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Improving Micro-, Small and Medium Enterprise's Access to Start-up Financing in ASEAN Countries

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Abstract

Lack of access to finance constitutes a major setback to the development of the micro-, small and mediumsized enterprise (MSME) sector in the countries of the Association of Southeast Asian Nations (ASEAN). MSMEs are confronted with stringent funding constraints in traditional lending and capital markets, in particular at the early stages of their activity. Demand and supply of capital to MSMEs thus entails more complex issues compared to the larger firms. This paper presents a number of policy actions that have the potential to mitigate the financing challenges faced by MSMEs in ASEAN at the start-up stage by enhancing the potential of alternative funding sources such as business angel investment, crowdfunding, venture capital investment and SME stock markets.

Keywords: ASEAN; business angels; crowdfunding; loans and guarantees; MSME stock markets; venture capital.

JEL Classification: G32.

Introduction

Micro-, small and medium-sized enterprises (MSMEs or SMEs) constitute the backbone of economic activity in the member countries of the Association of Southeast Asian Nations (ASEAN). However, MSMEs are confronted with stringent funding constraints in traditional lending and capital markets, in particular at the early stages of their activity. According to a survey cited by Tan et al. (2021), 42% of SMEs in South Asia were either fully or partially credit-constrained, compared to the global average of 38% (Figure 1). Furthermore, these difficulties have been compounded during the COVID-19 pandemic, amid rising risk aversion in both the banking sector and capital markets. The tightening of monetary policy in the United States and other advanced economies has also contributed to a tightening of financial conditions in emerging economies, in particular starting from the 2nd quarter of 2022.



Figure 1. Credit-constrained SMEs by geographical area, 2021, %

Source: Adapted from Tan et al. (2021).

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In this challenging macroeconomic context, alternative financing sources could provide significant opportunities for MSMEs in the region to obtain funding necessary at the start-up stage or to undertake innovative investment projects that would otherwise be difficult to finance through bank loans and other traditional financing sources. According to the pecking-order theory postulated by Myers, firms prefer to finance their investments first with internal funds, second with debt and third with external equity (Myers, 1984). However, a significant number of MSMEs with a strong potential for development require external finance in order to grow. Where external finance is required, several empirical studies have concluded that start-ups prefer equity rather than debt (Hogan et al., 2017; Paul et al., 2007; Venancio and Jorge, 2021). The alternative finance market could play an important role in providing MSMEs with external funds in the form of equity.

The alternative finance market has developed rapidly over the past decade via a range of innovative tools based on artificial intelligence technology and online platforms. In 2017, the alternative finance² activity in Emerging Asia³ amounted to no more than USD 360 billion (Ziegler et al., 2018). However, more than 90% of this volume was related to the Chinese market. More recent data on alternative finance funding per capita reveal large disparities among ASEAN countries. Singapore is doing well on a per capita basis, while Vietnam lies at the other extreme (Figure 2). These figures point to a vast untapped potential for alternative finance in most ASEAN economies.



Figure 2. Alternative finance volumes per capita in selected ASEAN economies, 2020

Note: Figures are unavailable for Brunei Darussalam, Lao People's Democratic Republic, Myanmar and Thailand. Source: Author's elaboration based on Yasar (2021).

There is a plethora of alternative finance sources. This paper focuses in particular on funding sources at the early stage of start-up financing, when MSMEs face the most significant challenges. The options considered in the paper are business angel investment, crowdfunding, venture capital, MSME stock markets, and loans and guarantees. These alternative financing options are recognized in the academic literature as some of the most promising venues for financing MSMEs, democratizing both the demand- and supply-side of investments, as well as for contributing to economic growth. They are gaining increasing attention from entrepreneurs, policymakers and practitioners alike.

This paper contributes to increasing understanding of and awareness on these alternative sources of finance and how they could develop in ASEAN. For each alternative source of finance reviewed, the paper provides a description of it; lists some of the advantages and disadvantages associated with the respective financing source; identifies barriers to the further development of that market segment in the ASEAN region; and finally looks at how public policies could contribute to the development of these markets, zooming in on existing policy initiatives from both ASEAN and non-ASEAN countries as examples of good practice. Where data are available, the paper also reviews the current state of market development in ASEAN for each type of financing source considered. The first section discusses business angel investment. In the second section, the functioning of the crowdfunding market is

² The concept of 'alternative finance' refers here to: peer-to-peer lending, balance sheet business lending, equity-based crowdfunding, invoice trading, revenue-sharing crowdfunding and real estate crowdfunding.

³ For the purpose of these calculations, Emerging Asia includes the following countries: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Tajikistan, Thailand and Vietnam.

reviewed, followed by venture capital investment in the third section. The fourth and fifth sections deal with MSME stock markets and loans and guarantees, respectively. The final section concludes the paper.

1. Business Angel Investment

State of play and challenges

Micro, small and medium-sized enterprises (MSMEs) face issues accessing finance, particularly at their early stages. Although there is a broad range of financial instruments adapted to the different steps of the companies' development, there are only a few to address the so-called "Death Valley", namely the phase representing the highest level of risk during early companies' life cycle (Cox et al., 2017; Lefebvre et al., 2022).

In this context, especially for the growth-oriented MSMEs and start-ups, business angels play a very important role. A business angel is a private individual, very often of high net worth, and always with business experience, expertise and an influential network, who directly invests part of his or her personal assets in new and growing unlisted businesses. A business angel can invest individually or in syndicates where typically one angel in the syndicate takes a lead role. Besides capital, business angels provide business-management experience, skills and contacts for the entrepreneur (Block et al., 2019; Cipollone and Giordani, 2019; De Clercq et al., 2012; Hellmann et al., 2021).

Business angels are increasingly important in providing risk capital as well as contributing to economic growth and technological advance. Moreover, the supply of start-up and early-stage equity finance has become more dependent on business angels. Venture capital funds are not able to accommodate a large number of small deals and suffered during these past years because of inadequate capital. They reduced their funding in risky MSMEs and moved on to later and larger scale investments with higher returns. The traditional source of start-up and early-stage financing – bank lending – is limited due to risk level and handling costs and has greatly decreased since the 2008 financial crisis (Casey and O'Toole, 2014; Chen et al., 2017; Demirguc-Kunt et al., 2020). Business angels provide both financing and managerial experience, which increase the likelihood of start-up enterprises surviving and growing. As a result, fostering business angel investment in start-ups can have a significant leverage effect for governments and economies. Increasing awareness about business angel activities and/or about available policies and programs in some countries or regions can positively impact industry, MSME financing, digital entrepreneurship and regional development (Cavallo et al., 2019; Harrison et al., 2020; Zhou et al., 2021).

