FINANCIAL RESOURCES FOR INNOVATIVE STARTUPS – STUDIES IN EMERGING ECONOMIES AND TRENDS FOR STUDIES IN VIETNAM

Phung Hong Ngoc

1Ph.D. Student of GRADUATE ACADEMY OF SOCIAL SCIENCES, Vietnam

Corresponding Author: Phung Hong Ngoc
Corresponding Author Email: hongpn2017@gmail.com

Article Received: 25-10-22   Accepted: 07-11-22   Published: 14-11-22

Licensing Details: Author retains the right of this article. The article is distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 License (http://www.creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Journal open access page.

ABSTRACT

Previous studies point to a fact: to achieve sustainable growth, it is necessary to invest in startups in the field of innovation, creativity, and financial resources are the first issue of concern. The financial resources for startups may be: (i) institutional capital: bank loans (banks, MFIs), venture capitals; (ii) non-institutional capital: angel investors, accelerators, crowdfunding. Bank loans are still the main channel for raising startups; however, it takes work for them to access these capital flows. Developed and developing economies have invested in new financial technology and loan markets, which are working. Venture capital generally tends to startups in the field of technology and innovation. Many developed and developing economies have also formed Angel investments, accelerator programs, or investment groups. The article summarizes some typical studies in developing economies with similarities to Vietnam to serve as lessons learned for research and policy-making related to financial resources for startups in Vietnam in the coming time.

Keywords: Financial Resources; Entrepreneurship; Creativity.
INTRODUCTION

INNOVATIVE ENTREPRENEURSHIP – DRIVERS FOR SUSTAINABLE GROWTH

Substantial Rise of Emerging and Developing Economies

The 2008-2009 Global Financial Crisis is regarded by many historians in the economic field as the worst crisis since the Great Depression. However, this period of the global financial crisis is also remembered for the reason that this is the first time in history that is emerging and developing economies have made more contributions to global output than developed economies (International Monetary Fund, 2017). Since then, emerging and developing economies have constantly increased their contributions to global GDP, and according to IMF forecasts (2017), by 2020, their GDP will account for 60% of the global GDP. Further, by 2035, Goldman Sachs also forecasts that the 04 largest emerging economies - BRICs will have GDP surpassing the developed economies - G7 (Goldman Sachs, 2003). These were also known as the Great Depression, which took place between 1929 and the end of the 1930s and overtook the early 1940s, beginning after the collapse of the Wall Street stock market on October 29, 1929.

Most emerging economies have experienced rapid growth. According to IMF statistics, in 1980, Korea's GDP per capita was only 17% of that of the United States; by 2016, it was 67% of that of the United States. Based on this development, the IMF has classified Korea as a developed economy. The IMF also forecasts that the index will continue to rise. Similarly, China's GDP was only equal to 2% of the United States in 1980, but by 2016 it was equivalent to 27% (International Monetary Fund, 2017).

Innovative Entrepreneurship – Development Trends of the Future

Goldman Sachs' 2003 research attracted significant interest from both investors and policymakers. Most agree with the forecast made by Goldman Sachs, which is that emerging economies will continue to proliferate and that this growth must be based on the development of science and technology. Many studies based on development, such as that of Abramowitz (1956) or Solow (1957), and some recent studies have shown that: a developed economy today cannot afford a high level of income without a rapid pace of technological change. It also means that today's emerging/developing economy can only close the income gap with developed nations if they continually innovate and innovate. The view that an economy today that relies only on increased inputs of the production process is unable to sustain sustained growth is being agreed upon by many scientists worldwide. Sustainable growth needs innovation in quality rather than a boost in quality. Material changes are innovations and innovations in the field of technology. However, there is still much debate about innovation and creativity (Furman, Porter, & Stern, 2002). The first topic of debate could include: (i) the effects on the pace of technological change and (ii) the change in the role of innovation in the context of developing countries towards higher levels of prosperity of the economy. Alternatively, the importance of entrepreneurship in innovation and innovation in emerging/developing economies is also of interest to many scholars (Casanova, Cornelius, & Delta, 2017). The role of entrepreneurship in innovation and creativity has been studied in the context of developed economies. However, studies like these in emerging/developing economies still have many gaps. Moreover, the third topic still debated is the topic of financial resources for entrepreneurship in innovation and creativity (Casanova, Cornelius, & Delta, 2017). Casanova et al. statistics show that many empirical studies indicate that the lack of
financial resources impede startup activities in innovation and development in developed economies, and this impediment is even more significant in emerging/developing economies. In summary, the theoretical issues are given as follows: an economy in today's context, if it is to work towards sustainable development, it is necessary to innovate in the field of technology continuously. Furthermore, with their dynamism, agility, and rapid adaptation, startups are the subjects in the economy that can accelerate the pace of innovation and creativity in the technology field. For startups to play their part, financial resources must be taken care of first. There has been much research in the developed world that demonstrates these theoretical problems. However, whether these theories are confirmed in developing countries such as Vietnam still requires further research to provide further evidence.

