



Alternative Financing Instruments for ASEAN SMEs



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Foreword

This publication offers guidance to policy makers in Southeast Asia to enable small and medium-sized enterprises (SMEs) and entrepreneurs to access a broad range of financial instruments. It provides an overview of eight alternative financing instruments beyond traditional bank lending, namely: leasing, factoring, private equity, venture capital and business angel financing, specialised SME exchanges, debt crowdfunding/P2P lending, equity crowdfunding, blockchain-based financing, and trade finance.

Information on the structure and characteristics of each instrument is provided, followed by a description of global trends on the take-up by SMEs and entrepreneurs, as well as commonly adopted policy approaches to support its growth. Recent trends and policy developments in ASEAN member states are also described. Each chapter concludes with implications and suggestions for policy makers in the region on how to foster alternative financial instruments for SMEs.

The report highlights the importance for SMEs in ASEAN countries to have access to a broad range of financial instruments. A diversified financing offer would help narrow the SME financing gap, raise financial inclusion in the region, make businesses more resilient and ultimately lead to higher and more inclusive economic growth.

The report documents that many alternative financing instruments remain underdeveloped in the region, with strong variability across ASEAN member states. It also identifies areas where there is scope to enhance policy making to foster the development of these instruments. In particular, the report underlines the need for a clear, transparent and appropriate regulatory framework, and provides examples of good international practices that could be adopted more widely in ASEAN countries. In addition, a better credit information infrastructure could help spur the development and uptake of these instruments. The importance of a healthy ecosystem and financial skills among SMEs and potential investors is also highlighted, with suggestions for potential policy interventions that could be implemented in ASEAN countries. Finally, this study explores the untapped potential of more direct interventions to stimulate alternative-finance markets, such as tax incentives or public (co)-investments.

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Acronyms and abbreviations

ABA	ASEAN Bankers Association
ACE	Action Community for Entrepreneurship
ACCSME	ASEAN Coordinating Committee on Micro, Small and Medium Enterprises
ADB	Asian Development Bank
AFIN	ASEAN Innovation Network
AIM	Alternative Investment Market
AML	Anti-Money Laundering
AMS	ASEAN Member States
ASEAN	Association of Southeast Asian Nations
ASIC	Australian Securities and Investments Commission
AUD	Australian dollar
B2B	Business-to-Business
B2C	Business-to-Customer
B2G	Business-to-Government
BAFT	Bankers Association for Finance and Trade
BKPM	Indonesia's Investment Coordinating Board
BPO	Bank Payment Obligations
BTC	Bitcoin
CAD	Canadian dollar
CERSAI	Central Registry of Securitisation Asset Reconstruction and Security Interest
CEZA	Cagayan Economic Zone Authority
CFT	Countering Financing of Terrorism
CIF	Co-Investment Fund
COPAS	Canada-OECD Project for ASEAN SMEs
CMF	Committee on Financial Markets
CMS	Capital Markets Services
CMSL	Capital Markets Services License
CNY	Chinese renminbi
CRD	Credit Risk Database
CVC	Corporate Venture Capital
DATO	Digital Asset Token Offering
DFSA	Dubai Financial Services Authority
DLT	Distributed Ledger Technologies

DSO	Day Sales Outstanding
ECF	Equity crowdfunding
ETH	Ethereum
e-KYC	Electronic Know Your Customer
FAA	Financial Advisers Act
FATF	The Financial Action Task Force
FCI	Factors Chain International
FDI	Foreign Direct Investment
Fintech	Financial Technology
GDP	Gross domestic product
GPs	General Partners
GVC	Global Value Chain
HOSE	Ho Chi Minh Stock Exchange
HNWI	High Net Worth Individuals
HNX	Hanoi Stock Exchange
IBFIM	Islamic Banking and Finance Institute Malaysia
ICC	International Chamber of Commerce
ICO	Initial Coin Offerings
IDR	Indonesian rupiah
IFC	International Finance Corporation
IPO	Initial public offering
IT	Information technology
JPY	Japanese yen
KRW	Korean won
KYC	Know-Your-Customer
LBOs	Leveraged Buy-outs
LEAP Market	Leading Entrepreneur Accelerator Platform Market
LPs	Limited Partners
LSX	Laos Securities Exchange
MAS	Monetary Authority of Singapore
MAVCAP	Malaysia Venture Capital Management Bhd
MBAN	Malaysian Business Angel Network
MDEC	Malaysia Digital Economy Corporation
MIC	Myanmar Investment Commission
MSME	Micro, small and medium-sized enterprise
MYR	Malaysian ringgit
MVDCD	Malaysia Venture Capital and Private Equity Development Council
NCB	National Credit Bureau
Nomads	Nominated Advisors
NUS	The National University of Singapore
NZD	New Zealand dollar
OECD	Organisation for Economic Co-operation and Development
Open APIs	Open Application Programming Interfaces
OJK	Indonesian Finance Authority

