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"Entrepreneurial Finance: New Frontiers of Research and Practice"

Editorial for the special issue Embracing entrepreneurial funding innovations.

Venture Capital: An International Journal of Entrepreneurial Finance

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Abstract

The proliferation of new sources of entrepreneurial finance potentially makes it easier for ventures to raise capital and grow. To date, entrepreneurial finance literature has developed a rich tradition of research on venture capital and angel finance. However, the emergence of "new" sources of finance, such as crowdfunding, and the limited attention paid to "traditional" debt financing and financial bootstrapping, offer opportunities to explore, from different points of view and theoretical perspectives, the challenges that ventures face. The objective of this Special Issue is to explore these new and traditional sources of finance and suggest how these phenomena can extend entrepreneurial finance literature and guide new theory building. This paper outlines the new sources of entrepreneurial finance, and in comparing them with more traditional sources, we propose theoretical and empirical challenges that these new and traditional sources present to entrepreneurship scholars. We also provide a brief summary of papers in the Special Issue and outline promising avenues for future research.

Introduction

Entrepreneurial firms are the backbone of economies and drivers of both economic development and employment. Young and innovative entrepreneurial firms are germane to the creation, development and growth of new technologies, industries and markets and create the most jobs (Megginson, 2004). Yet, these firms often need considerable amounts of financial capital to sustain their growth. Over the last decades, entrepreneurial finance literature has emphasized the importance of venture capital investors and business angels.

However, despite the relevance of venture capital and angel financing, in recent years a whole set of relatively "new" sources of financing have emerged (e.g. Bruton, Khavul, Siegel and Wright, 2015). Entrepreneurs in science and technology start-ups can raise financing from numerous sources, such as accelerators and incubators, proof-of-concept centers, university-based seed funds, crowdfunding platforms, and IP-backed financial instruments. Moreover, contrary to common accounts of startup activity, research further shows that new entrepreneurial firms heavily rely on "traditional" external debt sources, including bank financing (e.g. Robb and Robinson, 2014). Others argue that entrepreneurs can create and grow flourishing firms without raising the external financing that other firms consider to be essential, for instance, through financial bootstrapping and bricolage (e.g. Baker and Nelson, 2005; Winborg and Landström, 2001). Finally, the globalization of financial markets has allowed ventures to receive funding from investors located in different countries (Devigne, Vanacker, Manigart and Paeleman, 2013; Mäkelä and Maula, 2005).

Considering the importance of entrepreneurial firms for the overall economic system, there is a need for research on these distinct sources of financing, to understand how they impact start-ups (Fraser, Bhaumik and Wright, 2015) and how these new (or generally ignored) phenomena

shape existing theories. Previous studies emphasized the peculiarity of the entrepreneurial settings to study mainstream theories such as agency theory (e.g. Sapienza and Gupta, 1994; Burchardt, Hommel, Kamuriwo and Billitteri, 2016), transaction cost economics (e.g. Wright, Pruthi and Lockett, 2005), and resource based theory (e.g. Bellavitis, Filatotchev and Souitaris, 2016). New financing models such as crowdfunding, new phenomena such as "unicorns", or generally ignored sources of financing such as bank debt, provide valuable avenues to test existing theoretical foundations and eventually challenge current wisdom.

Extant research has only skimmed the surface in terms of exploring these new sources of entrepreneurial finance and some traditional sources of financing. Future research will provide valuable insights by studying if, how and which entrepreneurs rely on these relatively new sources of financing, what the advantages and disadvantages of these new sources are compared to more traditional sources and how the entrepreneurial environment is going to be affected by the emergence of these new funding sources. This is just a small subset of potential research questions that arise from the emergence of these entrepreneurial finance trends.

Furthermore, entrepreneurial finance literature is largely segmented by the source of financing from which entrepreneurs obtain their funds. As highlighted by Cosh, Cumming and Hughes (2009) entrepreneurial finance studies focus, almost exclusively, on a single source of financing. Largely separate streams of literature have emerged in bank finance, lease finance, business angel finance, venture capital, private equity, supplier finance and more recently, crowdfunding. However, in practice, entrepreneurs often raise financing from a multitude of sources. Hence, we need a better understanding of how these various (new and/or traditional) sources of financing interact and how different combinations support (or harm) entrepreneurial ventures (Hanssens, Deloof and Vanacker, 2015).

The aim of this special issue is to further our knowledge of the latest trends in entrepreneurial finance, including the emergence of relatively new sources of finance, generally ignored sources of financing and strategies entrepreneurs can implement to realize more with less. We also aim to highlight how these new phenomena challenge the current theoretical wisdom. In doing so, we try to contribute not only to entrepreneurial finance literature, but also to the broader entrepreneurship literature and mainstream theories such as agency theory, transaction cost economics (TCE) and resource based theory (RBT).

Entrepreneurial finance: Where to go next?

In recent years entrepreneurial finance literature has experienced a substantial makeover. Not only have new phenomena such as crowdfunding emerged, but also researchers have highlighted the existence of finance sources for ventures that were originally thought to be precluded to them (e.g. bank debt). These new trends call for a significant reorganization of our understanding of how entrepreneurs finance and grow their ventures. In the following sections we will (a) explore "new" sources of finance for start-ups such as crowdfunding, (b) challenge common wisdom with respect to how "traditional" sources of finance support ventures' development, (c) illustrate how the internationalization of capital markets is impacting ventures' prospects, and (d) provide directions for future research and theory building.