FINANCIAL ISSUES FOR INNOVATIVE STARTUPS IN EMERGING ECONOMIES

Analyses by the Organisation for Economic Cooperation and Development (OECD) indicate that dynamic young enterprises – which take risks with high growth potential – have enormously contributed to job creation. In its 2016 report, OECD provided information on the employability of startups in 21 OECD countries and non-OECD countries. Accordingly, enterprises with fewer than five years of operation employ only 21% of workers but generate 47% of the workload (OECD, 2016). These businesses can make breakthroughs in technology and build new business models. Policymakers in these countries should provide startups with the most favorable business environment, allowing resources (including primarily financial resources) to invest efficiently in them and enabling them to be implemented and test their ideas in the market. Financially, financial sources can finance startups, such as (i) funds from institutions: bank loans, and venture capital; (ii) non-institutional capital: investments from angel investors, acceleration programs, and investment groups.

Banks, Limitations of Bank Credit, and the Role of Financial Technology Development – The Primary Source of Capital for Startups

Today, financial loans from banks are still the main channel of capital mobilization for startups. Starting from the relationship between financial development and economic growth, many scientists argue that innovative entrepreneurship can only develop in an environment where startups have access to external financing sources (Rajan & Zingales, 1998; Demirgü - Kunt & A., 1998; De Gregorio & Guidotti, 1995; Dabla-Norris et al., 2015; Rousseau & Wachtel, 2011; Gennaioli, Shleifer, & Vishny, 2012). Ayyagari's research in 2015, based on World Bank enterprise survey data for 47 emerging economies, found a positive link between the rate of investment financed by the company's external capital with the level of innovation and creativity of the company. In contrast, firms are less innovative in countries where firms primarily depend on internal funds, leases, family and friends, and other informal sources. The investment rate of bank-financed companies also has a reversible relationship with per capita income (Casanova, Cornelius, & Delta, 2017). Therefore, to promote development, countries need to upgrade their financial systems continuously so startups can access as many bank loans as possible. It is also because of the contribution of startups to innovation and creativity that in its report "Doing Business," the World Bank has long advocated the reform of the financial sector as a prerequisite for easier access to finance for startups, thereby promoting technological advances and economic growth (World Bank, 2016).
Limitations of Capital Flow from Banks
Although loan flows from banks are essential for enterprises, many small and medium enterprises in emerging economies have yet to access such flows, especially newly established enterprises with very few tangible assets and no bank debt experience in the past. According to McKinsey's estimates (2016) based on IFC Enterprise Finance Gap and SME Finance Forum data, the difference between MSMEs' borrowing needs and banks' ability to provide credit is about $2.2 trillion. Moreover, about 200 million MSMEs need to be serviced or accepted for a loan by banks. Among these, few startups can innovate, create jobs and contribute positively to economic growth. Some have little access to short-term loans, but with medium- and long-term loans, signature loans with startups do not exist.

Even if these startups can borrow from banks, many other factors limit their credit access. This problem occurs not only in developing countries but also in developed countries, where the number of startups that have to use collateral for loans is twice as high as that of long-standing businesses (Chavis, Klapper, & Love, 2012). Moreover, the collateral value of startups in emerging economies is usually two to three times more than that of startups in developed economies. In addition, lending rates in emerging economies are often higher than those in developed economies (Dabla-Norris et al., 2015). These credit limits/difficulties have explained why the density of micro and small enterprises in emerging economies is much higher and the absence of medium and large enterprises in these economies compared to developed economies (Banerjee & Duflo, 2005).