World Bank data show that business angel investment in ASEAN is currently limited outside the core markets of Singapore and Malaysia. As regards the number of angel investment deals concluded in 2020, Singapore accounted for around 65% of total deals in the regional sample, followed by Malaysia with a share of 15%. From the perspective of minimum funding amounts by business angels, it can be concluded that in 2020 Thailand and Vietnam have funded relatively larger deals compared to their peers, each at around USD 20,000 per deal. At the other end of the spectrum, Indonesia and the Philippines have funded relatively smaller deals, which on average stood below USD 5,000 per deal. On the other hand, business angel investment is virtually non-existent in Brunei Darussalam and the CLM countries: Cambodia, Lao People's Democratic Republic and Myanmar.

There are several reasons why business angel investment in most ASEAN countries is currently very low. One of these reasons is the presence of still weak formal institutional regimes, even in countries that perform relatively well in the region in terms of business angel investment. In a recent study of the business angel market in Malaysia, for instance, Harrison *et al.* (2017) report that business angel investors in this country were concerned about a potential middle-income trap whereby economic growth and new venture formation stalls due to persistent institutional voids. Moreover, the 19 business angel investors included in the sample constructed for the purpose of this study found it challenging to invest in and monitor new ventures in what was considered to be a "highly uncertain and competitive environment where there is high political uncertainty, weak legal and financial support for investors and SMEs". The study also reports that business angels in Malaysia have resorted to some workarounds in order to overcome these institutional challenges. For instance, they developed informal institutions by co-investing and networking with family members and government officials and conducted careful due diligence prior to the investment.

Policy options to support the development of business-angel investment in ASEAN

Considering the benefits associated with investment by business angels discussed in the previous paragraphs, policymakers in ASEAN need to create the right conditions to provide with an environment conducive to private investors. Besides creating a tax break scheme for investors investing in start-ups, allowing them to deduct their taxes immediately during the investment process, the important policy priority is the creation of co-investment funds. Developing the right incentives, the right mechanisms and the right capabilities of both investors and entrepreneurs is a key issue. This will attract the private sector and provide the incentive for private investors to invest in start-ups. Support from government to business angel networks is also an essential element (Chiappini *et al.*, 2022).

On the supply-side, various policies could be implemented to bring in more investors, including: removing tax system obstacles; providing tax incentives; supporting the creation of co-investment funds; organizing investorreadiness training sessions; carrying out media campaigns (Antretter et al., 2020; Bonnet et al., 2021; Cusolito et al., 2020; Edwards and Todtenhaupt, 2020; Harrison, 2018; Gregson et al., 2017; Howell and Mezzanotti, 2019; World Bank, 2022).

In particular, the launch of co-investment funds with business angels has proven to be an efficient way to attract "new money" in many countries, as well as expertise from the market, helping to fund thousands of innovative companies. Co-investment schemes with business angels represent an added value for public authorities in comparison to grants because their leverage effect is higher. Co-investment schemes also represent an added value for angels, because they lower the risk and allow more investments to be made. They therefore represent a win-win situation for business angels, managing public authorities and the companies benefiting from these investments (Antretter et al., 2020; Bonini et al., 2018; Bonnet et al., 2021).

Two scenarios typically result from the creation of business angel co-investment funds: (i) Public-private coinvestment funds help build early-stage investment communities and thus create a virtuous circle. Public and private entities no longer invest alone. The investment risk is diluted from both sides, as well as contributing to the perceived "political" risks. (ii) By combining multiple parties into common funding vehicles, more money is gathered for the ecosystem and more investments can be made. Costs are also decreased as mentoring, networking and knowledge of business angels are immediately shared with more people. Management fees are also lower compared with venture capital funds.

On the demand-side, the investor base could be broadened in several manners: enhancing investment readiness (including regional training and support); improving financial literacy at schools; developing an entrepreneurial mind-set (including links with local businesses); and establishing incubators and other facilitators to educate and prepare entrepreneurs (Van Rijnsoever, 2020).

Some countries in ASEAN have already taken steps to support business angel investment, in particular Malaysia and Singapore (Table 1). An example is the Angel Investors Tax Deduction Scheme (AITD Scheme), implemented in Singapore. The AITD Scheme is a tax incentive scheme aimed at encouraging individuals to invest in start-up companies in order to help the latter grow through their management expertise and business networks. The AITD Scheme was available between 1st of March, 2010 and 31st of March, 2020. In order to qualify for a tax deduction, an approved angel investor must meet the following two criteria: (i) invest at least SGD 100,000 (Singaporean dollar) of qualifying investment in a qualifying start-up company within 12 months from the date of his/her first investment in that company; and (ii) hold such investment for a continuous period of two years from the date of last qualifying investment (IRAS, 2022).

Country	Policy initiative(s)		
ASEAN countries			
Malaysia	Tax incentives		
Singapore	Tax incentives		
Non-ASEAN cou	untries		
Belgium	Tax incentives; grants to business angel networks; guarantee scheme for business angel investment		
France	Tax incentives; grants to business angel networks; training programs for network managers; development of a network Charter and Code of Conduct; public-private accelerators and incubators to develop and promote ideas and projects with a viable business model		
Germany	Tax incentives; grants to business angel networks; public co-investment funds		
Netherlands	erlands Tax incentives; financial support for information meetings for entrepreneurs and novice business angels; seed facility for investors; public co-investment funds		

Table 1. Government initiatives to promote business angel investment in selected ASEAN and non-ASEAN countries

Country	Policy initiative(s)
Portugal	Tax incentives; public-private accelerators and incubators to develop and promote ideas and projects with a viable business model
United Kingdom	Tax incentives; public co-investment funds

Note: Information as of 25th of July, 2022. The list of policy options is not exhaustive. Countries have been selected by the author based on information availability.