"New" sources of financing

Until recently, the usual financing cycle started with the three "Fs" representing friends, family and "fools", followed by business angels, VCs and capital markets (e.g. IPO). Entrepreneurs looking to raise seed finance usually turned to their close ties. They developed a

prototype, approached the first clients and hopefully generated revenues. Once these initial milestones were achieved, entrepreneurs started enlarging their circle of financiers with business angels. These wealthy and well-connected individuals usually provided capital to expand. At this stage the venture was supposed to grow substantially in order to be appealing to institutional investors such as VCs. For many entrepreneurs, obtaining VC funding was already a significant achievement, a stamp of quality and success. VCs were considered a valuable sign of legitimacy (Stuart, Hoang and Hybels, 1999) and an important source of advice and contacts (Bellavitis, Filatotchev and Kamuriwo, 2014; Cumming, Fleming and Suchard, 2005; Sapienza, Manigart and Vermeir, 1996). VC funding and connections fuel strong growth domestically and internationally. Once the start-up raised VC funding, the entrepreneur and the investors shared the goal of reaching an IPO or selling the company to a large corporation. This cycle was generally considered to be streamlined. The majority of highly successful companies followed a similar funding cycle (e.g. Berger and Udell, 1998).

Nowadays however, this funding cycle has to be re-conceptualized. Entrepreneurs in science and technology start-ups can raise financing from numerous sources that were not available until recently. New sources include accelerators and incubators, proof-of-concept centers, university-based seed funds, and crowdfunding platforms. These sources offer peculiar advantages and disadvantages and can be accessed during different moments of the firm's life cycle, many times interchangeably. These new dynamics pose strategic challenges to entrepreneurs and offer interesting theoretical opportunities.

Although entrepreneurs tended to follow the "traditional" funding cycle mentioned above, today they can creatively and strategically time and customize their fund raising, approaching different sources of finance at various points in time. For example, some

entrepreneurs may prefer to enter an incubator at a very early stage to access a valuable network of contacts and mentors. Other entrepreneurs may prefer to access consumers directly through a crowdsourcing campaign on Kickstarter or Indiegogo. These choices offer different types of benefits and costs.

A prominent example of the former strategy is represented by AirBnB, the famous website for finding short term accommodation. AirBnB was founded in 2008. The following year the venture was admitted to the incubator program of Ycombinator. During the three months of incubation, important strategic changes were implemented, including the change of name from Airbedandbreakfast.com to AirBnB.com. In the years following the program, the venture raised a total of \$2.39B¹ from prominent angel investors such as movie star Ashton Kutcher, as well as VCs such as Sequoia, Andreessen Horowitz and Greylock Partners. After these early successes, Ycombinator and other well known incubators such as 500 Startups or Techstars grew in popularity. In fact, being part of one of these start-up programs has become a sign of legitimacy, as much as receiving funding from top VCs. The demo days² of these incubators are very popular and most companies backed by top incubators manage to raise significant follow on funding from VCs and other investors. The VCs that are based on the framework of Stuart et al. (1999) are supposed to confer legitimacy to the venture and tend to rely on the legitimacy conferred to the venture by the incubator to evaluate the venture's quality.

Another interesting phenomenon is represented by crowdfunding and crowdsourcing websites. It is not uncommon for ventures to raise funds directly from small investors (equity

¹ As of the 15th of April 2016. Source: CrunchBase.

² Demo days are events where the latest batch of companies that have been funded by each incubator present to a room of selected guests. Usually these guests represent investors or the press. Demand to attend these events at top incubators is high.

crowdfunding) or from prospective consumers (reward based crowdfunding). In particular, the latter form of crowdfunding reshaped the funding cycle considerably. In fact, ventures can now sell millions of products without needing the initial funds to produce these products. Ventures use sales' proceeds to ramp up production. Therefore, this funding source has the potential to disrupt how ventures finance their operations. A great example is represented by Pebble Watch. The company initially participated in Ycombinator, raised angel financing from top investors, but failed to raise a series A from VCs.³ Therefore the company turned to the crowdfunding website Kickstarter to raise additional funding. The first product launch raised more than \$10M, while the second raised more than \$20M. At this point, Forbes, with an article titled "Who Needs Venture Capital?"⁴, questioned the necessity to raise VC financing anymore.

However, the founders of Pebble Watch leveraged on the success obtained directly from consumers to raise an additional \$15M from institutional investors.⁵ A related example is the "Coolest cooler" that raised \$13.3M from Kickstarter and, although did not raise any institutional capital (yet), the founder of the "cooler" recently announced that the company intends to raise equity crowdfunding.⁶ These examples show that funding options to entrepreneurs have increased and different companies might follow different paths.

Ventures also require considerably fewer resources to grow their business compared to the past. Some ventures try "to do more with less". The cost of doing business, of transportation

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³ Source: Venture Beat. Article accessible at http://venturebeat.com/2012/04/18/pebble-smartwatch-rejected-vcs-kickstarter/.

Source: http://www.forbes.com/sites/anthonykosner/2012/04/19/who-needs-venture-capital-pebble-smart-watch-raises-over-5-million-on-kickstarter/#527c6e7a17b7

⁵ As of the 15th of April 2016. Source: CrunchBase.

⁶ Source: Crowdfundinsider, http://www.crowdfundinsider.com/2016/03/82461-coolest-cooler-will-raise-additional-capital-via-equity-crowdfunding/. As of the 3rd of October 2016.

and communication has decreased significantly in the last decades. The speed at which ventures access consumers is also growing exponentially. An interesting statistic shows that it took 75 years for the telephone to reach 100 million users. To access the same number of users it took the World Wide Web seven years, Facebook four and a half years, approximately three years for the messaging application Whatsapp and one year for the mobile game Candy Crash Saga. One take from these figures is that new platforms such as the internet or applications' market places such as iTunes allow ventures to directly access consumers in an unprecedented way, both in terms of timing and costs (Broekhuizen, Lampel, and Rietveld, 2013). To reach 100 million users, Whatsapp had raised only one round of VC worth \$8M, while Facebook, to reach the same number of users, raised numerous rounds of VC financing worth more than \$300M. Even more interestingly, in 2014 Whatsapp was acquired by Facebook for \$22B. What is surprising is that, at the time of acquisition, Whatsapp had only \$10M in revenues and was composed of a team of 55 employees. These interesting dynamics offer a valuable ground for research into the value and valuation of resources. What makes the resources embedded in Whatsapp so valuable?