Using World Bank survey data, Chavis (2012) points out that 18% of enterprises in emerging economies use bank credit in the first two years after its establishment, while over 30% use informal capital sources, and the rest use commercial credit and other sources. Enterprises that have existed for more than ten years are less likely to use informal sources. About 10% of businesses of this type use commercial credit, and about 35-40% rely on bank credit. However, the relationship between business age and funding may be much more complex than Chavis's research. In a study by Chavis et al., they pointed out special situations that differ from country to country: young businesses have better access to bank credit than older companies in countries with more vital legal systems and better credit information. Moreover, this is also in line with the recommendations and support of the World Bank on financial sector reform in countries in its “Doing Business” report. Adding to these studies, Alfaro et al. (2015) suggested that financial sector reform in countries would promote the participation of foreign banks and that this participation encouraged business formation in emerging economies.

Microcredit Institutions (MFIs) and Small Credit
The $2.2 trillion funding gap for MSMEs has led to the creation of Microfinance Institutions. The birth and development of MFIs have become a global event, although the contributions of MFIs to poverty alleviation through encouraging the development of startups could be more transparent. Microcredit first emerged in the mid-1970s in Bangladesh to overcome the difficulties that had led to persistent poverty in the country. Formally established in 2012 and seen as the financial innovation of the World Economic Forum, microcredit has become a significant phenomenon with more than 200 million borrowers worldwide (Casanova, Cornelius, & Delta, 2017). Microfinance institutions often maintain close relationships with their clients by bringing together a group of related borrowers who are simultaneously responsible for the debt obligations of other members of the group, thereby always striving to
ensure that others in the group will repay (Banerjee & Duflo, Poor Economics. A Radical Rethinking of the Way to Fight Global Poverty, 2011). A further difference between those MFIs is that they do not use forced debt collection policies; instead, they use the "power of shame" through links with those in the group and other social networks to put pressure on those who do not pay their debts. According to Banerjee et al. (2015), the core of that form of microcredit is "no choice." Microcredit institutions operate in many forms. First, these organizations act as policy banks to eradicate poverty by financing small business activities. Today about 1100 institutions are operating in this way, with annual loans of about $23 billion and total credit outstanding at the end of 2015 of $89 billion. Second, they grew from non-profit organizations into profitable businesses, emphasizing profitable savings programs, with total deposits of up to $37 billion (Casanova, Cornelius, & Delta, 2017). In addition, they diversify their insurance products to benefit customers and microcredit institutions. Finally, microcredit institutions have changed a lot. The participation of small-scale financial investment funds is vital in creating resources for these MFIs. Although MFIs are considered individual investors, a few institutions, such as institutional investors, pension funds, insurance companies, and mutual funds, are also very interested in investing in MFIs (Goodman, 2007).

In addition to the advantages, microfinance institutions have similar constraints to traditional banks. Accordingly, they rely mainly on manual processes and cash, which leads to high transaction costs and limits their ability to achieve a grander scale (Casanova, Cornelius, & Delta, 2017). It leads us to the potential role of digital finance in improving credit institutions' performance and promoting the emergence of new forms of financial intermediation.

**The New Type of Financial Technology and Loan Market**

Digital finance is a system of financial services provided through digital infrastructure. Instead of cash transactions through traditional bank branches, individuals and businesses are connected to the digital payment infrastructure through mobile phones, computers, and point-of-sale (point-of-sales) devices. In recent years, investment in financial technology (fintech) has grown around the world, especially in the U.S. and Asia (as calculated by Casanova et al. (2017) based on KPMG and C.B. Insights data). Financial services and capital intermediation will be improved through digital infrastructure. According to McKinsey Institute for Global Studies (2016), 80% of adults in emerging economies use mobile phones, but only 55% have bank accounts, or about two billion people are not using bank services. This statistic shows the potential that can be exploited from telephone payment services in developing countries. Research by Beck et al. (2015) in Kenya shows a strong link between mobile payment use and commercial credit access. The results of Beck et al.’s Kenya businesses survey show that the availability of mobile payment technology increases economic output from startups by about 0.33% to 0.47%.

