number of venture capital companies (SECO, 2012).

Figure 1. Venture Capital Investment Stage focus

Furthermore, according to some public and private economic circles in Switzerland, the Swiss market for direct investment in early-stage start-ups shows great potential (SECA, 2013; SECO, 2012). In the same vein, the recent report of the “Avenir Suisse” think tank⁷, which is concerned with the financing of innovation, argues that the growing number of Swiss start-ups (Fig. 2) suggests that current framework conditions are very favourable to start-up creation (Comtesse and Zinkl, 2013). According to these players, Switzerland, as a world leader in innovation and competitiveness, provides a highly supportive environment for high-tech innovative start-up creation (Comtesse and Zinkl, 2013).

Source: SECA Yearbook 2013 (SECA, 2013)

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At the same time, the number of private investors wishing to invest directly in innovative unlisted start-ups has risen sharply in recent years (SECO, 2012). These new private investors are fairly heterogeneous in terms of experiences, profit expectations and investment approaches.

### 2.1 Funding gap and VC spatial dynamics

Despite these two positive developments - the sufficient number of high quality innovative start-ups and the significant increase in private investor demand - a funding gap has nevertheless been created at the bottom end of the venture capital market, in financing seed and early stage projects. In the literature studying entrepreneurial finance, the lower rate of VC activity in some countries than in others is usually explained in terms of the absence of an exit market, insufficiently entrepreneurial ecosystems, unfavourable legal and corporate governance conditions, and political and economic country-related risk and cultural differences (Metrick and Yasuda, 2011). Economic geographers have put a spatial dynamics approach at the centre of their research into VC activities. For instance, Martin et al. (2002) argue that such a “gap of risk capital” may be viewed as a consequence of some particular geographies of venture capitalism. Spatial inequalities within venture capital allocations, between regions and countries, may thus be explained by the observation that despite some national differences, venture capital firms are disproportionately located in more dynamic and buoyant regions to the detriment of less prosperous areas (Martin et al., 2002). Further, they tend to be concentrated in identifiable clusters of high-technology firms and close to clusters of other venture capital firms.
In the case of Switzerland, spatial and market-related arguments do not seem to be enough to explain the VC slowdown. In addition to a politically and economically secure environment, Swiss VC firms can also benefit from geographical proximity to a high quality start-up ecosystem on the one hand, and major financial institutions and syndicate partners on the other. Instead, the existing funding gap could be due to the start-up development stage and the nature of the product innovation (SECA, 2013; SECO, 2012). Venture capital firms have been reluctant to finance companies requiring smaller amounts of capital, especially those at the early stage of business development. As argued by Mason and Harrison (1991), such investments require as much, if not more, time to investigate and monitor than larger proposals and have a longer payback period of at least 5-7 years with a higher risk. Business angels, or informal venture capitalists (Bonnet, 2012), who traditionally operate at this stage, are too few in Switzerland to cover the increased early stage financing needs. In fact, such an equity gap probably occurs when venture capital deals tend to be too large, and business angel finance is underdeveloped (Mason and Harrison, 1991).

2.2 What kind of innovation can fill the funding gap within Swiss start-ups?

In neo-Schumpeterian innovation theory, product innovation can be of two kinds: radical or incremental (Cooke et al., 2011). In Malerba (1992), incremental innovation is generated from firms' accumulated stock of knowledge and consists mostly of minor modifications and improvements to already existing products. This type of “marginal” innovation contrasts with “radical” or “disruptive” innovation which entails the introduction of a totally new type of technology or “technological revolution” (Fagerberg, 2005). Following the assumptions of Schumpeter (1934), scholars have emphasized the essential interplay between radical and incremental innovation over the course of the product cycle (Tushman and Nelson, 1990). Cooke et al. (2011) pointed to the inadequacy of a restrictive binary distinction between these two types of innovation. These scholars argued that long-wave radical innovation is continuously interspersed with epochal passages of incremental innovation or “normal science” (Cooke et al., 2011).

8 Interviews with several Business Angels and venture capital actors in Switzerland
Yet in the VC industry, breakthrough or “disruptive” innovation seems to be more attractive to capital inflows, especially those of big multinational companies (corporate venture capital) (Rice et al., 2000; Weber and Weber, 2007). In fact, as shown by Hellmann and Puri (2000), innovators, or firms that are first to introduce new products or services to the market, obtain venture capital earlier in the life cycle than do imitators which are also engaged in relatively new products and technologies, but are not the first movers in their markets. According to a recent Avenir Suisse report 9, the great majority of Swiss start-ups involve incremental rather than disruptive types of innovation (Comtesse and Zinkl, 2013). The report’s authors explain the VC industry slowdown in Switzerland mostly by the lack of “disruptive” innovation, except, of course, in the field of life sciences (i.e. the pharmaceutical industry). Interestingly, the biggest Swiss VC funds operate mainly in this area.