These examples show that the funding cycle is not as straightforward as it used to be. The numerous alternative routes that entrepreneurs can follow to raise funding open up a plethora of research questions that entrepreneurial finance researchers can investigate. There are potential synergies between different sources of funding. From an investor perspective, synergetic players can turn into competitors, leading to higher valuations and the phenomenon of unicorns. Legitimacy plays a strong role and different sources, as we explained above, are intertwined. Conflicts of interests are heightened and are different from what they were in the past.

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⁷ Source: Boston Consulting Group "The digital imperative".

⁸ Source: Bloomberg, http://www.bloomberg.com/news/articles/2014-10-28/facebook-s-22-billion-whatsapp-deal-buys-10-million-in-sales

Entrepreneurs leverage scarce resources and the capital markets value these resources in ways that do not seem to align with existing theories. These are only a few of the many research topics that entrepreneurial finance researchers can investigate. As we highlight in the next section, scholars might contribute to entrepreneurial finance literature, not only by examining new sources of financing, but also by examining generally ignored traditional sources of financing and how these new and traditional sources interact and impact the venture's development.

Challenging common wisdom with respect to "traditional" sources of financing

It is often assumed that entrepreneurial firms require access to external sources of financing to form and subsequently grow because internal sources are lacking (Carpenter and Petersen, 2002a). However, it is also often assumed that adverse selection and moral hazard problems, combined with a lack of stable cash flows and high-quality collateral, make it extremely challenging, if not impossible, for young entrepreneurial firms to attract external debt and "traditional" bank debt in particular (Berger and Udell, 1998). Moreover, even when bank debt is available, it is often viewed as unsuitable for entrepreneurial firms. In fact, the above problems combined with the increased probability of financial distress associated with leveraged ventures discourage fund raising (Carpenter and Petersen, 2002b). Unsurprisingly, studies in the entrepreneurial finance domain have heavily focused on VC and angel financing—external (equity) investors that have developed specialized abilities to deal with severe adverse selection and moral hazard problems (Amit, Brander and Zott, 1998).

Undeniably, VC and angels are important sources of financing for entrepreneurial ventures. Vanacker and Manigart (2010), for instance, show that external sources of equity are important for the financing of extraordinary high-growth firms with limited debt capacity.

Moreover, Cole and colleagues (2016) compare the impact of VC funding and bank financing on firm growth and show a stronger impact on growth by VC funding rather than bank financing. However, only an extremely select group of entrepreneurial firms with high-growth ambitions are able to attract VC or angel financing. For instance, in the Kauffman Firm Survey, which includes 4,928 U.S. firms founded in 2004, only 26 new firms attracted VC funding and 110 new firms attracted financing from informal investors (Robb and Robinson, 2014). The 1993 U.S. NSSBF data shows that angel financing accounted for an estimated 3.59% and VC funding 1.85% of small business finance (Berger and Udell, 1998). Yet, there has been a disproportionate focus on external equity finance, including VC finance and to a lesser extent angel finance. The entrepreneurial finance field generally overlooks the fact that most entrepreneurs never get into contact with these financiers and need to attract financing from other more "traditional" sources of external financing, or rely on financial bootstrapping.

Sporadically, studies have suggested—contrary to the commonly held view in entrepreneurial finance literature—that banks and debt finance represent a major source of financing for entrepreneurial firms. Cassar (2004), for instance, shows that in his sample of Australian start-ups, 43.5% raised bank financing. Zarutskie (2006) used U.S. data to show that 57.9% of new firms used outside debt. Huyghebaert and Van de Gucht (2007) showed that Belgian start-ups are highly levered: on average, 75.73% of initial financing is raised as external debt, and bank debt represents 44.76% of total debt. Moreover, in the five years after raising initial VC financing some 60% of financing events in Belgian VC-backed firms related to raising

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⁹ Note that even when examining new sources of financing, entrepreneurial finance scholars generally put little emphasis on debt financing. For instance, while many studies are emerging on reward-based crowdfunding and equity crowdfunding, almost no research focuses on lending-based crowdfunding, which is surprising because lending-based models cover the biggest part of the crowdfunding market (Massolution, 2015).

debt financing (Vanacker, Seghers and Manigart, 2012). Thus, while generally ignored, debt financing plays a crucial role even in VC-backed firms (for evidence from U.S. VC-backed firms, see Robb and Robinson, 2014). This evidence indicates that we need a better theoretical and empirical understanding of the role of debt in entrepreneurial ventures.

For example, what mechanisms do banks use to reduce information problems when interacting with new firms? Finance scholars have suggested that "one of the most powerful technologies available to reduce information problems in small firm finance" is relationship lending (Berger and Udell, 2002: F32). Traditional (entrepreneurial) finance research has focused on large and small firms, but we have very little research on new firms. However, as Chua and colleagues (2011: 473) indicate "what works for large or small firms may not work for new ventures". Thus, we cannot simply generalize findings from large and small firms to apply to new entrepreneurial firms. In addition, just like VC investors represent a heterogeneous set of investors, so do banks. For instance, larger national banks and smaller local banks function differently (e.g. Howorth and Moro, 2006). Overall, we require additional theoretical and empirical work on how (different types of) banks interact with new entrepreneurial firms and influence the financing and growth of these firms.