Although all countries can benefit from financial technology, its potential is arguably most significant in emerging economies, where underdeveloped financial systems often limit development. If digital finance helps these countries overcome these limitations, new financial technologies can help countries' economies grow significantly (Casanova, Cornelius, & Delta, 2017). In particular, digital finance has the potential to reach more clients at significantly lower costs, so the lending capacity of fintech institutions and traditional banks will increase as these clients have greater access to financial services. Any digital transaction records stored data, which allows lenders to enhance their credit scoring system. These transaction data are essential
for traditional banks and P2P1 platforms based on the new-style Internet system. More and more banks are partnering with fintech companies to provide loans through online lenders, which can promote financial inclusion and help achieve underserved segments of the financial services in the economy. Of course, accompanied by the development of fintech and digital finance is the rise of legal oversight (Bradford, 2012).

**Startups in the Field of Technology, Innovative Innovations, and Markets for Venture Capital**

So far, the fintech financial technology revolution has mainly been financed by venture capitalists and angel investors. Instead of providing loans, these investors provide equity capital to fintech.

Investing in startups usually goes through four stages: (i) the seed stage; (ii) the early stage; (iii) the expansion stage, and (iv) the later stage. The seed germination stage is usually the essential stage for each startup. However, using agency theory, Kaplan & Strömberg (2004) note some issues during this period as follows: (i) the startup may not work hard to maximize value after receiving the investment; (ii) the startup understands its value is greater than that of the venture capitalist; (iii) the venture capitalist disagrees with the startup and wants to make a decision; (iv) the startup puts pressure on the venture capitalist by threatening to leave startups when the startup determines its value to the company.

Relationships and investment partnerships between venture capital funds have also been studied by many scientists, such as Gompers & Lerner (2001) and Hochberg et al. (2007). Accordingly, if the enhanced funds share investment opportunities in the same startups, the funds will have more opportunities to improve the fund's performance. In addition, Sørenson and Stuart found that venture capital investments in the U.S. tend to be within a 500-mile radius.

Companies tend to focus on leading universities in the field of scientific research, such as Silicon Valley in California, Route 128 in the Boston area, or the Research Triangle in North Carolina (Sørenson & Stuart, 2001). The coherent investment process also explains that only some startups receive investment funds from venture capital funds. Every year in the United States, there are about 600,000 startups. Moreover, from 2001 to 2015, only 1,200 startups received investment capital in the early stages from venture capital funds, corresponding to 0.2% of the total number of startups in that period (National Venture Capital Association, 2016).

In recent years, China and India have emerged as the busiest places globally, with the contribution of venture capital funds from abroad for startups, even more so in Europe (Casanova, Cornelius, & Delta, 2017). Much of this funding is for startups in e-commerce and Internet-related services - similar to recent trends in the U.S. market - the cradle of venture capital. Although venture capital investment in emerging markets has focused heavily on China and India, funds invested in startups have recently continued to grow in other economies (e.g., Russia, Mexico, Chile, Turkey) (World Bank, 2016).1. Internet access and the use of mobile phones play an important role. Like China and India, most investments in financial markets are focused on retail in these countries. The subsequent significant impact seems to be on the development of the accompanying financial system. Many countries have emphasized driving digital transformation to unlock the Internet's huge transformative potential. These measures show that more efforts have been made to attract venture capital through government-funded programs.
When discussing startups in the field of technology, Fannin (2012) said that Vietnam has been attracting much interest from domestic and international venture capitalists. The reason for attracting these capital flows is similar to China and India because of the population growth rate, economic growth rate, and the impressive increase in mobile phone and internet users. Seen ten years behind China, prominent technology leaders have begun investing in startups in Vietnam, especially in digital media and entertainment sites. For example, Tencent has bought startups' shares in social networking and gaming as VNG Corp.2, or Rebate Networks, set up a social and e-commerce website called Buying Groups.