OSS	Online Single Submission
P2P	Peer-to-peer
PE	Private equity
PSE	Philippines Stock Exchange
R&D	Research and development
SaaS	Software as a Service
SAP SMED 2025	ASEAN Strategic Action Plan for SME Development 2016-2025
SCF	Securities-based Crowdfunding
SDG	Sustainable Development Goals
SME	Small and medium-sized enterprise
SEC	Securities and Exchange Commission
SET	Stock Exchange of Thailand
SFC	Securities and Futures Commission
SOEs	State Owned Enterprises
SSC	State Securities Commission
SSM	The Companies Commission of Malaysia
UNCDF	United Nations Capital Development Fund
UPCoM	Unlisted Public Company Market
USAID	United States Agency for International Development
USD	United States dollar
VAT	Value Added Tax
VC	Venture capital
VCC	Variable Capital Companies
VIB	Viet Nam International Bank
VNBA	Viet Nam Banks Association
VSD	Viet Nam Securities Depository
WC-FINC	ASEAN Working Committee on Financial Inclusion
WPSMEE	Working Party on SMEs and Entrepreneurship
XRP	Ripple
XLM	Stellar

Executive Summary

Access to finance by small and medium-sized enterprises (SMEs) has been a longstanding issue in many economies in both developed and emerging markets. Structural issues and market imperfection soften drive barriers related to finance, and are exacerbated in times of crisis, when the availability of bank credit is constrained. Given the fundamental role of appropriate funding sources for the development of SMEs and their importance for inclusive economic growth, SME financing has become an increasing priority for policy makers in OECD and ASEAN economies, one that has been enshrined, for example, in the ASEAN Strategic Action Plan for SME Development 2016-2025 (SAP SMED 2025), as well as in the 2015 G20-OECD High Level Principles on SME Financing.

Fostering alternative financing instruments (i.e. funding other than bank lending) is one of the most prominent policy responses to potential SME financing gaps across the ASEAN region. A well-diversified financing landscape for small businesses has the potential to address some of the obstacles that SMEs face in obtaining adequate funding by complementing bank financing, while at the same time enhancing financial inclusion in ASEAN Member States (AMS).

Financial inclusion is particularly pertinent for AMS, as most of them have low banking penetration compared to OECD and G20 economies, and a large part of the population remains underbanked. These issues are particularly acute in rural areas and cost and distance are two of the main reasons why AMS adults do not have a financial institution account. As such, with a few exceptions such as Singapore, SMEs in AMS tend to have limited access to bank credit. The alternative financing sources outlined in the report: (i) leasing; (ii) factoring; (iii) private equity, venture capital and angel funding; (iv) public equity; (v) P2P lending/ debt crowdfunding; (vi) equity crowdfunding; (vii) blockchain-based financing through initial coin offerings; and (viii) trade finance— offer an important opportunity to narrow the SME financing gap and to bring these firms into the formal economy.

This joint ASEAN-OECD report explores the potential for developing a range of alternative financing instruments in AMS. It presents an overview of the abovementioned eight alternative finance instruments relevant for SMEs in Southeast Asia. The structure and characteristics of each instrument is described, followed by information on activities in AMS and a discussion of policy options to support the take-up of the instrument by SMEs.

Asset-based financing, such as leasing and factoring, can have an important development impact. As with most alternative financing instruments, a strong institutional framework is necessary to support the development of lease financing, including appropriate regulations, incentive systems and necessary infrastructure. Coordination between authorities responsible for the legal, fiscal, and other regulatory aspects of leasing can help build an enabling ecosystem that can lead to the organic growth of a sound leasing market. Adequate financial literacy policies will also help to raise awareness of this instrument, and how it can serve as a viable alternative to traditional debt. Public sector authorities can help to catalyse the leasing market through direct measures (funding or investing in leasing companies or banks), and indirect measures (provision of credit to financial institutions active in leasing, which can then be on-lent to targeted SMEs through the extension of lease agreements; tax incentives; official sector participation in securitisation of lease financing portfolios).