Entrepreneurial finance literature would benefit from a better understanding of how debt policies evolve in entrepreneurial firms. Entrepreneurial finance scholars generally assume that debt financing becomes available as firms develop a track record and accumulate collateral. Thus, as depicted in the financial growth cycle (Berger and Udell, 1998), debt policies change considerably as entrepreneurial firms age. However, drawing on imprinting theory, Hanssens, Deloof and Vanacker (2016) illustrate that entrepreneurial firms' debt policies (leverage, debt specialization, debt maturity and debt granularity) contain an important stable component in the

15 years after startup. Specifically, the debt policies in the initial year of operation are important determinants of future debt policies, even after controlling for traditional contemporaneous determinants. Moreover, the influence of initial debt policies on future debt policies is significantly reduced when founder-CEOs are replaced or when they die. Interestingly, the importance of external debt financing for entrepreneurial firms also opens new avenues for research on topics that have only received attention in publicly-held firms, such as debt specialization decisions.

It becomes clear that, to date, we have only skimmed the surface in terms of understanding the role of debt financing and banks in entrepreneurial firms. Moreover, when entrepreneurs are unsuccessful at raising external financing from "traditional" sources, such as banks, they are unlikely to remain passive. Indeed, as highlighted by Cosh and colleagues (2009: 1494) "[entrepreneurial] firms seeking capital are typically able to secure their requisite financing from at least one of the different available sources. However, external finance is often not available in the form that a firm would like." Thus, there is a need for more research that examines multiple sources of financing simultaneously, opening important avenues for future research on how "traditional" and "new" sources of financing interact. For instance, why do some firms raise financing from banks while others visit lending-based crowdfunding platforms? Which companies are more likely to obtain each source of finance? Do firms that attract financing on equity crowdfunding platforms have subsequently better access to external debt financing and what happens to those firms that had unsuccessful campaigns?

In addition, entrepreneurs often "handle the need for resources using means other than external finance by applying different kinds of financial bootstrapping methods", where financial bootstrapping "refers to the use of methods for meeting the need for resources *without* relying on

long-term external finance from debt holders and/or new owners" (Winborg and Landström, 2001: 235-236; emphasis added). As such, financial bootstrapping may allow entrepreneurial firms to grow and flourish despite experiencing financial constraints. Importantly, while prior research has often framed bootstrapping as a reactionary activity of entrepreneurs (e.g. a last resort) driven by a lack of external financing, entrepreneurs also proactively use bootstrapping techniques (Grichnik, Brinckmann, Singh and Manigart, 2014; Winborg, 2009). Some 95% of firms in the studies by Freear, Sohl and Wetzel (1995) and Harrison, Mason and Girling (2004) were engaged in at least some bootstrapping activities. Despite its prevalence, research on financial bootstrapping remains scarce—even when we consider studies that have focused on some individual bootstrapping techniques, such as leasing and using subsidy financing (e.g. Deloof and Verschueren, 1999; Meuleman and De Maeseneire, 2012). Overall, there remain significant opportunities for additional research on how entrepreneurs address opportunities without relying on external financing using more, or less, creative techniques and how entrepreneurial bootstrapping activities relate to the use of other "traditional" (and "new") financing sources.

International capital markets

Research on the development of 'traditional' sources of entrepreneurial finance such as venture capital and debt in emerging markets has revolved around how and why institutional voids impede ventures from accessing much needed funding relative to their counterparts in developed markets. Institutional voids in emerging markets include relatively low legal protection for investors, erratic legal enforcement, and under-developed capital markets. These

institutional problems have negatively affected the development of VC and debt markets in emerging economies (e.g. Bruton, Fried and Manigart, 2005).

Similarly, relatively opaque or weak regulations and accounting standards in emerging markets significantly and negatively lower the prevalence of quality (voluntary) reporting by entrepreneurial ventures (e.g. Cumming and Walz, 2010). Whilst this certainly makes it more difficult to obtain not just VC funding but also bank debt, research has also highlighted the increased importance and role of networking in emerging economies for entrepreneurial ventures to access equity or debt markets (e.g. Bruton, Ahlstrom and Pecky, 2009). This line of research has opened a stream of inquiry into how entrepreneurial ventures access network resources. For example, how do firms lacking network resources due to cultural reasons (e.g. female-backed ventures in traditionally male dominated societies) access funding in emerging markets?

Hence, whilst VC funding represents a small portion of entrepreneurial finance in developed countries, it plays an even smaller role in emerging markets. This situation is exacerbated by the fact that entrepreneurial ventures in emerging markets have relatively lower levels of corporate transparency or disclosures required and enforced (e.g. Cumming and Walz, 2010). This has implications for how the VC funding cycle – deal origination, monitoring and exit – differs across markets. Although these issues are well researched for the biggest VC sectors in the U.S. and Western Europe, limited attention has been devoted to other markets. Research in Asia (where China and Japan are especially key markets), Eastern Europe, South America and Africa is still required in order to fully understand how institutional differences affect the development of the VC and debt markets in these contexts.

Another key emerging market characteristic is that the majority of businesses and individuals get their funding outside formal equity and debt institutions. A number of researchers

have chronicled the development and diffusion of funding innovations in emerging markets that revolve around microfinance. This literature has tended to focus on studies at the so-called bottom of the pyramid and thus highlights the reduction of poverty as a key outcome of using microfinance (e.g. Robinson, 2001). Whilst this literature is rich and quite extensive in the emerging markets, its development has been insulated from other streams of inquiry. It would be interesting to integrate research in microfinance with other entrepreneurial finance sources. For example, how do microfinance funded firms grow and move on to other sources of funding? Moreover, alongside microfinance, there are other types of informal but highly innovative funding sources in the communities of emerging markets. These sources revolve around community-based savings and lending clubs whose governance and management of default rates is based on cultural and social capital considerations.