In the light of this, we argue in this paper that the problems of VC financing in Switzerland might be because the traditional VC business model has become outdated and inadequate for bringing together institutional investment and early stage start-ups. In contrast, today we can observe the emergence of new forms of intermediation between investment capital (mostly private) and innovative start-ups. In this paper, we suggest exploring this phenomenon by using the concept of crowdinvesting platforms which has developed in the last two or three years. These new platforms play the role of intermediaries by bringing together the different stakeholders: private and professional investors, start-up creators, industry experts, etc.

3. INTERMEDIARY PLATFORM CONCEPT

Our understanding of the intermediary platform concept builds on the growing research into platform economics and multi-sided markets (Evans, 2011, 2013; Simon, 2013). In today’s economic environment, characterized by an explosive development of information and communication technologies, the platform model "is becoming one of the most important business models of the new millennium" (Simon, 2013: 23), in contrast to traditional models of organization.

So, wherein exactly does the “novelty” of this business model lie? Simon (2013) clarifies some of the key features that distinguish today’s platforms from previous forms of business organization. Thus, new platform players are both business and consumer-oriented. Unlike traditional organizations which are fairly stable and based on a limited number of strategic partners, new platforms are dynamic, evolving and changing. They are also based on partnerships and communities which rapidly form, change and dissolve (Simon, 2013). Platforms are cooperation-based, mostly open source, bottom-up and less proprietary than traditional organizations (Simon, 2013).

Platforms play a central role in providing intermediation services (Bessy and Chauvin, 2013). By assessing and certifying products, people and organizations, intermediaries (private and public) contribute to building the trust which is essential to the achievement of the mercantile exchange (Vatin, 2013). Because of their role as matchmakers between different kinds of players, platforms represent “multi-faced” or “multi-sided” devices (Evans, 2013). As defined by Evans (2011): “a two-sided platform provides goods or services to two distinct groups of customers who need each other in some way and who rely on the platform to intermediate transactions between them” (p.137). In addition, due to their “combinatory” capabilities (Cooke, 2010), their multi-activities and multi-functionalities, intermediary platforms help individual economic stakeholders to better manage the complexity of today’s world of innovation and technologies. These platforms can also facilitate combinatory learning methods by building complex relationships around knowledge, interconnecting people, solving problems and providing new business opportunities (Crevoisier and Jeannerat, 2009). They facilitate the management and sharing of knowledge between multiple players involved in different “communities of practice” (Wenger et al., 2002). This combinatory learning model has been at the heart of the rapid development of crowdsourcing or open innovation platforms since the early 2000s (Liotard, 2012). The value created on these platforms derives mainly from a variety of devices and services which facilitate access to information and manage relationships among multiple players from different economic sectors (Liotard, 2012). Finally, by targeting the greater transparency of information, the platform also seeks to reduce uncertainty and to strengthen confidence between its users, for instance between private investors and entrepreneurs brought together on crowdfunding platforms (Belleflamme et al., 2012).

However, to ensure its credibility and legitimacy as an intermediary, a platform should reach a certain critical mass (Evans, 2013). This implies that each “face” of the platform must have sufficient users to be able to create enough value to attract new members (Evans 2013). If a platform fails to reach this critical mass, its members would tend to reduce their participation due to lack of recognition (Evans, 2013). Hence network effects are crucial in understanding the power of the platform: “Platforms become exponentially more popular as they become more popular” (Simon, 2013: 26).
This observation inspired us to look more closely at possible explanations of VC slowdown in the Swiss economic context. It also raised the question of the extent to which the emerging forms of financing for innovation (i.e. crowdinvesting platforms) could represent alternative solutions in terms of dealing with uncertainty when investing directly in early stage start-ups.

Hitherto, the large body of literature on venture capital and entrepreneurial finance has demonstrated researchers' interest in analysing venture capital fund performance, valuation methods and decision-making criteria (Festel et al., 2013; Harris et al., 2012; Kollmann et al., 2011; Teten and Farmer, 2010; Zacharakis and Shepherd, 2007). However, too little research has attempted to compare the traditional venture capital business model (formal and informal) with new unconventional forms of start-up financing, namely crowdinvesting intermediary platforms. In the next section we shall compare the decision-making logic and investment process adopted by venture capital firms and crowdinvesting platforms. The conceptual comparison below is based on a wide range of information sources: existing academic literature, public and private meetings and conferences, web-based content analysis, observation of crowdinvesting platform web sites and face-to-face discussions with several platform clients and founders.

4. CROWDINVESTING PLATFORMS VERSUS TRADITIONAL VENTURE CAPITAL

The growing academic research exploring crowdinvesting platforms as an alternative early-stage start-up financing model is still embryonic. In most papers we have reviewed, crowdinvesting is defined as a new, more start-up oriented form of crowdfunding (Hagedorn and Pinkwart, 2013; Harrison, 2013; Klöhn and Hornuf, 2012; Moritz and Block, 2013).