Source: Author's elaboration based on World Bank (2022) and various national sources

A similar tax incentive scheme has been implemented in Malaysia, the second-largest market in ASEAN in terms of angel investment deals concluded in 2020. The Angel Tax Incentive Scheme (ATI Scheme) is designed to bridge the early-stage investment gap by encouraging qualified individual investors to invest in early-stage technology start-ups in Malaysia (MASTIC, 2022). Although a welcome initiative, the ATI Scheme has not had as much take-up as originally envisaged for several reasons, which could constitute lessons to learn for other countries in ASEAN seeking to implement similar tax incentive schemes. More specifically, in the case of the ATI Scheme privacy issues were a major deterrent from an investor's perspective, as angel investors who claimed the tax exemption had to disclose their investment activities. Other reasons behind the low adherence to the ATI Scheme include the requirement for the investments to be held for a minimum period of two years before the tax incentive could be claimed, as well as the administrative requirements that constrained the rapid take-up of the initiative, with eligible target companies needing to be approved by Malaysia's Ministry of Finance. In addition, the ATI Scheme was targeted at technology-based companies, thus excluding brick-and-mortar firms from the pool of eligible investee firms (World Bank, 2022).

Outside ASEAN, several examples could be cited from countries with strong and diverse markets for business angel investors and for which such information is available. This information is summarized in Table 1. In addition to providing tax incentives to promote business angel investment, policymakers in several European countries have expanded their policy mix with various types of other initiatives, such as: financial support to business angel networks (Belgium, France and Germany); guarantee schemes for business angel investment (Belgium); seed facilities for investors (the Netherlands); public co-investment funds (Germany, the Netherlands and the United Kingdom); training programs for business-angel network managers (France); public-private accelerators and incubators to develop and promote ideas and projects with a viable business model (France and Portugal); or the development of a code of conduct and charter to streamline the functioning of business angel networks (France).

2. Crowdfunding

State of play and challenges

Crowdfunding is a way of raising money to finance projects and businesses. It enables fundraisers to collect money from a large number of people via online platforms. Crowdfunding is most often used by start-up companies or growing businesses as a way of accessing alternative funds. Crowdfunding platforms are web sites that enable interaction between fundraisers and the crowd. Financial pledges can be made and collected through the crowdfunding platform. Fundraisers are usually charged a fee by crowdfunding platforms if the fundraising campaign has been successful. In return, crowdfunding platforms are expected to provide a secure and easy-to-use service. There are different types of crowdfunding, including peer-to-peer lending (also referred to as lending crowdfunding), equity crowdfunding, rewards-based crowdfunding, donation-based crowdfunding, and profit-sharing/revenue-sharing.

Peer-to-peer lending is a direct alternative to a bank loan with the difference that, instead of borrowing from a single source, companies can borrow directly from tens, sometimes hundreds, of individuals who are ready to lend. Crowdlenders often bid for loans by offering an interest rate at which they would lend. Borrowers then accept loan offers at the lowest interest rate. Internet-based platforms are used to match lenders with borrowers. Due diligence is carried out for each loan request, as crowdfunding platforms have a duty to protect both businesses and investor interests. Platforms normally require financial accounts and a trading track-record. Peer-to-peer lending thus complements traditional credit markets by catering to the unserved businesses (Liu et al., 2020), largely augmenting MSMEs' working capital and growth needs (Gao et al., 2018; Santoso et al., 2020).

Equity-based crowdfunding consists of selling a stake in a business to a number of investors in return for investment. The existence of equity funding is well established, with private equity, venture capital and angel investing long playing a role in developing companies. The main difference between equity crowdfunding and these traditional models, rather than establishing a one-to-one relationship, it is offered to a wide range of potential investors, some of whom may also be current or future customers. Equity crowdfunding does this by matching companies with would-be angels via an Internet-based platform. A successful equity crowdfunding campaign tends to facilitate the attraction of venture capital funding (Buttice et al., 2020).

Rewards-based crowdfunding is where individuals donate to a project or business with the expectation of receiving a non-financial reward in return, such as goods or services at a later stage. A common example is a project or business offering a unique service (rewards) or a new product (pre-selling) in return for investment. This form of crowdfunding allows companies to launch with orders already on the books and cash-flow secured (a major issue for new business) and gathers an audience before a product launch. Empirical research suggests that ventures initially funded through reward-based crowdfunding can be even more likely than those initially backed by venture capitalists in attracting follow-up funds from venture capitalists (Roma et al., 2021).

Another type of crowdfunding is donation-based crowdfunding, whereby individuals donate small amounts to meet the larger funding aim of a specific charitable project while receiving no financial or material return. Donation-based crowdfunding has simplified the process of fundraising for social purposes by integrating information collection, donation transaction and interactive communication into one standardized process (Belleflamme et al., 2013; Cason and Zubrickas, 2019). It has therefore been claimed that donation-based crowdfunding has redefined the way charitable giving is performed, as it fuses traditional charitable giving and technology-enabled crowdfunding (Gerber and Hui, 2013; Gleasure and Feller, 2016). Moreover, donation-based crowdfunding also presents several advantages from a fundraiser perspective, such as greater efficiencies in terms of geographical reach, reduced transaction and coordination costs, as well as richer and more frequent interactions with prospective donors (Zhao and Shneor, 2020).

Finally, in the case of profit-sharing/revenue-sharing crowdfunding, businesses can share future profits or revenues with the crowd in return for funding now. For firms seeking to raise capital, profit-sharing/revenue-sharing crowdfunding has the advantage that it yields lower effective interest rates, on average, compared to bank loans. In addition, this type of crowdfunding offers a less costly and faster way to raise capital than equity-based crowdfunding. Furthermore, in a profit-sharing/revenue-sharing crowdfunding arrangement the monthly payments are adjustable, which reduces the pressure of meeting a fixed payment during downturns. This in turn lowers the risk of bankruptcy for smaller and more vulnerable firms (Fatehi and Wagner, 2019; Wagner, 2018).