Finally, it is widely accepted that emerging markets need to develop an institutional framework that supports an entrepreneurial ecosystem (e.g. Cumming, Schmidt and Walz, 2010). Although there are differences across markets in relation to the extent to which each country has invested in developing a supportive entrepreneurial ecosystem, funding innovations such as accelerators and incubators are slowly finding their way into most emerging markets. Some are government backed but most are private. Private accelerators include international backed units as well as some supported by local entrepreneurs. Such funding innovations are in their infancy in most emerging markets and research is required to increase our understanding of how they fit into the funding life cycle.

Theoretical implications of the evolution of entrepreneurial finance

Given the significant differences between financing strategies of mature firms and entrepreneurial ventures, it is not surprising that researchers have different theoretical foci when applying mainstream theories to these two distinctive contexts, such as agency and institutional theories, resource-based view and transaction cost economics. Table 1 provides a brief summary of these differences.

Insert Table 1 about here

The agency perspective with its focus on principal-agent problems and costs of managerial opportunism in terms of shareholder value destruction has dominated corporate finance research for many decades. The main emphasis of this research in the context of the firms' financing decisions is on how to protect the interests of minority investors from the selfserving behavior of professional managers. However, an entrepreneurial finance context adds new, relatively less explored, dimensions to agency-grounded research. For example, foundermanagers may hold significant equity stakes in the entrepreneurial firm, and there is the potential for these individuals to abuse other investors. The information asymmetries intrinsic in a young and fast-growing company make it possible for founder-managers to shirk their duties and not act at maximum efficiency and effectiveness for the firm. The emerging "multiple agency" framework suggests a complex picture of the governance roles of founders and early stage investors. For example, although VCs are principals to a focal firm, they are also agents to those who provide their investment funds (e.g. pension funds). This dual role can result in the traditional principal-agent problems being supplanted by multiple agency problems arising from principal-principal goal incongruence, which occurs when a dominant owner disregards the interests of minority public market owners (Bruton, Filatotchev, Chahine and Wright, 2010).

Therefore, emerging research questions include: How do new sources of finance shape the agency conflicts? For example, in crowdfunding "ownership" is highly dispersed and generally inexperienced, compared to VC investments. Also, if an entrepreneur raises capital both from the crowd and VCs, interests may be diverging. Similarly, if the venture sells products on Kickstarter, and then raises VC, the interests of the consumers and those of investors might be divergent. How can this misalignment of interests be reconciled?

Internalization theory emphasizes the relative costs and benefits of coordinating related economic activities internally by the management of a firm rather than externally through the market. A parallel literature has focused on the theory of the domestic firm, and has given rise to the transaction costs economics (TCE) paradigm in which the works of Williamson (1979) and Klein, Crawford and Alchian (1978) have been particularly influential. Both view the firm as an alternative governance structure to the market. And both focus on crafting governance structures which economize on the *ex post* transaction costs of coordinating the activities of the various parties. When the TCE framework is applied to capital markets the focus is not on how firms can minimize the costs associated with production and distribution on global product markets but rather how firms can minimize the costs related to the acquisition of production factors such as capital, that are available globally. Such issues as using an internalized capital market within a multi-divisional organizational form, or selecting foreign stock exchanges for the firm's equity, have become focal points on TCE-grounded studies of global capital markets.

Again, the research context of entrepreneurial finance provides important new dimensions to the TCE framework. A number of emergent theoretical perspectives is related to new research questions such as: How do entrepreneurs choose between sources of finance? What are the different advantages and disadvantages of each source? How do they impact future

performance? What type of performance impacts arise from each funding source? How do they interact? Are VCs relying on signals such as crowdfunding success or accelerators? Or vice versa, are crowdfunding backers relying on the legitimacy conferred by previous VC investors? Are VCs decreasing their due diligence efforts if a firm belongs to a prominent accelerator? How are valuations impacted by the mix of different investors? Are these signals reducing the information asymmetries or is the increase in the number of players heightening agency costs?

The two main theoretical approaches to the financing strategies of mature firms in the management field - resource-dependency theory (RDT) and the resource-based view (RBV) assume that the most efficient firm strategy will be that which maximizes the rents from the firmspecific assets and thus maximizes the long-run value of the firm (Buckley and Strange, 2011). The RDT perspective extends these arguments further and suggests that a successful strategy to access factor markets should also aim at minimizing the firm's dependency on external transactional parties such as suppliers of finance. The entrepreneurship research adds new dimensions to this analysis by focusing on how firms can take advantage of their knowledge capital to minimize their dependency on external capital providers. For example, "unicorns" are resource poor firms with high valuations. How do we value the resources inside these firms? What makes these resources so valuable? Do the new "do more with less" rules change how we value ventures? Do ventures raising funds from different types of investors (e.g. VCs and crowdfunding) reduce their dependency on each fund provider or just increase their transaction costs? Previous literature emphasized that VCs add value: Do entrepreneurs rely less on VCs to add value? More precisely, in this over-connected world where access to consumers is more direct, can VCs still add value? Is it more valuable to pre-sell products in a crowdfunding campaign and establish a relationship with customers early on, or is better to connect with a top

VC? How much are entrepreneurs willing to pay to receive VC? Do some ventures benefit from VC more than others? How can VCs improve their business model to compete with these new sources? Or do they just compete on valuations (leading to unicorns)?