The phenomenon of crowdfunding appeared a few years ago and saw rapid growth through the Internet, first in the United States and then in Europe, as an alternative way to finance projects that experience difficulty in accessing funding capital through traditional finance channels (Harrison, 2013). In the growing literature, the concept of crowdfunding is commonly defined as a way of “raising money from general public, or the “crowd”, via an intermediary platform that is typically web-based” (Tomczak and Brem, 2013: 285). Several scholars have argued that crowdfunding has evolved from the broader concept of crowdsourcing, meaning the outsourcing of a particular problem to the crowd of anonymous individuals by drawing on their knowledge and expertise (Belleflamme et al., 2011; Hagedorn and Pinkwart, 2013). More precisely, the phenomenon of crowdfunding embodies the combination of two concepts: crowdsourcing and microfinance (Harrison, 2013). The latter refers to both financial and social intermediation by means of small
loans for economically active but poor borrowers unable to access more conventional sources of financing (Ledgerwood, 1998).

In the recent literature, the funding model put into practice by crowdinvesting platforms is often related to the venture capital investment approach. Hagedorn and Pinkwart (2013) consider the “equity model” of crowdfunding as the second generation of venture capital which takes advantage of the power of the crowd: "Crowdinvesting is a financing method for young ventures and other commercial projects that supports the acquisition of equity by coordinating the submission of different forms of shares to an undefined group of possible investors through social virtual communities" (Hagedorn and Pinkwart, 2013: 17). As pointed out by Harrison (2013), crowdinvesting or the “equity model” of crowdfunding represents the most recent of the distinct crowdfunding models (the others being donation, reward, pre-purchase and lending models). The crowdinvesting model offers investors equity-based rewards, which means a stake or a share of the profit stream, a financial product or an interest in a managed investment scheme (Harrison, 2013). Crowdinvestors are therefore rewarded by the return on the investment, as in traditional venture capital investment (Hagedorn and Pinkwart, 2013). Since 2007, crowdinvesting or equity-based crowdfunding has undergone massive growth, with an increase of 114% in Europe, mainly due to the proliferation of European platforms (Tomczak and Brem, 2013).

### 4.1 Investment and decision making process

In many research papers discussing the issue of new crowd financing practices, crowdinvesting is usually contrasted with traditional venture capital investment approaches (Hagedorn and Pinkwart, 2013; Kortleben and Vollmar, 2012). These two forms of investing in young ventures are compared mainly from the perspective of investment process (stages) and start-up selection/assessment strategies (Hagedorn and Pinkwart, 2013; Kortleben and Vollmar, 2012). As a general rule, venture capital firms conduct their investments in five stages (Tyebjee and Bruno, 1984): (1) deal generation, (2) screening, (3) evaluation, (4) structuring and (5) post investment activities. In the case of crowdinvesting platforms, the investment process lasts longer, because of a two-step start-up selection/assessment process: first, by platform founders and, then, by a large community of crowd investors (Hagedorn and Pinkwart, 2013; Kortleben and Vollmar, 2012).

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During the selection/assessment phase, venture capital firms undertake a thorough due diligence process, based on various decision-making criteria (entrepreneur, technology, product and market-related) (Festel et al., 2013). The due diligence is then completed by a standard financial ratio analysis (Metrick and Yasuda, 2011). Conversely, the due diligence carried out by the platform’s managers is lighter and simplified. Indeed, every individual investor is required to perform its own assessment on the basis of the entrepreneur’s business plan and oral presentation of the start-up project. The crowd investor thus takes sole responsibility for the final decision to invest. However, through communication tools available on these web-based platforms (e.g. discussion forums), potential investors have an opportunity to verify and contrast their estimates by interacting with other investors and the start-up founder. As investing through crowdinvesting platforms is accessible to anyone willing to invest their own money, Hagedorn and Pinkwart (2013) emphasize that it can be assumed that all private investors do not possess the knowledge to evaluate any business proposal. This necessarily raises the question of trust-building. In the event that investors have insufficient specialist knowledge (uninformed investors), individuals need to rely on the word of the start-up founder and/or follow some other, better-informed crowdinvestors whose expertise is recognized (Hagedorn and Pinkwart, 2013). Trust-building therefore becomes a strong factor in the decision to invest.

Table 1. Traditional Venture Capital Vs. Crowdinvesting platforms

<table>
<thead>
<tr>
<th></th>
<th>Venture Capital managed fund</th>
<th>Crowdinvesting intermediary platform</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start-up industry sector</strong></td>
<td>1-2 specific sectors</td>
<td>No specific sector (all industries)</td>
</tr>
<tr>
<td><strong>Investors</strong></td>
<td>Professional and experienced investors only</td>
<td>Various investors (professional/private: experienced/not experienced)</td>
</tr>
<tr>
<td><strong>Funding Instrument</strong></td>
<td>Active partnership</td>
<td>Mostly silent partnership</td>
</tr>
<tr>
<td><strong>Minimum Investment limit</strong></td>
<td>CHF 500k</td>
<td>100-250 €</td>
</tr>
<tr>
<td><strong>Intermediary fees</strong></td>
<td>2% (management fees) + 20% (capital gain)</td>
<td>5%-10% (founded sum) + various services (coaching, etc.)</td>
</tr>
<tr>
<td><strong>Financial circuit</strong></td>
<td>Centralized financial circuit connected to Global cities</td>
<td>Decentralized financial circuit (constellation of numerous decentralized circuits)</td>
</tr>
</tbody>
</table>

Source: Hagedorn and Pinkwart (2013), Metrick and Yasuda (2011)
4.2 Time and space issues

It is worth noting that apart from the divergences in start-up selection/assessment approaches, the comparison between venture capital firms and crowdinvesting platforms raises the question of temporal issues quite differently (Tab. 1).