Presently, Indonesia and Singapore are the largest players in the crowdfunding market in ASEAN. According to figures for 2017, Indonesia and Singapore were among the 30 largest crowdfunding markets at the global level, with a market share of 0.48% and 0.16%, respectively (Schmidt, 2020). Elsewhere in the region, crowdfunding is not a popular financing method in Cambodia, Lao PDR and Myanmar, with a very limited number of dedicated platforms operating in each of these countries if any (CCAF, ADBI and FinTechSpace, 2019).

Policy options to support the development of crowdfunding in ASEAN

Strong regulatory frameworks are essential for the development of crowdfunding markets, as crowdfunding investments present a high risk of capital loss to investors, are highly illiquid and may constitute a target for fraudulent operations. Table 2 below provides an overview of the regulatory landscape related to crowdfunding activities in ASEAN countries. While several countries in the region have implemented bespoke regulation for crowdfunding in recent years, Cambodia, Lao PDR, Myanmar and Vietnam have no specific regulations for crowdfunding. In addition, countries such as Indonesia, Malaysia and Thailand have differentiated between equity-based and debt-based crowdfunding, enacting bespoke regulation for each of these crowdfunding models. By contrast, there are still no specific regulations for debt-based crowdfunding in certain jurisdictions such as the Philippines and Singapore. In these two countries, entities carrying out activities related to debt crowdfunding fall within the scope of existing regulations, such as securities laws and anti-money laundering requirements.

Country	Bespoke regulatory frameworks for crowdfunding		Date when the first bespoke crowdfunding
Country	Equity-based	Debt-based	regulation was implemented
Brunei Darussalam	•		2017
Cambodia	-	-	-
Indonesia	•	•	December, 2018
Lao PDR	-	-	-
Malaysia	•	•	August, 2014
Myanmar	-	-	-
Philippines	•	-	July, 2019
Singapore	•	-	N/A
Thailand	•	•	May, 2015
Vietnam	-	-	-

Table 2. Overview of the crowdfunding regulatory landscape in ASEAN countries

Note: Information as of 25th of August, 2022. 'N/A' means the information is not available.

Source: Author's elaboration based on various national sources.

The examples of Malaysia and Thailand with implementing crowdfunding-specific regulation will be discussed below, as these two countries were early adopters in ASEAN. Malaysia was the first country in ASEAN to enact regulations with the specific goal of facilitating the development of equity-based crowdfunding. In a nutshell, the regime applicable to equity-based crowdfunding in Malaysia is comprised of the general regime for equity investments plus regulations that are specific to equity-based crowdfunding. The proposed regulatory framework for equity-based crowdfunding was set out by the Securities Commission Malaysia through a consultation paper published back in August 2014. The consultation paper emphasized the potential for crowdfunding to facilitate innovation, productivity and growth by encouraging the creative potential of MSMEs. The Securities Commission Malaysia consultation paper also emphasized the potential for increased competition among suppliers of capital, which could lower the cost of capital for all issuers (Securities Commission Malaysia, 2014). In April 2016, the Securities Commission Malaysia, 2016).

Thailand has also enacted crowdfunding-specific regulation earlier than most of its peers in ASEAN. Thai policymakers have sought to overcome the lack of a capital market for promoting business start-ups and innovators through the establishment of a regulatory regime that caters specifically to equity-based crowdfunding. The corresponding regulatory framework has been set out by the Capital Markets Supervisory Board, in two regulations that have been in force since May 2015. These regulations have been subsequently amended in order to allow a broader pool of investors to participate in the market for equity-based crowdfunding and be more in line with other regulations, such as definition of private equity trust and venture capital, as well as some rules regarding trading in the secondary market. In May 2019, the Securities and Exchange Commission of Thailand has issued regulations on debt-based crowdfunding through funding portals in order to further increase MSMEs' access to alternative fundraising models (Securities and Exchange Commission of Thailand, 2019).

Countries with less advanced regulatory frameworks could benchmark against other ASEAN and non-ASEAN jurisdictions. Benchmarking can be a useful source of knowledge owing to the scarcity of market and supervisory data in markets where activities are less developed, such as crowdfunding. Indeed, regulatory benchmarking is used by more than 90% of regulators when reviewing alternative finance regulation and lessons learned from other jurisdictions have prompted changes in regulation more frequently than any other trigger. Among ASEAN countries, Malaysia and Singapore are recognized among the top jurisdictions for benchmarking regulations for alternative finance at a global level. Outside of ASEAN, the UK is the most frequently benchmarkedagainst market globally, followed by the United States of America, Spain and France. On the other hand, benchmarking can be limited by incompatible legal systems or language barriers (World Bank and CCAF, 2019).





Note: Data are unavailable for Brunei Darussalam and Singapore. Source: Author's elaboration based on World Bank (*n.d.* a; *n.d.* b), World Development Indicators (WDI), Doing Business.

Besides strong regulatory frameworks, other types of policies can foster the development of crowdfunding markets. Empirical research has concluded that the level of economic and financial development, as well as the rule of law and control of corruption tend to be significant drivers of crowdfunding-market development (Rau, 2017; Tan et al., 2021). Additionally, crowdfunding activities require solid infrastructure such as stable power supply and reliable Internet connection (Ojo and Elgadi, 2020; Rau, 2017). However, not all countries in ASEAN have adequate power and Internet infrastructure. For instance, access to electricity is still very low in Myanmar, with an electrification rate at 43% (IEA, 2019). But even where connections are available, the quality of power-related services is inadequate. Power outages in a typical month tend to be more numerous in Myanmar, with 11 outages on average, compared to just 0.1 in Malaysia and the Philippines. When a power outage does occur, it tends to be lengthier in Indonesia, Myanmar, the Philippines and Viet Nam, with a minimum outage length of five minutes each (Figure 3). Policymakers in these countries therefore need to address the remaining challenges for the crowdfunding market to thrive.

3. Venture Capital

State of play and challenges

Innovative and growth-oriented small businesses need to acquire capital (equity investment) from external sources because they do not have their own or cannot access loans. Firms typically use venture capital to expand, break into new markets and grow faster. Investors provide start-up finance in exchange for an equity share in the investee firm. In a typical venture-capital arrangement, the transaction consists of an upfront payment combined with profit participation. Unlike business angel investors – who usually invest their own funds – venture capitalists' funds are usually pooled by investment firms.