Institutional theory has been widely deployed in both product and capital market studies, but here too we find a number of subtle differences in theoretical emphasis and focus with regard to entrepreneurial firms as opposed to their more mature industry peers. Generally, sociological and institutional perspectives on the behavior of financial markets suggest an alternative theoretical approach to the role of macro-institutions by arguing that capital markets' reactions to firm-level financing strategies are institutionally embedded. From this perspective, market perceptions of the firm's actions are an outcome of investors' perceptions of its legitimacy rather than rational, efficiency-centered investor decisions (Bell, Filatotchev, Aguilera, 2014). *Legitimacy* is the "generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate, within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574). In the context of corporate finance, this research explores how being isomorphic with its institutional environment can help the firm to reduce the cost of capital and improve its financial sustainability.

Again, in the setting of uncertainty associated with the process of capital raising by entrepreneurial firms, investors tend to focus on institutionalized rules (also called institutional logics) when evaluating the quality of financial products offered by firms (Filatotchev, Chahine and Bruton, 2016). These rules are formed by macro-institutions that frame the process of an investor's assessment of the firm. New research questions are: How do entrepreneurial firms gain legitimacy among various types of investors? Can they compensate for the lack of a performance track record by relating to special types of investors, such as "crowdfunding"? How have the

institutional logics changed overtime? And in particular, do the new sources of finance available to entrepreneurs change the institutional rules?

To summarize, mature and entrepreneurial firms differ significantly in terms of information environment, time structure of transactions, and linkages between investors and investees, which suggests that the process of financing and its impact on individual firms in the two markets may be different. To address these theoretical challenges, we also need to reconsider our application of key research frameworks that have been widely used in prior research, including TCE, RBV/RDT and institutional theory.

Papers in the Special Issue

The special issue presents five well researched papers that address some of the key questions raised by our call. Here we summarize the papers in the special issue and provide important highlights and linkages that should prove useful for further work in this area.

The first paper by Cumming and Vismara unravels and seeks to address the problem we have highlighted in our call – i.e. that entrepreneurial finance literature is segmented. In their comprehensive review, Cumming and Vismara show that entrepreneurial finance studies tend to be segmented along four dimensions. First, the entrepreneurial finance literature is segmented by the source of financing. This segmentation has hindered our understanding of how different financing sources interact. Moreover, research is biased towards studying intermediated (e.g. venture capital) finance but our knowledge on disintermediated financing sources such as crowdfunding is still limited. Second, research is segmented by data source – and this segmentation implies that samples are often biased towards firms that received a particular source of financing. Third, studies are segmented by field of investigation. Different approaches

and requirements have meant that studies appearing in finance journals versus those that appear in entrepreneurship/management journals have different expectations and treatment of theory and rigour in estimation methods. As such, different "silos" of research have appeared with limited cross-fertilization between them. Finally, studies are segmented by country and are often US-biased. However, findings in one context do not necessarily hold in another context, and cross-country differences require more attention in the entrepreneurial finance literature. Whilst this paper provides a comprehensive review of trends within each segment, it also points out valuable research directions to contribute across segments.

The second paper by Neckebrouck et al. starts from the observation that extant work concludes that family firms are reluctant to hand over control to outside investors, while in practice there are indications that more and more family firms open their capital for outside investors. By drawing on organizational identity theory, they answer to our call by explaining why specific family firms may be more open to outside equity investors and, if so, which funding sources they prefer. By so doing, this study also addresses the segmentation by funding source as highlighted in the paper by Cumming and Vismara. The study by Neckebrouck et al. shows that Belgian family firms with a strong family identity are less likely to use outside investors – and that when they do, they are more likely to use investors that are more family oriented such as family offices and high net worth investors. The research goes some way to help us understand why some firms may find it difficult to incorporate a range of funding sources – especially those that may be innovative – as they develop.

The third paper by Loher clarifies the emerging role of crowdfunding platforms for those ventures that seek to use this funding source. Although crowdfunding is a disintermediated source of financing (as pointed out by Cumming and Vismara in this special issue), Loher's

study shows that crowdfunding platforms do not remain passive. Indeed, there is a key preselection process that platforms play in two main stages. First, not only do platforms source deals, but they also screen ventures to ensure that they are in line with the investors' preferences. This is crucial to increase the likelihood that platforms generate success fees and, at the same time, to align the investments' opportunities with the investors' requirements. As a consequence, investors' attention span will lengthen, so their incentive to stay on the platform. A second key role is for the platform to help market and promote the accepted projects to potential investors. This study helps ventures to understand that there seems to be significant differences across platforms in terms of mission and positioning. Therefore, for a venture seeking this route of funding, finding the right platform is worthwhile and likely to improve access to this growing innovative funding source.

The fourth paper by Moghaddam et al. is an interesting look at how firm and entrepreneurial characteristics – high tech ventures and cultural background of founders – affect choices of the multiplicity of funding sources or types used. In a qualitative comparative study of native born versus non-native Americans, the study finds that immigrant founders prefer bootstrapping and bank loans from relatively small banks. Native founders tend to use a multiplicity of funding sources (including venture capital and angel financing and bank debt) and use relatively bigger banks. Immigrant founders are said to be relatively conservative and to prefer to hoard equity – which leads them to source funding from their focused/limited networks. These findings re-inforce how firm and entrepreneurial characteristics can limit the willingness of specific entrepreneurs to access a wider range of available funding options. This has implications for how we can understand the embracement of new funding sources but also how cultural factors may impede access to innovative funding.

Finally, the paper by Hulsink et al. discusses an innovative funding solution. The authors describe the Dutch government revolving fund that helps science based start-ups to access funding to purchase or to access specialized testing equipment they need in their early venture stage. This study shows that, compared to other government backed incentives normally used to stimulate private equity or debt investment into early stage high risk ventures, a special purpose government backed fund provides a greater impact on venture development. Ventures backed by the fund have faster and greater innovative outputs and are able to develop and change their business models accordingly to broaden their network and perspectives. A key reason may be that the fund is properly targeted to provide investments that the market would be reluctant to – given the risk involved. The study shows that government interventions need not simply copy the private sector models but that such intervention must be better targeted to venture needs.