Factoring also represents a relevant finance instrument for a relatively large segment of the SME population in AMS, especially for firms with significant working capital needs. In many countries across the globe, factoring activities have risen significantly in recent years, and countries in Southeast Asia have generally followed that trend, albeit with significant cross-country variation. Factoring activities benefit from reliable and accessible credit information, such as that provided by credit bureaus and registries, and, most importantly, a well-functioning registry on collateral and accounts receivable. In addition, countries in the region could adopt good international practices related to their legal frameworks for factoring more widely by streamlining their judicial procedures, and by ensuring that taxation does not render factoring uncompetitive.

AMS are increasingly the focus of Private Equity (PE) and Venture Capital (VC) investors, particularly in an era of persistently low interest rates and a dearth of yield. PE/VC investment in the region has been growing over the past decade, as funds seek to benefit from the region's growth prospects. Nevertheless, the region's PE/VC industry is characterised by rather volatile and uneven capital flows. There is room for policy to foster a more consistent flow of capital, and create the conditions for PE/VC investment to become a regular source of funding for SMEs in these markets. This will depend on the underlying investment environment and on investor confidence. Policymakers can promote institutional transparency, regulatory and legal clarity, solid investor protection and corporate governance, on the one hand, while fostering conducive environments, robust business infrastructure and healthy ecosystems, including a skilled workforce, on the other. These factors can provide the basis for a healthy deal flow and a safe environment for PE/VC investors to allocate their capital to SMEs in the region. Government participation in the PE/VC funding ecosystem should be carefully designed and calibrated, to avoid over-reliance of the industry on government funding, market distortions and the crowding out of private players.

SME exchanges are a crucial component of the SME finance and entrepreneurial ecosystems; yet in AMS, activities remain limited, with a few notable exceptions, such as Singapore, Thailand and Viet Nam. They can provide an important avenue of finance for firms with high growth potential. A well-developed public equity market for small- and midcaps is especially important to enable existing shareholders (such as early stage investors like business angels and venture capitalists) to exit the firm in a straightforward manner. In light of this, many countries around the world have developed specialised platforms for SMEs with tailored and proportionate listing requirements. Countries in the region could consider closely scrutinising their regulatory framework, which may be overly strict in some jurisdictions. These vehicles aim to lower compliance costs, and the length and the complexity of procedures, without compromising investor protection and market integrity. Nonetheless, support to SMEs with the potential to become listed is crucial throughout the listing process, in order to have a healthy market, as well as to address gaps related to financial skills and knowledge. International experiences, including in Thailand, indicate that tax policies can play a role in kick-starting SME exchanges, especially in underdeveloped markets, which could also be more widely adopted in the region. Successful public equity markets are also typically underpinned by a well-developed ecosystem, including intermediaries such as brokers, financial advisors, investment banks, specialised legal professionals and underwriters. The development of such an ecosystem, currently lacking in many AMS, could also be a useful starting point to kick-start the market.

Fintech-enabled financing is expanding rapidly in the ASEAN region, recording triple-digit growth rates for some fintech financing instruments in recent years in many AMS. The development of peer-to-peer (P2P) lending not only provides funding to SME projects, but it also constitutes a great step towards greater financial inclusion. There is a role for governments and regulators to provide support to fintech-related initiatives, such as P2P lending, by (a) building the infrastructure (institutional or otherwise) and the regulatory framework that will enable these platforms to thrive in a safe environment, and (b) ensuring that the services provided are fair and safe for the financial consumers. Regulatory sandboxes can encourage fintech companies to experiment and test prototypes of their projects in a safe environment, before services and products are launched to a wider market. Policy and regulation is a key enabler in this market, as government led-initiatives can combine and coordinate the efforts of different fintechs in banking, credit

provision, payment systems, telecom companies, e-commerce and BigTech and can provide the underlying conditions for a coherent and vibrant ecosystem that will promote both innovation and usage levels by individuals and companies. Investment in technological and legal/institutional infrastructure and appropriate regulatory frameworks are even more important in financial services, where there is a need to address consumer and SME needs, while promoting financing inclusion, trust in the markets, financial stability and security.