Venture capital firms, which invest in start-ups on behalf of institutional investors, begin their investment process with fundraising (Fig. 3). This first step is crucial and represents one of the major sources of uncertainty in this field (Branche and al., 2012). Currently, the fundraising stage is severely undermined by the high risk aversion of institutional investors, especially with regard to direct investment in unlisted start-ups and SMEs. Hence, every three or four years, each new venture capital fund creation would be determined by the ability of the VC team to convince investors to entrust them with their money. Furthermore, the outcome of every fundraising exercise might be heavily influenced by a successful history of previous exits, and not only by the power of persuasion. This being so, a venture capital fund must assume, as financial intermediary, the full risk and responsibility for its investment choices. It cannot afford to fail because that would hamper the setting up of the next fund, and hence the future of the VC firm. That is why the next step in investment decision-making is often seen as a second major source of uncertainty for VC fund managers (Branche and al., 2012). VC firms therefore tend to increase their sectoral specialization with a narrow focus on just one sector or just one market in which they can best control distribution and exit networks, while giving preference to later-stage start-ups with proof of product and market. Finally, the whole investment process is characterized by an accelerating race for exit, between two and four years, instead of four to five years in the early 2000s (Mason and Harrison, 2002).

The second phase of the investment process (deal sourcing) entails another important challenge for VC funds, that of selecting the least risky and highest-potential start-ups from the huge volume of proposals they receive. By contrast, the first step on crowdinvesting platforms consists of pre-selecting several promising start-ups from those that are already registered on the platform. In its role of intermediary, the platform founders bear a minimal financial risk. Unlike the venture capital

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11 Small and medium enterprises (SMEs)
12 Interview with a manager of a Swiss VC fund (SVC-Venture Capital, Crédit Suisse)
funds’ remuneration system based on capital gain after exit (20%) in addition to 2%\textsuperscript{13} of management fees (Bonnet, 2012; Metrick and Yasuda, 2011), the income generated by crowdinvesting platforms comes mainly from levies on the finance raised\textsuperscript{14} as well as from various services intended for project owners (start-up presentation video, coaching, etc.) and for investors (learning seminars, split investment, etc.). Thus, multi-sided platforms (Evans, 2011) are primarily responsible for ensuring a better match between the expectations of start-up founders and those of potential private investors.

Figure 3. Temporal logics of Venture capital vs. Crowdinvesting investment process

Source: Own elaboration

Like the temporal organisation of the investment process, the spatial dimensions of stakeholders and financial channels generated by traditional venture capital players and crowdinvesting platforms also take shape differently (Fig. 4).

As argued by Christensen (2011), the concentration of venture capital firms in major financial centres, where economic activity is high, is often a demand-induced pattern. Hence dynamic urban areas attract the largest share of VC investments because of their close relations with financial and other institutions that may assist investment decisions and post-investment monitoring: technology

\textsuperscript{13} It is 2% of invested capital (Metrick & Yasuda, 2011)

\textsuperscript{14} According to the study conducted by Hagedorn A, Pinkwart A, 2013, "Crowdinvesting as a Financing Instrument for Startups in Germany. A Critical Platform Analysis." \textit{HHL Working Paper N°120}, crowdinvesting platforms levy from 5% to 10% of the sum raised in the event of a successful financing round. These results are based on a survey of 13 crowdinvesting platforms in Germany.
experts, a wide range of business services, head-hunters and access to syndicate partners (Christensen, 2011). In fact, geographical proximity matters for VC investments, both for venture capital firms themselves and start-ups. While facilitating access to the “tacit” knowledge which is needed to assess the trustworthiness of management, it makes it possible to reduce transaction costs which are higher if the financier is not close to the small firm (Christensen, 2011). This knowledge and expertise are essential for raising new funds within institutional partners, finding “good” deals, organizing investments and monitoring portfolio companies. At the same time, venture capital funds tend to invest locally, that is to say, close to VC clusters, such as big financial centres (Mason, 2007). This spatial proximity reduces uncertainty and minimizes the risks inherent in new and young businesses by sharing information with other investors, consultants, accountants and a wide range of other players. The nature of information-sharing tends to be personal and informal, built on mutual trust and, therefore, hard to obtain at long distance (Mason, 2007). This reliance on personal and professional contacts can be seen at every stage in the venture capital investment process: deal flow generation, deal evaluation and post-investment relationships (Mason, 2007).