Conclusion

Entrepreneurial ventures represent important "engines" for future economic growth. However, for these ventures to form and subsequently grow, financial resources are critical (Cassar, 2004). While many studies have focused on the financing of entrepreneurial ventures, several issues remain under-explored. Moreover, empirical evidence and theoretical insights from established organizations cannot be simply generalized to the entrepreneurial context. Furthermore, there are many newly emerging phenomena that can, and should, be explored given the practical importance of entrepreneurial ventures for modern economies as well as developing ones. From an academic point of view, the entrepreneurial context and new developments in this context also provide ample opportunities to extend mainstream theories in different academic fields.

In this editorial, we have provided interesting avenues for further research related to new sources of entrepreneurial finance (including crowdfunding), traditional—but generally ignored—sources of entrepreneurial finance (such as bank debt) and the globalization of entrepreneurial finance markets. Furthermore, we highlighted how these avenues for further research within the entrepreneurial finance context provide many opportunities to contribute to mainstream management and finance theories including agency theory, transaction cost economics, resource-based theory, resource dependence theory and institutional theory. We then summarized the papers that are included in this Special Issue and started to address some of the issues we identified. Obviously, most of our identified avenues for further research remain open and we hope that these avenues will become part of the research agendas of many colleagues in the near future.

References

- Amit, R., Brander, J., and Zott, C. 1998. Why do venture capital firms exist? Theory and Canadian evidence, *Journal of Business Venturing*, 13(6): 441-466.
- Baker, T. and Nelson, R.E. 2005. Creating something from nothing: Resource construction through entrepreneurial bricolage, *Administrative Science Quarterly*, 50(3): 329-366.
- Bell G., Filatotchev, I. and Aguilera, R. 2014. Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective, *Academy of Management Journal*, 57(1): 301-320.
- Bellavitis, C., Filatotchev, I., and Kamuriwo, D.S. 2014. The effects of intra-industry and extra-industry networks on performance: A case of venture capital portfolio firms, *Managerial and Decision Economics*, 35(2): 129-144.
- Bellavitis, C., Filatotchev, I., and Souitaris, V. 2016. The impact of investment networks on venture capital firm performance: A contingency framework, *British Journal of Management*, 00: 1–18.
- Berger, A.N. and Udell, G.F. 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*, 22(6): 613-673.
- Berger, A.N. and Udell, G.F. 2002. Small business credit availability and relationship lending: The importance of bank organisational structure. *The Economic Journal*, 112(477): F32-F53.
- Broekhuizen, T.L.J., Lampel, J. and Rietveld, J. 2013. New horizons or a strategic mirage? Artist-led-distribution versus alliance strategy in the video game industry. *Research Policy* 42(4): 954-964.
- Bruton, G.D., Ahlstrom, D., and Pecky, T. 2009. Institutional differences and the development of entrepreneurial ventures: A comparison of the venture capital industries in Latin America and Asia, *Journal of International Business Studies*, 40: 762–77.
- Bruton, G.D., Fried, V.H. and Manigart, S. 2005. Institutional influences on the worldwide expansion of the venture capital industry, *Entrepreneurship Theory and Practice*, 29(6): 737-760.
- Bruton G., Filatotchev I., Chahine S., and Wright. M. 2010. Governance, ownership structure and performance of IPO firms: The impact of different types of private equity investors and institutional environments, *Strategic Management Journal*, 31(5): 491-509.
- Bruton, G., Khavul, S., Siegel, D. and Wright, M. 2015. New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations, *Entrepreneurship Theory and Practice*, 39: 9–26.
- Buckley, P.J. and Strange, R., 2011. The governance of the multinational enterprise: Insights from internalization theory, *Journal of Management Studies*, 48(2): 460-470.

Burchardt, J., Hommel, U., Kamuriwo, D.S., amd Billitteri, C. 2014. Venture capital contracting in theory and practice: Implications for entrepreneurship research. *Entrepreneurship Theory and Practice*, in press.

Carpenter, R.E., and Petersen, B.C. 2002a. Is the growth of small firms constrained by internal finance? *Review of Economics and statistics*, 84(2): 298-309.

Carpenter, R.E., and Petersen, B.C. 2002b. Capital market imperfections, high-tech investment, and new equity financing, *The Economic Journal*, 112(477): F54-F72.

Cassar, G. 2004. The financing of business start-ups, *Journal of Business Venturing*, 19(2): 261-283.

Chua, J.H., Chrisman, J.J., Kellermanns, F., and Wu, Z. 2011. Family involvement and new venture debt financing, *Journal of Business Venturing*, 26(4): 472-488.

Cole, R., Cumming, D., and Li, D. 2016. Do banks or VCs spur small firm growth? *Journal of International Financial Markets, Institutions and Money*.

Cosh, A., Cumming, D., and Hughes, A. 2009. Outside entrepreneurial capital, *Economic Journal*, 119(540): 1494-1533.

Cumming, D., Schmidt, D., and Walz, U. 2010. Legality and venture capital governance around the world, *Journal of Business Venturing*, 25: 54-72.

Cumming, D., Fleming, G., and Suchard, J.A. 2005. Venture capitalist value-added activities, fundraising and drawdowns, *Journal of Banking and Finance*, 29(2): 295–331.

Cumming, D. and Walz, U. 2010. Private equity returns and disclosure around the world, *Journal of International Business Studies*, 41(4): 727-754.