Although only relevant to a smaller group, venture capital is essential for the growth of innovative firms (Pierrakis and Saridakis, 2017; Pradhan et al., 2018; Rossi et al., 2022). In addition, venture capital finance has a major advantage over bank finance to the extent that venture capitalists tend to more intensively monitor investment projects and they also provide expertise (Kaplan and Stromberg, 2003). It can therefore be argued that, as opposed to banks, venture capitalists have the possibility to take on riskier projects, and of to further enhance the value of the project they invest in (Manigart and Sapienza, 2017; Winton and Yerramilli, 2008). Furthermore, in financing a portfolio of companies, venture capital funds are able to diversify risk and it could be argued that, to a certain extent, they can fully ensure the entrepreneur (Keuschnigg and Nielsen, 2003).

Venture capital funds raise a large part of their funding from institutional investors and they typically invest large amounts into firms with potential for rapid growth. However, many investors are reluctant to invest in startups and innovative firms because of high risks and transaction costs. They may also believe that the expected returns may not be worth the risk. Risk diversification through venture capital is also limited by the extent of moral hazard in the relationship between the venture capitalist and the entrepreneur. While entrepreneurial effort is critical for the venture to have a positive chance of survival, an incentive problem typically results as this effort is non-observable and non-verifiable by an outside investor (Keuschnigg and Nielsen, 2003). The market for venture capital investment is at different levels of development in ASEAN countries. While venture capital funds have been active for many years in Indonesia, Malaysia, Singapore and Thailand, venture capital investment remains limited elsewhere in the region. In Viet Nam, for instance, the supply of institutional capital for private equity remains limited, while only a small part of this capital is available for domestic venture capital. This can be attributed to both domestic and external factors. On the domestic front, Vietnamese have a preference for credit-based MSME financing solutions to the detriment of equity-based solutions. As regards the external factors, Vietnam's official development assistance providers typically provide expertise on loans and not on equity investments. The only donors having recommended venture capital and equity investments have gone "around the state" rather than through it by working directly with the private sector (Klingler-Vidra, 2014).

Policy options to support the development of venture capital investment in ASEAN

Pro-active government policies and regulations are crucial elements in promoting the development of the venture capital industry, in particular in ASEAN countries with currently underdeveloped markets for venture capital. In Indonesia, Malaysia, Singapore and Thailand, venture capital markets have been supported by a structured environment for private firms, strong legal and regulatory frameworks for non-bank financial institutions, as well as by established stock markets.

Table 3 provides some examples of tax and non-tax government policies aimed at promoting the development of venture capital in ASEAN and non-ASEAN countries. In addition to a strong legal and regulatory environment for non-bank financial institutions, which is a constant for the countries listed in Table 3, another factor that is often associated with a flourishing venture capital market is favorable taxation for equity investments.

Country	Policy initiative(s)		
ASEAN countries			
Indonesia	Tax incentives		
Malaysia	Tax incentives		
Singapore	Tax incentives; sustained infrastructure development		
Thailand	Tax incentives for certain sectors in which venture capital funds invest		
Non-ASEAN countries			
France	Tax incentives; public investment in the venture capital market through national promotional institutions		
Germany	Tax incentives; public investment in the venture capital market through national promotional institutions		
Sweden	Tax incentives; liberalization of investment guidelines by pension funds		
United Kingdom	Tax incentives; public investment in the venture capital market through national promotional institutions		
United States of America	Liberalization of investment guidelines by pension funds		

Table 3. Examples of government initiatives to promote venture capital investment in selected ASEAN and non-ASEAN

Note: Information as of 23rd of August, 2022. The list of policy options is not exhaustive. Country selection reflects information availability at the reference date.

Source: Author's elaboration based on various academic papers and national sources.

In Singapore, for example, Ermisch and Huff (1999) noted that various tax incentives corroborated with sustained infrastructure development provided a major impetus for the growth of venture capital in the island-state. Tax incentives are also available to domestic venture capital firms in Indonesia. In Malaysia, tax incentives are available for venture capital firms, with exemptions for capital gains and dividends arising from investee firms in certain circumstances. Finally, while there are no special tax incentives available for venture capital firms in Thailand, certain sectors in which they invest attract some incentives.

Tax incentives are also available in the three largest European venture capital markets, namely France, Germany and the United Kingdom (Table 4). The most significant forms of tax incentives in these countries are in the form of tax reliefs on exit gains, such as those implemented in France and the United Kingdom). Another form of tax reliefs is those granted on initial investments, for instance in the form of a tax credit or grant, as it is the case in Germany.

Finally, tax reliefs applicable to losses, whereby losses are allowed to be deducted from future taxable income, are also very important for start-up firms since they typically only become profitable after a number of years. This type of tax relief has been provided in Germany, for example. On the other hand, a potential problem arises when such tax incentive schemes lead to a relocation of investments or businesses that would not have taken place in the absence of such schemes (Stander, 2017).

Table 4. Examples of tax incentive schemes to promote venture capital investment in selected non-ASEAN countries

Country	Description of tax incentive scheme
France	<i>Entrepreneur-investor account</i> : The scheme enables individual investors to reinvest profits from an exit into a new start-up or venture capital fund without being taxed immediately (deferred taxation).
Germany	Venture capital grant (INVEST): The scheme grants private investors an upfront relief in the form of 20% of the investment in start-up shares. The scheme also provides relief on exit gains from 2017 onwards.
	Losses carried forward: Start-ups are able to carry forward losses indefinitely, as compared to situation before 2016 when any change of more than 25% to the firm's ownership resulted in losses no longer being usable.
United Kingdom	<i>Entrepreneur's relief</i> : Individual shareholders (e.g., directors, partners and employees who own at least a 5% stake in the firm) of a firm can benefit from a reduce capital gains tax of 10% when selling their business up to an amount of GBP 10 million (British pounds).

Note: Information as of 23rd of August, 2022. Source: Adapted from Stander (2017).