**Venture Capital**

Startups can be invested in venture capital from independent venture capital (IVC) or corporate venture capital (CVC). Investors in IVC independent venture capital funds are often organizations such as charities, founding funds, pension allowances, or wealthy people's funds. These investors pour capital into independent venture capital funds, often for financial returns. The investment funds of CVC corporations are often formed by the world's economic corporations themselves, the primary purpose of which is to complement the R&D research and development programs of their corporations. For example, many prominent American innovation companies such as AT&T, Amgen, Bloomberg, Chevron, eBay, Google, General Electric, General Motors, and Intel... have funded venture capital for many startups worldwide. In the United States, between 2013 and 2015, CVC's venture capital accounted for 12%, or $5 billion/year, of the country's total venture capital. While IVCs invest for profit, CVC invests, in the opinion of scientists, because a corporation wants to seek profits. They must invest in insights outside the corporation so that it can improve their competitive advantage (Dushnitsky & Lenox, 2005). Some scientists discover why CVC is more effective than R&D from within the group (Ma, 2016; Lerner, 2013). CVC is also rising in emerging markets, especially in China and India. The technology corporations of these two countries have supported many startups. In addition, many startups have received funding from some of the world's leading technology corporations, such as Amazon, Cisco, eBay, Eli Lilly, Google, Intel, and Microsoft. CVC programs have been globalized, reflecting the international integration of the venture capital market. Domestic and foreign CVCs account for about 5%-8% of total venture capital investment in China and India, a slight difference from U.S. CVCs.

**Non-Institutional Forms of Finance for Startups: Angel Investments, Accelerators, Investment Groups**

While the capital from the bank is borrowed capital, the investment capital from V.C. V.C. funds is the owner's equity of the startups. These sources are called institutional capital/finance. In addition to these sources, startups can be funded by non-institutional capital/finance, such as angel investors, accelerators, and crowdfunding.

**Angel Investments:** Angel investors are usually entrepreneurs who invest with their own money. Angel investors developed in the 1980s in the United States - when V.C. markets flourished. Angel investors usually invest capital in stage 1 (seed stage) and stage 2 (early start – early stage) in a sequence of 4 stages, as mentioned in the previous section. Today, angel investors often organize into groups to improve efficiency and minimize the risk to their investments. Although because of the non-institutional nature of these investments, information on angel investors' markets is often limited; however, there is ample evidence that this form of
financing has had development drivers not only in the U.S. but also in developed and emerging/developing economies.

A few recent studies show that angel investors are a complement to V.C. rather than an alternative. In emerging economies, angel investor investment is just as crucial as V.C. V.C. fund investment and is considered a source of funding for startups. In these countries, angel investors act as "gatekeepers," enhancing the already-funded companies' ability to continue to achieve the capital they are pursuing. Thereby, angel investors can help bridge the financial gap between what friends and family can provide at an early stage for startups and what venture capitalists, banks, and other sources can contribute as the startups stabilize. Specifically, when the startups have made every effort to mobilize resources from friends and family but have not met the requirements of banks or venture capital funds to disburse, angel investors can invest and fill that gap at all times.

Are angel investors focused on specific sectors like V.C.? Do they invest in most emerging technology startups? Angel investors are less focused on technology startups than V.C. venture capital funds. Studies indicate that it still needs to be determined to determine the scope/region in which angel investors concentrate their investment. However, there is evidence suggesting that angel investors positively influence the survival, growth, and job creation of the startups in which they have invested. In addition, there is the phenomenon that with less "friendly" economies with a startup spirit, startups, when calling for capital from angel investors, tend to be larger, operate more extended, and are willing to generate revenue. Startups in these economies often seek smaller grants than businesses in more “friendly” startups.

**Acceleration/Incentive Programs**

The acceleration program can increase the activity of the startups. While it only appeared in the 2000s, it has multiplied, estimated at more than 2000, spreading worldwide (Cohen & Hochberg, 2014). The acceleration program is simply a program that lasts about three months. During this time, the accelerated program allowed participating entrepreneurs to shape and build their first products, identify potential customers, and secure sufficient resources for growth. The acceleration program provides only a moderate amount of capital during the seed stage. The main contribution of the acceleration program is to provide a range of networking, education, and guidance opportunities on the part of venture capitalists and mentors - who may also be successful entrepreneurs with a wealth of experience. The accelerated program increases the viability, growth, and access to more capital for startups from venture capital funds or banks. While the accelerated program is often used in conjunction with venture capital investment by CVC corporations, it is being used by many governments in many countries to encourage entrepreneurship, innovation, and growth.