Therefore, as intermediaries between the institutional investors\(^{15}\) (e.g. pension funds), start-ups and large multinationals\(^{16}\) as potential buyers, traditional venture capital entities have concentrated in “global cities” (Sassen, 2010) that are directly connected to global financial channels.

Conversely, the financial channel bringing together investors’ capital and innovative start-ups via crowdinvesting may be considered as spatially dispersed. Simultaneously locally-based through its founders and web-based, the platform brings together a large community of heterogeneous private and professional investors, geographically dispersed and with varied financial resources, with a large number of young enterprises from all kinds of industrial sectors spread throughout the national territory. Given that crowdinvesting platforms have only been in existence for two or three years, it would be too soon to draw any conclusions about exit routes, that is to say, the financial channel downstream. It may nevertheless be imagined that divestment will take place in the same way as for venture capital, principally through trade sale to large business or multinationals.

\(^{15}\) The most important investors in venture capital: pension funds, investment and commercial banks, insurance companies (Metrick A. & Yasuda A., 2011).

\(^{16}\) For European venture capital, trade sale is the dominant divestment strategy (46.7% compared with 14.8% IPO), EVCA Yearbook 2012 (http://www.seca.ch/getattachment/6e3e6728-ccb7-4c56-9058-22de93d27144/EVCA-Yearbook-2012.aspx)
5. RESULTS AND DISCUSSION: THE SWISS CASE

5.1 Post-crisis investment choices of Swiss pension funds: financial and reputational risk aversion

Our survey shows that there are several possible reasons why pension funds are currently so reluctant to invest in unlisted early stage businesses. First, there is a lack of highly skilled private equity and venture capital managers within Switzerland, and, second, the existing regulatory policy framework which issues recommendations and directions seems to discourage pension fund managers. This framework, which includes the Swiss federal authorities, politicians, the media, etc. can also put pressure on fund managers and engage their personal responsibility in case of financial losses. Unlike in the United States, where private equity and venture capital are regarded as 'normal', in Switzerland these investment vehicles are not widely known and, consequently, are not socially accepted because of their poor reputation. Hence, a heavy loss in equities will be passed by without comment in the media because it is ‘socially and politically accepted’, whereas
fluctuations in alternative investments are closely monitored by politicians and media alike, with strong criticism in the event of failure, affecting the reputation of the management.

Moreover, unlike equity investments through financial markets where it is possible to simply follow the benchmark index, direct investment in start-ups requires a different management style with continuous monitoring, which consumes excessive time and resources and hence cannot be justified from the fund’s point of view. Finally, the lack of enthusiasm for investing in unlisted small companies could be explained by the lack of entrepreneurial drive at pension fund management level. It appears from our interviews that pension fund heads are not entrepreneurs. They are often either former accountants who have gradually climbed the corporate ladder or portfolio managers coming from banks or other financial institutions. Their job consists of assessing the financial value of various products which is given by financial market evaluations. To invest in a more direct way in the economy, and more specifically in small unlisted firms, demands substantial experience in industry management.

As a result, pension funds currently have no option but to continue to place their capital in the financial markets through intermediaries or directly in real estate (Theurillat et al., 2010). Although Swiss pension funds have traditionally purchased and owned buildings directly, the proportion of real estate in pension fund portfolios is constantly increasing: 20.7% in 2011, as compared with 17.1% in 2007 (Swisscanto, 2012). Real estate assets, in fact, are viewed as a source of protection against the volatility of financial markets, despite rising prices, particularly in internationally significant cities such as Geneva, Lausanne and Zurich (Theurillat et al., 2010).

While opting for massive investments in liquid financial assets, such as equities and bonds, these institutional investors increasingly tend to skew their portfolios in favour of large groups such as Nestlé, Novartis, Roche and UBS, while ensuring that they have exactly the same companies in their portfolio as other pension funds. We argue that this “flagship strategy” may be explained by the institutional and conventional management framework. It means that since the Global financial crisis of 2008, and as far back as 2001, the main strategy is no longer to make the largest profits but to manage risks.

The question of risk is thus crucial to understanding the rationale and behaviour of investors. The financial system has eliminated the notion of uncertainty and replaced it with a concept of risk that is probabilisable (Savage, 1972) and controllable thanks to the principle of diversification established in portfolio theory (Markowitz, 1959). Conversely, investing directly in business projects means accepting radical uncertainty, an entrepreneurial gamble (Knight, 1921) which can only be partially controlled and which demands a high cost commitment, in both social and financial terms,
on the part of the investor (Julien and St-Pierre, 2012). We can therefore observe that what we call traditional alternative investments such as private equity or venture capital are not seen by pension funds as credible ways of satisfying their security and return criteria. Furthermore, it appears from our survey that investing directly in innovative unlisted businesses might involve a change in the management framework, accompanied by new entrepreneurial capacities and new tools for assessing the value of small firms.