Several other non-tax policies addressed at venture capital activity have been implemented including, among others (Table 3), the liberalization of investment guidelines by pension funds and public investments in the venture-capital market. For instance, the liberalization of investment guidelines by pension funds in Sweden and the United States of America has led to a significant mobilization of funds to the venture capital industry. Institutional investors with a long-term investment horizon, such as insurance corporations and pension funds, are particularly suitable to support the economy with equity investments since they do not need to divest during times of market turmoil and can therefore act as a counter-cyclical stabilizer to the market for venture capital (Han *et al.*, 2018).

In several countries in Europe, the government is the most significant investor in the venture capital market. National promotional institutions play an important role in countries such as France, Germany and the United Kingdom (Table 3). Examples from these countries include the Banque Publique d'Investissement (Bpifrance) in France, the Kreditanstalt fur Wiederaufbau (KfW) in Germany and, respectively, the British Business Bank (BBB) in the United Kingdom. These national promotional institutions typically deploy a broad range of equity instruments through which they try to remediate some of the shortcomings of the venture capital market.

4. Micro-, Small and Medium-sized Enterprise Stock Markets

State of play and challenges

Listing on a stock exchange can provide MSMEs with a significant source of funding, particularly for highgrowth firms in the technological and other innovative sectors where capital and visibility are needed at earlier stages. There are many benefits to listing on a stock exchange. The benefits extend beyond initial access to capital through an initial public offering (IPO) to repeat issuances in the longer-term. Besides access to capital, listed MSMEs also enjoy a more diversified pool of investors. The investor base of a listed firm is extended and includes a broad pool of retail and institutional investors, which means that risk also tends to be distributed more efficiently. Intangible benefits such as increased creditworthiness, transparency, visibility and credibility represent additional advantages associated with a stock-exchange listing. Additionally, MSME owners enjoy the dual benefit of realizing their capital gains, while managing their cost of capital and enhancing the capital structure of their firm (Nassr and Wehinger, 2016).

Despite the benefits of being listed on a stock exchange, exchanges in ASEAN countries are currently struggling to attract new MSME issuers. This can be explained by the presence of several impediments to the wider use of public equity markets by MSMEs. First and foremost, admission costs and listing requirements in the main stock exchanges are very often prohibitive for MSMEs and disproportionately high relative to the size of their offerings. Besides fees, listing entails meeting several market requirements that translate into additional costs stemming from underwriting, advisory, accountancy, overhead, legal and ongoing listing fees. A "one-size-fits-all" regulatory approach and stock market structures on the main stock markets are therefore not appropriate to small and large firms to the same extent (Nassr and Wehinger, 2016).

Limited liquidity also hinders the development of public markets for MSME listing. Although technological innovations such as Internet-based trading have increased liquidity overall, the benefits do not seem to be equally

spread among firms. MSME shares tend to be very illiquid and thus have the highest liquidity risk, which both raise their cost of capital substantially (Acharya and Pedersen, 2005; Amihud and Mendelson, 1986; Pastor and Stambaugh, 2003). This hampers investors' ability to realize their investment through normal exit. If liquidity is insufficient, investors tend to shift their assets away from MSMEs into more liquid stocks, in a so-called "flight-to-quality" (Apergis *et al.*, 2015). Furthermore, there are spillovers in liquidity, volatility and returns across small- and large-capitalization stocks. As shown by Chordia *et al.* (2005), the returns of large stocks lead those of small stocks due to the fact that market-wide information is first traded in the large-capitalization segment, causing spreads there to widen, and subsequently incorporated into the prices of small-capitalization stocks with a lag.

The lack of financial literacy on the side of MSMEs may also limit the development of MSME stock markets. Financial literacy has been shown to promote active participation of firms in the formal financial markets (Guiso and Jappelli, 2005; Van Rooij *et al.*, 2011). More specifically, it has been demonstrated that managers in firms with considerable financial literacy tend to be more active in optimally choosing their financing sources by assessing the costs, benefits and risks associated with each type of funding source (Agyapong and Attram, 2019; Hussain *et al.*, 2018). The specialized literature also stated that a major hindrance to the growth of SMEs in developing countries is the lack of managers' knowledge, skills and awareness on the available financing sources (Agyei and Nsiah, 2018; Bongomin et al., 2017; Susan, 2020).

Policy options to support the development of MSME growth stock markets in ASEAN

Countries in ASEAN have a large scope to increase the size, depth and relevance of their equity markets, in particular for MSMEs. In order to overcome the significant admission costs and listing requirements in the main stock exchanges, policymakers in some jurisdictions have established equity markets targeting smaller issuances. SME growth markets typically offer more flexible listing criteria, lower admission costs compared to the main market, as well as lighter disclosure requirements. Several examples of specialised SME listing platforms are provided in Table 4 below. An example from ASEAN is the Market for Alternative Investment (MAI) in Thailand. The MAI was established under the Securities Exchange of Thailand Act and commenced operations in June 1999. The purpose of the MAI is to create new fund-raising opportunities for innovative MSMEs with high growth potential and provide a broader range of investment alternatives (Stock Exchange of Thailand, undated).

Country	SME listing platform	Purpose of the SME listing platform		
ASEAN countries				
Thailand	Market for Alternative Investment (MAI)	Create new fund-raising opportunities for innovative MSMEs with high growth potential and provide a greater range of investment alternatives.		
Non-ASEAN countr	Non-ASEAN countries			
Belgium/France/ Portugal	Euronext Access	Provide start-ups and SMEs with the advantages of being listed on a stock exchange, without the need to meet the admission criteria on the main market.		
Brazil	Bovespa Mais	Encourage the growth of SMEs via the capital market.		
China	ChiNext	Promote the allocation of social funds to innovative businesses and emerging industries.		
Germany	Scale	Facilitate access to capital for SMEs, enhance the reputation of multilateral trading venues and the attractiveness of capital-market financing.		
India	Emerge	Provide capital raising opportunities to credible and fast-growing businesses with good governance standards.		
Korea	KONEX	Provide SMEs and venture capitalists with the opportunity to raise funds or collect investments.		
Poland	NewConnect	Provide equity capital to young and dynamic Polish SMEs, especially in the high-tech sector.		
South Africa	AltX	Provide good quality growth SMEs a springboard onto the main market with a clear growth path and access to capital.		