**Investment Groups**

Crowdfunding includes crowd-lending and crowd-investing groups. Investment teams can play a more significant role in bringing startups in need of finance and investors looking for good ideas together. Unlike angel investors, accelerators, and venture capitalists, crowd funders are less geographically constrained, allowing online platforms to excel.

However, most crowdsourcing investors need to be more experienced. With significantly smaller amounts of investment capital, they are less likely to exercise control over their investment than venture capitalists and angel investors. Instead, they may decide to pursue more experienced investors who are leading other investment groups or funds. In this case, crowd
and angel investor investments would be an addition rather than an alternative. However, pursuing or associating investments with angel investors can increase risk through herd behavior (Wilson & Testoni, 2014). Finally, many countries still need a legal framework that allows small investors to participate in group investment through public offerings and advertising. Regulatory innovations are being implemented in some countries to balance business support objectives while limiting risks to investors.

CONCLUSION
From a scientific point of view, if a country/economy wants rapid, sustainable growth, it is imperative to rely on innovation—transition from growth by energy factor to growth by changes in quality. Furthermore, innovation and creativity will be best implemented by the new group of enterprises with many innovative business ideas based on the development of technical sciences, especially the development of information technology. Moreover, for these startups to have the opportunity to make their ideas come true, thereby contributing to job creation, poverty alleviation, and economic growth, it requires financial support mechanisms, including credit capital and investment capital. Many countries/economies around the world, including developed and emerging, already have financial support mechanisms for startups arranged by popularity as follows: (1) loans from banks, financial intermediaries, and new-type lending markets; (2) venture capital; (3) angel investing; (4) accelerator programs; (5) crowdfunding. In order to help policymakers in Vietnam come up with effective mechanisms to promote the attraction of funding for startups in Vietnam, from a scientific perspective, we need to address research questions such as: what factors and factors affect the financial support mechanisms for startups? For example, when considering solutions to promote loans from banks or MFI s for startups, we need to consider from the point of view of reforming the financial system towards more application of information technology, limiting cash transactions, and encouraging payment transactions by telephone. It can speed up the flow of capital in the economy. In addition, transactions paid by phone or other non-cash transactions will serve as a basis for building a credit score system for individuals and organizations in the economy, including startups. Based on this, banks and MFI s can shorten the time of loan appraisal, reducing the cost of lending while reducing the percentage of collateral required for a loan. Many banks worldwide have partnered, even CVC venture capital, to advance financial sector technology with fintech to improve and upgrade the bank’s trading system in a more convenient direction for customers. In Vietnam, many banks cooperate with fintech. Alternatively, as with venture capitalists’ investment in startups, in order to attract this capital, from a scientific point of view, we also need to consider the relationship between venture capitalists (investors) and startups (parties with ideas and calls for investment capital). According to Kaplan et al. (2004) and some other scientists, the relationship between venture capitalists and startups is relatively complex. In addition, the relationship between venture capitalists also influences the chances of getting capital from startups. Therefore, when making policies for the activities of venture capitalists in Vietnam, we should also start from a scientific perspective so that policies can be most effective. In addition, policy-making with other forms of non-institutional finance for startups, such as operating policies of angel investors, acceleration programs, and investment groups, also need to be seen from a scientific perspective so that the policies issued can promote efficiency, ensure entrepreneurship in the field of innovation and creativity in Vietnam in the right direction and
achieve the set objectives. The article only aims to compile some studies on financial support for entrepreneurship in innovation and creativity worldwide, especially in emerging economies. From there, it is possible to make lessons learned and a theoretical basis for further research in Vietnam. According to EY’s 2018 Asian Fintech Panorama Report, Vietnamese startups have poured $129 million into fintech, and 47% of this fintech operates in the payments sector (the highest in Southeast Asia). It is an opportunity for commercial banks to improve their systems by applying technology in payments and transactions.

References