This survey of Swiss pension funds and asset investment consultants has revealed that the traditional players in direct investment, the venture capital companies, have not succeeded in offering pension funds feasible solutions for managing uncertainty. The opposite is true; these institutional investors have tended to reduce to a minimum this type of alternative investment, which is regarded as too risky and likely to damage the reputation of the fund and its management.

5.2 Towards a new venture capital investment business model?

In Switzerland, against the background of the decline of traditional venture capital and the inability of business angels to fill the early-stage funding gap, new trends in direct investment have begun to emerge. Interviews conducted with some business angels clubs in Suisse Romande revealed aspirations to move away from the traditional business model in order to come closer to the platform model, with the intention of reducing the risk factor and improving the likelihood of achieving a match between the expectations of investors and entrepreneurs.

Increasingly, business angel clubs are facing difficulties, not least due to the geographical limitations imposed by their business model. The need for proximity between investors and the start-up financed, along with the restriction of financing to start-ups in a given region, significantly reduce the choice of investment projects. Aware of these limits, the business angels we interviewed in the course of this study would like to see their model evolve into a broader form of intermediation, which would make it possible to share databases of start-ups and investors among several business angel clubs in different regions of Switzerland. Contrasting territorial characteristics, for example the greater critical mass of start-ups and investors in the Zurich region than in Valais, could also lie behind the desire to combine resources. In the words of our

17 BAS (Business Angels Suisse) and CVBS (Club Valaisan des Business Angels)
18 Interview with BAS (Business Angels Suisse)
19 BAS (Business Angels Suisse) and CVBS (Club Valaisan des Business Angels)
interviewees, they would like to move towards an intermediation platform model inspired by the Go-Beyond platform. Created in 2010 in Zurich, this platform aims at improving the chances of matching private investors and start-up founders. The Go-Beyond platform provides its members with a wide range of services, such as learning seminars for inexperienced investors, group and split investments, start-up value benchmarking, etc. The learning and risk-sharing processes that take place within a community of investors helps to reduce the feeling of uncertainty and leads to a better understanding of the particular nature of the process of investing in early-stage start-ups.

In the field of traditional venture capital, new forms of intermediation between investors and start-ups are also beginning to appear. In the following section, we present a case study of a hybrid investment platform which combines the traditional practices of venture capital with new crowdfunding platform approaches.

**6. THE CASE OF INVESTIERE: THE HYBRID INVESTMENT MODEL**

Investiere is an intermediation platform for direct investment in early-stage start-ups. Its particular feature is to merge in a single business model the analytical and procedural rigour of venture capital professionals with the principles of transparency and shared knowledge offered by today’s virtual crowdfunding platforms.

Established as a concept in 2009, with the first financing round in 2010, the Investiere platform claims to have evolved within only three years into the largest private investors’ network in Switzerland, and even into the most important online start-up investment community in Europe today, with CHF 40 million annual private investment potential. Today, Investiere says that their platform assembles a community of over 4000 members including Swiss innovative start-ups, international industry experts, Swiss and international individual and professional investors, and different private / public and media partners. According to the platform founders, this hybrid business model was conceived “to go away from pure fund model and to go towards a platform

\[\text{http://www.go-beyond.biz/}\]
\[\text{https://www.investiere.ch/}\]
model that brings together different types of investors and allows a better industry diversification"\(^{23}\). The next section will compare the decision-making process and start-up valuation strategies of Investiere with those of traditional VC funds.

### 6.1 Decision-making process: Investiere vs. traditional venture capital

As mentioned above, the venture capital investment decision process normally includes the steps of deal origination, screening, evaluation, structuring and post-investment activities (Tyebjee and Bruno, 1984). Investment in early-stage start-ups is synonymous with high risks, so the new intermediation model developed by Investiere primarily aims to support individual investors, who may or may not have experience, by providing innovative tools for deal sourcing, deal selection and evaluation, as well as start-up monitoring.

### 6.2 Sources of deal origination

In principle, venture capital entities apply two methods of project selection: traditional (the passive collection of business proposals) and more proactive and innovative (Internet research, deal sourcing software, expert networks, social media, etc.) (Teten and Farmer, 2010). Despite the greater choice of deals available from a huge volume of proposals by combining these two methods, the deal origination process may encounter the problem of identifying those of high quality and with strong exit potential (Teten and Farmer, 2010). On crowdinvesting platforms, deal sourcing is mainly performed through entrepreneurs’ applications on the platform. On the Investiere platform, the deals originate from a dual source: first, through the entrepreneurs’ direct application on the platform, and, second, through the recommendations of Investiere community members. This dual approach provides access to the ecosystem for hundreds of start-ups and ensures that the best projects are not overlooked.