Table 4. Examples of specialized SME listing platforms in selected ASEAN and non-ASEAN countries

Country	SME listing platform	Purpose of the SME listing platform	
Spain	BME Growth	Provide listed firms with visibility and credibility, making it easier for SMEs to access the capital they need to finance, develop and expand their business model and move to the main stock market when they reached a certain size.	
United Kingdom	Alternative Investment Market	Provide SMEs from a wide range of countries and sectors with access to a diverse set of investors and a supportive advisory community, who understand the needs of entrepreneurial businesses.	

Note: Information as of 1st of September, 2022.

Source: Author's elaboration based on various national sources.

The "SME growth markets" established in the European Union could serve as a benchmark for similar initiatives in ASEAN. More specifically, the European Commission proposed in May 2018 to implement more proportionate rules to support the listing of small and medium-sized enterprises, while safeguarding investor protection and market integrity. The initiative on the "SME growth markets" was subsequently launched with the aim to reduce the administrative burden and the high compliance costs faced by SME growth market issuers while ensuring a high degree of market integrity and investor protection. Another purpose of the initiative is to foster the liquidity of publicly listed SME shares to make these markets more attractive for investors, issuers and intermediaries. Finally, the initiative seeking to establish SME growth markets aims to facilitate the registration of multilateral trading facilities as SME growth markets (European Commission, 2019). Policymakers in ASEAN countries could assess the feasibility of establishing a market for smaller listings.

As regards the low liquidity prevalent in MSME growth markets, policymakers in ASEAN should consider various policies to enhance liquidity. For instance, increased standardisation could potentially alleviate this problem. Another approach is to encourage participation by intermediaries such as market-makers. For instance, Bovespa Mais (Brazil) and NewConnect (Poland) have offered subsidies to market-makers to participate in smaller, less liquid stocks, for instance in the form of reduced trading fees (Harwood and Konidaris, 2015). Increasing tick sizes is another example of policy in favour of liquidity. Higher tick sizes could also provide incentives to market-makers to trade MSME shares, which in turn could improve liquidity in this market segment. Another policy option is to encourage research on listed SMEs, as very little research analyst coverage is available for this market segment. This also reduces liquidity. Some SME exchanges took steps to encourage specialised research, including temporarily paying for research. The AltX exchange (South Africa), for example, pays for two or three reports per year, while India's Emerge exchange collaborates with a third-party research organisation that provides research on companies listed on its platform (Harwood and Konidaris, 2015).

There is also a role for policymakers in ASEAN to raise financial literacy by promoting financial education for MSMEs. Exchanges should be encouraged to provide special training programmes to educate SME managers on the benefits of being listed. Pre-listing trainings could cover matters related to corporate governance, information disclosure and capacity building. Post-listing trainings could extend to managing investor relations, exchange compliance and ongoing investor's coverage and visibility. Some exchanges have already provided such trainings. For example, the AltX exchange (South Africa) offers mandatory induction courses for directors, combining education and training to executives of listed companies, investor relations and public relations executives. The topics covered by the training programme include listing requirements, strategies for targeting investors, management of investor relations, and financial media management (Harwood and Konidaris, 2015).

5. Loans and Guarantees

State of play and challenges

The development of equity finance should not be considered as being to the detriment of banks, but rather as a complement. As heavy reliance on market-based finance may turn out to be problematic for MSMEs given their size and characteristics, most businesses in ASEAN will arguably continue to rely on bank loans for external financing. Borrowing can be difficult for MSMEs, however, particularly if they lack collateral or have a short record of accomplishment of credit history. Indeed, banks may be reluctant to extend long-term unsecured loans to MSMEs due to tighter regulation and higher capital requirements (Acharya, Berger and Roman, 2018; Cortes *et al.*, 2020). Moreover, even MSMEs that have available collateral may avoid pledging their assets, as unpledged collateral can serve various other purposes, such as being used for insurance (Rampini and Viswanathan, 2013). A firm may also prefer to use unpledged collateral in order to strengthen its internal funds and its capacity to issue low-risk debt, jointly referred to as "financial slack" (Triantis, 2000).

To help small businesses obtain loans from banks, guarantees provided by public, private or mutual guarantee institutions can help compensate for lacking collateral or creditworthiness by reducing banks' risks. The firms that are eligible to benefit from the loan guarantees can use these to strengthen their cash buffers and continue servicing their liabilities over a longer horizon, even with limited cash flows. The guarantee schemes therefore have the potential to limit the amount of losses incurred by banks on corporate loans by partially transferring the credit risk to governments.

Many countries in ASEAN have implemented loan guarantee schemes as part of their support packages to mitigate the economic impact of the COVID-19 pandemic (Table 5). The features of these schemes vary across countries according to a number of parameters, such as the overall size of the guarantee scheme, the pricing of the guarantees, the share of the loan that is guaranteed, the eligibility criteria for firms to qualify for the guarantee, and the maximum amount per individual borrower. There are, however, some similarities among schemes. Loan guarantees are usually short-term (one year) but can increase to up to ten years in Malaysia. Loss absorption is typically limited to a maximum of 60%-80% of the loan principal.

Table 5. Loan guarantee schemes targeting MSMEs implemented in ASEAN countries in response to COVID-19 shock