Deloof, M. and Verschueren, I. (1999). Are leases and debt substitutes? Evidence from Belgian firms, *Financial Management*, 28(2): 91-95.

Devigne, D., Vanacker, T., Manigart, S., and Paeleman, I. 2013. The role of domestic and cross-border venture capital investors in the growth of portfolio companies, *Small Business Economics*, 40(3): 553-573.

Filatotchev, I, Chahine, S. and Bruton, G. (Forthcoming). Board interlocks and IPO performance in the US and UK: An institutional perspective, *Journal of Management*.

Fraser, S., Bhaumik, S. K., and Wright, M. 2015. What do we know about entrepreneurial finance and its relationship with growth? *International Small Business Journal*, 33(1): 70-88.

Freear, J., Sohl, J. and Wetzel, W. 1995. Who bankrolls software entrepreneurs? *Frontiers of Entrepreneurship Research*, (pp. 394-407). Wesley, Mass: Babson Center for Entrepreneurial Studies.

Grichnik, D., Brinckmann, J., Singh, L., and Manigart, S. 2014. Beyond environmental scarcity: Human and social capital as driving forces of bootstrapping activities, *Journal of Business Venturing*, 29(2): 310-326.

Hanssens, J., Deloof M., and Vanacker, T. 2015. Underexplored issues in entrepreneurial finance. In D.B. Audretsch, C.S. Hayter, and A. N. Link (Eds.), *The Concise Guide to Entrepreneurship, Technology and Innovation*. New York, NY: Edward Elgar.

Hanssens, J., Deloof, M., and Vanacker, T. 2016. The evolution of debt policies: New evidence from business startups, *Journal of Banking and Finance*, 65: 120-133.

Harrison, R. T., Mason, C. M., and Girling, P. 2004. Financial bootstrapping and venture development in the software industry, *Entrepreneurship and Regional Development*, 16(4): 307-333.

Howorth, C., and Moro, A. 2006. Trust within entrepreneur bank relationships: Insights from Italy, *Entrepreneurship Theory and Practice*, 30(4): 495-517.

Huyghebaert, N. and Van de Gucht, L.M. 2007. The determinants of financial structure: New insights from business start-ups, *European Financial Management*, 13(1): 101-133.

Klein, B., Crawford, R.G. and Alchian, A.A. 1978. Vertical integration, appropriable rents, and the competitive contracting process, *Journal of law and economics*, 21(2): 297-326.

Mäkelä, M.M., and Maula, M.V.J. 2005. Cross-border venture capital and new venture internationalization: An isomorphism perspective, *Venture Capital*, 7(3): 227–257.

Massolution. 2015. 2015CF – Crowdfunding industry report.

Megginson, W.L. 2004. Towards a global model of venture capital, *Journal of Applied Corporate Finance*, 16: 89–107.

Meuleman, M., and De Maeseneire, W. 2012. Do R&D subsidies affect SMEs' access to external financing? *Research Policy*, 41(3), 580-591.

Robb, A. M., and Robinson, D.T. 2014. The capital structure decisions of new firms. *Review of Financial Studies*, 27(1): 153-179.

Robinson, M. S. 2001. The microfinance revolution: Sustainable finance for the poor. World Bank Publications.

Sapienza, H. and Gupta, A.K. 1994. Impact on agency risk and task uncertainty on venture capitalists-CEO interaction, *Academy of Management Journal*, 37(6): 1618–1632.

Sapienza, H.J., Manigart, S., and Vermeir, W. 1996. Venture capitalist governance and value added in four countries, *Journal of Business Venturing*, 11(6): 439-469.

Stuart, T.E., Hoang, H., and Hybels, R.C. 1999. Interorganizational endorsements and the performance of entrepreneurial ventures, *Administrative Science Quarterly*, 44(2): 315–349.

Suchman, M.C. 1995. Managing legitimacy: Strategic and institutional approaches, *Academy of Management Review*, 20(3): 571-610.

Vanacker, T. and Manigart, S. 2010. Pecking order and debt capacity considerations for high-growth companies seeking financing, *Small Business Economics*, 35(1): 53-69.

Vanacker, T., Seghers, A. and Manigart, S. 2012. Follow-on financing of venture capital backed companies, in D. Cumming (ed.), *Oxford Handbook of Venture Capital*, Oxford: Oxford University Press, pp. 373-400.

Williamson, O.E., 1979. Transaction-cost economics: The governance of contractual relations, *Journal of Law and Economics*, 22(2): 233-261.

Winborg, J. and Landström, H. 2001. Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors, *Journal of Business Venturing*, 16(3): 235-254.

Winborg, J. 2009. Use of financial bootstrapping in new businesses: A question of last resort? *Venture Capital*, 11(1): 71-83.

Wright, M., Pruthi, S., and Lockett, A. 2005. International venture capital research: From cross-country comparisons to crossing borders, *International Journal of Management Reviews*, 7(3): 135–165.

Zarutskie, R. 2006. Evidence on the effects of bank competition on firm borrowing and investment, *Journal of Financial Economics*, 81(3): 503-537.

Table 1. Key theoretical frameworks: Entrepreneurial ventures vs mature firms.

Theoretical Frameworks	Research Focus	
	Mature Firms	Entrepreneurial firms
Agency theory	Principal-agent conflicts	Principal-principal conflicts:
	Managerial opportunism	- Founder/VCs
		- VCs/business angels
Resource-based view	Firm-specific advantages	Innovative capacity
	Dynamic capabilities	External networks
Institutional theory	Isomorphism	Liabilities of newness
	Strategic agency	Legitimacy
TCE	Internalization versus	"Collective actions":
	Externalization of capital	- Crowdfunding
	raising	- VC syndicates