\(^{23}\) Steffen Wagner (Co-founder of Investiere), Presentation at I Swiss New Finance conference 2012 (http://www.swissnewfinance.ch/swissnewfinance/2012.html)
After the initial, pre-selection phase, venture capital funds conduct in-depth due diligence and multi-criteria analysis of the young business, which determines their decision to invest (Zacharakis and Shepherd, 2007). This stage is of great importance, because the fund team must use all its tools and expertise to be able to commit to a gamble on the future despite the radical uncertainty that characterises any business activity (Knight, 1921) especially in the field of innovation (Julien and St-Pierre, 2012). Unlike venture capital funds, crowdinvesting platforms do not assume all the responsibility for selecting ‘sound’ projects. After pre-selection by the platform founders, it is for the community’s investors to take responsibility for their decision by conducting their own assessment of the start-up. Interestingly, the legitimacy of VC funds and crowdinvestment platforms is not built on the same basis. In fact, VC fundraising from potential limited partners (LP) is mostly determined not only by VC fund size, but, in particular, by the reputation and successful track record of the VC team (Gompers, 1996; 1999). These factors appear to influence perceived controllability by limited partners, enhancing the success of fundraising (Kollmann et al., 2011). On the other hand, private investors on crowdinvesting platforms do not always have the necessary experience or expertise to assess the legitimate value of a start-up. Hence they tend to turn to an evaluation method which is self-referential in nature and based on mimicry (Keynes, 1965; Orléan, 2011). In our discussion of the evaluation approach based on shared opinion, we will follow Orléan (2011). This author emphasizes the importance of distinguishing between two different understandings of economic value: substantive value and opinion value. Substantive economic value refers to a valuation model based on substantive knowledge which is characterized by stabilised, clarified content provided, for instance, by industry experts (Crevoisier, 2011). In contrast, the ‘opinion’ value reflects an assessment model which consists of following or imitating the choices of players who are recognised as legitimate by a large community (Orléan and Diaz-Bone, 2013). For instance, on the Investiere platform, individual, inexperienced investors are invited to trust the opinion of certain members of the investment community who are recognised as experienced and competent (‘top investors’). In this way, small individual investors abandon the notion of control and agree to gamble on the future value of their investment. However, the amounts invested by private investors are incomparably lower (between €100 and €10 000) than the several millions invested by venture capital funds on behalf of major institutional investors.
The Investiere start-up evaluation model therefore differs from that of venture capital companies in terms of strategies, but also in terms of the time-scale. When a venture capital fund chooses a start-up, it must first conduct an assessment and then take the decision on whether to invest. In-depth due diligence which addresses financial, market, product and entrepreneurial issues is used to assess its potential and to consider the risks of involvement in an innovative project. Entrepreneurial uncertainty is then controlled by a VC team through close monitoring and active involvement in start-up management (Mason and Stark, 2004). These post-investment activities...
are essential but also very costly, which may explain the small number of simultaneous participations, as well as high management fees\textsuperscript{24}.

On the Investiere platform, the assessment of start-ups takes place differently, for two reasons. First, because the number of projects funded annually (about 10) is higher than the one to three projects normally selected by traditional venture capital companies, Investiere’s founders are unable to sit on the board of each start-up selected. Second, as an intermediary - a facilitator of deals - the platform does not assume the same responsibility for the success of the projects as venture capital funds do, since it is the community’s investors who carry all the responsibility for their investment decisions, based mainly on the information available through the platform. On the Investiere platform, the evaluation process consists of several stages and takes from three to six months. Once the entrepreneur has registered his start-up on the platform, it joins the Investiere ecosystem, where it will be subjected to the ‘social proof’ principle, that is to say, it will be evaluated continuously by different categories of players within the community.

\textbf{6.3 The ‘Social proof’ concept}

As has been shown above, the start-up assessment process happens differently, depending on whether it is conducted by a traditional venture capital company or by a crowdinvesting platform. It seems appropriate to approach this difference in terms of the notion of time, which is an important factor in early-stage investment. It is necessary to be both proactive and fast to identify and seize a good opportunity before others do so. Otherwise, at a later stage the cost of access for investors who arrive last may be too high, or the funding round may already have been closed. At the same time, it is important to take the time required to assess a new project which is only at the first prototype stage.

So as not to miss a project with high potential, and to be able to integrate it on the platform ahead of the others, the Investiere founders first conduct an accelerated pre-selection process and, once the investment offer has been officially announced, potential investors have the time necessary to

\textsuperscript{24} 2\% of invested capital
take the decision to invest. The ‘social proof’ strategy plays an essential role here, at several levels. At the first of these levels, some fifty industrial experts (industry curators) who are members of the community conduct an initial selection:

“In our case, we do involve industry experts right at the beginning, before we even look at a deal. We just simply look at what niche that specific start-up plays in. And we show this to industry experts. And these guys need very little information. They will look at the ecosystem, who you are connected to, what your product is about, who you sell it to. They know distribution sale channels, they know exit candidates. He can very quickly give us a thumbs up, a thumbs down, and if it is worth going ahead.” (Investiere founder)

After filtering by the experts and the Investiere team’s due diligence, the observation phase begins. This is a matter of observing the attitude of the community in response to the new project announced on the platform. As the investors have the opportunity to show their interest in investing with an indication of the amount they are willing to invest, it is important to see who is interested in the project and what their intentions are. So the involvement or otherwise of FFF can in itself provide an initial indication to community members:

“Well, if you look at what happens, you want to see that there are some friends and family commitments, because if there are no FFF commitments, something must be wrong. There must be someone from the person’s network that puts money in. So you wait, that’s fine to wait a little.” (Investiere founder)

As well as the involvement of FFF, interest on the part of some top investors, business angels or serial entrepreneurs provides additional assurance as to the validity of the business plan and the potential of the project.