Country	Features of the loan guarantee scheme
Cambodia	In March 2021, the Business Recovery Guarantee Scheme was launched to help MSMEs and large firms stay afloat and enhance economic recovery from the COVID-19 pandemic. The scheme is worth USD 200 million and acts as collateral for 70%-80% of the loan amount borrowed by businesses from participating financial institutions. In September 2021, the Credit Guarantee Corporation of Cambodia announced the launch of the Co-Financing Guarantee Scheme, whose specific purpose is to improve access to finance for MSMEs. This scheme will act as collateral or security for 70%-80% of the loan amount.
Indonesia	In July 2020, a loan guarantee scheme worth 100 trillion Indonesian rupiah (IDR) was implemented to help firms that operate in priority sectors, such as tourism, automotive, textiles and garments, and electronics, and that employ at least 300 staff manage their cash flows during the COVID-19 pandemic. The program offers guarantees for up to 80% of working capital loans totaling between IDR 10 billion and IDR 1 trillion, and for a period of up to one year. In April 2021, the eligibility rules were eased, whereby firms that employ a minimum of 100 staff, or 50 employees in some sectors, can also benefit from guarantees. The relaxation also allowed guarantees for loans of up to three years, and it reduced the minimum loan size to IDR 5 billion.
Malaysia	A fund worth MYR 50 billion (Malaysian ringgit) was launched for working capital loan guarantees for all businesses affected by the COVID-19 shock. The scheme covers up to 80% of the loan amount for financing working capital requirements. The minimum guaranteed loan size is MYR 20 million per company. In January 2021, the scheme was enhanced. The maximum financing amount increased to MYR 1 billion, while the scope of financing expanded to cover working capital with a guarantee period of up to 10 years. In January 2022, Bank Negara Malaysia announced two new facilities for MSMEs totaling MYR 1.5 billion. These facilities will provide guarantees on loans to help MSMEs to recover and grow post-pandemic, while also supporting recipient firms in adopting sustainable practices for business resilience.
Philippines	A credit guarantee scheme worth PHP 120 billion (Philippine peso) for small businesses affected by the economic fallout from the pandemic was launched. In September 2020, a capital injection of PHP 5 billion was given to the Philippine Guarantee Corporation (PhilGuarantee), allowing it to support loan guarantees of PHP 100 billion (around 0.6% of 2020 GDP). In February 2021, it was announced that PhilGuarantee had broadened its scope to include support for micro, small and medium enterprises in manufacturing, housing, agriculture, and other key sectors of the economy, in order to help businesses, stay afloat.
Thailand	In March 2021, a series of financial rehabilitation measures were launched to support businesses in their recovery from the COVID-19 pandemic. They included soft loans for SMEs, for a total amount of 500 billion Thai baht (THB). The soft loan scheme was complemented by a credit guarantee scheme through the Thai Credit Guarantee Corporation (TCG). Under this scheme, the government covers the first six months of interest payments and guarantees up to 60%-70% of the loans from the financing pool of THB 500 billion. In September 2021, the TCG expanded its guarantees for the Bank of Thailand's soft loan scheme by an additional THB 100 billion. The TCG charges MSMEs a guarantee fee of 1% of the guaranteed loan value for the first four years, which is below the normal rate of 1.75% per annum.

Note: Data are as of 19th of July, 2022.

Source: Author's elaboration based on OECD (2022); Asian Development Bank COVID-19 Policy Database (ADB, undated); and various national sources.

Policy options to develop loan and guarantee programs in ASEAN

Beyond the support provided to firms during the COVID-19 crisis (Table 5), policymakers in ASEAN could build on the experience of the European Union, which has initiated several initiatives to develop loan and guarantee programs targeted at MSMEs. For instance, the program for the Competitiveness of Enterprises and Small and Medium-sized enterprises (hereafter "COSME") improves small businesses' access to loans through the Loan Guarantee Facility. COSME is improving access to finance for small and medium-sized enterprises through two financial instruments that have been available since August 2014. COSME has a budget of over EUR 1.4 billion to fund these financial instruments that facilitate access to loans and equity finance for SMEs where market gaps have been identified. Thanks to this budget, it will be possible to mobilize up to EUR 35 billion in financing from financial intermediaries via leverage effects (European Commission, undated).

COSME comprises two sub-initiatives, namely the Loan Guarantee Facility (LGF) and the Equity Facility for Growth (EFG). Part of the COSME budget will fund guarantees and counter-guarantees for financial intermediaries (guarantee organizations, banks, leasing companies) to help them provide more loan and lease finance to SMEs. By sharing the risk, the COSME guarantees will allow financial intermediaries to expand the range of SMEs and types of financial transactions they can support. Another part of the COSME budget is dedicated to investments in risk-capital funds that provide venture capital and mezzanine finance to expansion and growth-stage SMEs, in particular those operating across border (European Commission, undated).

However, it is worth noting that the effectiveness of loan guarantee schemes may depend on the financial structure prevalent in each ASEAN country, as well as on the ability of banks to process a potentially elevated number of guarantee applications. For example, the demand for guarantees is likely to be particularly elevated in those countries facing larger economic contractions, where firms rely more on short-term bank loans, where SMEs play a more prominent role and where corporate sector indebtedness is higher. In addition, operational challenges for banks may also hinder the effectiveness of guarantee programs. For instance, banks may need to assess the creditworthiness of potentially numerous applicant firms in a challenging economic environment, and where guarantee applications may coincide with a large number of applications for debt moratoria. It is estimated that, if only firms in the most adversely affected sectors take up loans, rather than all eligible firms, the guarantee uptake may be around 60% of its maximum potential amount (ECB, 2020).

Conclusion

Lack of access to finance constitutes a major setback to the development of the MSME sector in ASEAN countries. MSMEs are confronted with stringent funding constraints in traditional lending and capital markets, in particular at the early stages of their activity. Demand and supply of capital to MSMEs thus entails more complex issues compared to the larger firms. This paper presents a number of policy actions that have the potential to mitigate the financing challenges faced by MSMEs at the start-up stage by enhancing the potential of alternative funding sources such as business angel investment, crowdfunding, venture capital investment and SME stock markets. Acknowledging that these alternative sources of finance can only act as a complement to bank lending and not as a pure substitute, the paper also discusses the importance of loan guarantee schemes in improving SMEs' access to bank loans.

Various policies could be implemented to bring in more business angel investors, including tax incentives, the creation of co-investment funds, investor-readiness training sessions, or media campaigns. The development of the crowdfunding market requires appropriate regulatory frameworks, strong rule of law and control of corruption and solid infrastructure such as stable power supply and reliable Internet connection. Similarly, venture capital investment in ASEAN could benefit from the implementation of dedicated legal frameworks, tax incentives, as well as from the relaxation of certain investment requirements for institutional investors such as pension funds. In a similar vein, policymakers in ASEAN could consider the establishment of equity markets targeted at SMEs, with lighter admission requirements than public markets. For this type of market to thrive, various policies are needed to reduce the costs associated with the listing, improve liquidity and increase SME managers' level of financial literacy. However, financial markets in ASEAN countries are currently at very different levels of development. Governments in the region therefore need to carefully assess the feasibility of these policy actions, taking into account the characteristics of the domestic financial system and the broader macroeconomic environment.

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