The presence of a number of top investors among the community’s members is an essential feature of the Investiere business model. Who are these top investors? They are typically large and

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25 Friends, Family and Fools
successful financial players, such as large Swiss banks, large venture capital funds, major Swiss companies and also some of the most successful Swiss start-ups. When investing in young innovative ventures, the presence of these co-investors on the platform helps to enhance its legitimacy in the eyes of the community of private individual investors. These top investors have a leverage effect in attracting the best entrepreneurs to Investiere, as well as many private investors who would not otherwise have come. Private investors are often inexperienced, and lack any specific knowledge regarding the new product which they hope to finance. That is why the fact that they can co-invest alongside top investors gives them a degree of confidence and calms their anxieties in the face of uncertainty:

“Here is an example of an investment that is currently active. It is interesting to see that the co-investors, the potential co-investors because it is not yet closed, in this case are the founders and CEO of the most successful Swiss IT start-ups that we ever had (Doodle, jobstart.ch, etc.) These kinds of guys have know-how in company exit and they think this company is worth investing in. And you may want to do the same. That’s how it works. This may be ZKB or whoever, but we believe in this social proof.” (Investiere founder)

For its part, the Investiere team works to achieve the best possible match between the entrepreneur and the investors who will sit on the board of directors, ensuring that the investors who become involved in the management of the start-up have the appropriate expertise to monitor and support the young venture.

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26 Zürcher Kantonalbank (ZKB)
CONCLUSION

In this article we have sought to examine the emerging forms of financial intermediation which have appeared over the past two or three years in the area of innovation funding in Switzerland.

The hypothesis that new investment channels developed after the 2008 financial crisis led us to question the role of the venture capital industry in the increasing importance of short, direct investment channels which can replace investment through the financial markets. Contrary to this hypothesis, the venture capital industry has experienced a phase of decline over the last five years. We believe that this decline can be explained at two levels. Upstream, the reputational risks run by pension fund managers, and the Swiss political and institutional framework which does not encourage alternative investment, explain the difficulty venture capital companies have in raising new funds. Downstream, the trend for venture capitalists to abandon the early-stage sector to focus more on the very competitive market in high-quality, expanding SMEs derives from a certain failure of the traditional business model, mainly at the deal sourcing, start-up evaluation and investment decision phases.

We are now also witnessing the growth of new investment channels from below, following the emergence of new forms of financial intermediation represented by crowdinvesting platforms. Via a case study of the Swiss platform Investiere which combines professional investors, specialists in various sectors and inexperienced private investors who would like to invest directly in start-up projects, we have demonstrated some of the advantages of this new model by comparison with the traditional venture capital model. First, based on the principle of collaboration, the platform model benefits from its capacity to mobilise cutting-edge industrial and financial expertise appropriate to each particular start-up. Second, it draws advantages from exploiting the potential of new Internet technologies to bring together and increase the interaction between different players within a large community of investors and promoters of innovative projects. Finally, we believe that the crowdinvesting platform model provides a new answer to the fundamental question of managing entrepreneurial uncertainty. Venture capital funds have traditionally based their management of uncertainty on the specialist expertise of a small team of managers capable of conducting in-depth due diligence, close monitoring and active participation in the management of a financed start-up. On the Investiere platform, the feeling of uncertainty inherent in the early-stage start-up market is managed via the innovative concept of ‘social proof’. While accepting that radical uncertainty can never be completely managed, we suggest in this article that the new business model adopted by the Investiere platform is more in keeping with today’s socio-economic circumstances, and presents a more convincing and effective way of managing uncertainty than the traditional venture capital model.
The results of this research have led us to reflect on the future and the role of crowdinvesting platforms in the development of new investment channels in Switzerland. First, will the emblematic case of the Investiere platform in Switzerland be extended on a larger scale, marking a new direction for the venture capital industry? In other words, are we moving towards a new more decentralised system of financial intermediation, based on horizontal relationships between a range of stakeholders? The second question which arises concerns the ability of these new multi-sided intermediation platforms to generate a sufficiently large membership to ensure their long-term survival. As for institutional investors, hitherto reluctant to entrust their wealth to venture capital funds, will they be more inclined to invest in start-ups via crowdinvesting platforms, sharing the risks with different private and professional investors? Finally, at the current time, it is still too early to gauge the impact of these new forms of financing on the economy in different regions. This question remains unanswered and could be the subject of future research.
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