The regulatory and supervisory regime is also of crucial importance for the development of equity crowdfunding markets for SMEs. A careful balance needs to be found to ensure investor protection and limit the risks of a collapse of platforms due to malpractice and fraud on the one hand, while avoiding overregulation, specifically with respect to licencing requirements, on the other. Regulatory sandboxes may be an appropriate tool in this regard. Other important policy considerations for the development of this market relate to the awareness among SMEs and entrepreneurs, their financial acumen and ability to run a successful crowdfunding campaign, as well as access to affordable broadband. Equity crowdfunding activities have increased exponentially in many countries, including in Southeast Asia, but often from a very low base, indicating a strong potential for countries that lag behind.

Depending on the conditions of issuance, blockchain-based financing such as Initial Coin Offerings (ICOs) can offer an innovative and inclusive way to raise capital for young and innovative SMEs enabled by Distributed Ledger Technologies (DLTs) and blockchain. Under specific caveats, regulated forms of ICOs have a great potential to become an alternative financing mechanism for SMEs with DLT-related projects, which could simultaneously improve competition in the SME financing space. Unregulated ICO activity and token offerings, coupled with limitations in the structuring of ICOs and operational risks related to DLT-based networks, however, expose investors to significant risks in the absence of consumer protection safeguards. Any ICO regulatory framework should provide enhanced investor protection for retail investors in particular, and promote financial education initiatives, so as to safeguard their informed participation in such financing.

Trade finance instruments also play a key role in allowing SMEs to participate in GVCs and trade internationally. These instruments provide payment facilitation, financial support to one or more parties in trade transactions, risk mitigation through insurance and guarantees and information on individual international transactions. There appears to be a sizeable gap in the provision of trade finance instruments in Southeast Asia, which has traditionally relied on short-term letters of credit and documentary collection to support their international transactions. Prominent hurdles include know-your-customer (KYC) information, Basel regulatory requirements, insufficient collateral from companies, the lack of dollar liquidity and capital constraints. Getting regulation right is important, with KYC and anti-money laundering regulations of particular concern. Fintech and digitalisation also hold great potential to make trade finance instruments more easily accessible and affordable for small businesses. The establishment of trade platforms and e-invoicing initiatives constitute practical examples of how governments can make a difference in this respect. Publicly run or supported export credit and insurance can also help bridge gaps in private sector financing.

The ASEAN region is a fast-paced, diversified economic area that is changing rapidly. SME financing can help foster sustainable and dynamic growth, as well as improve financial inclusion in the ASEAN region. Policy has an important role to play in creating the conditions for the development of a diversified set of financing instruments for ASEAN SMEs, to enable them to contribute more fully to sustainable and inclusive economic growth.

1. Introduction

Background

SMEs are the backbone of ASEAN economies, accounting for 98-99% of businesses in most ASEAN countries, and contributing to at least 50% of employment in all countries (generally between two thirds and three quarters, and up to 97%).

Ensuring improved and adequate access to finance for SMEs has long been a concern in ASEAN. As a result, increasing access to finance is strategic goal B of the ASEAN Strategic Action Plan for SME Development 2016-2025 (SAP SMED 2025) with desired outcome B1 “Institutional framework for access to finance will be developed and enhanced”. In that framework, the Strategic Action Plan aims to support the deepening of markets for alternative sources of finance for ASEAN SMEs.

While bank loans are – and will remain – essential to address part of SME financing needs, fostering SME creation and growth requires that SME have access to a broad range of financing instruments, adapted to their needs, as emphasized in the G20/OECD High Level Principles on SME Financing (G20/OECD, 2018^[1]). Currently, the share of non-bank finance in total SME finance remains very low, and entrepreneurs still excessively depend on bank loans to fulfil their needs, from the startups to the growth phase. This lack of access to other, and often more suitable, financing instruments, is particularly detrimental to new, innovative or fast-growing firms, given the absence of collateral or historical profitability, particularly following the financial crisis, which resulted in credit rationing in a number of economies. In that regard, ensuring SME access to a diversified range of instruments also improves the resilience of all SMEs to shocks on the credit market. Additionally, while Fintech innovations have created a range of new funding solutions particularly suited for SMEs, their sustainable development depends on the implementation of an enabling framework, which also ensures adequate investor protection.

In order to support ASEAN’s strategic objective to foster the development of markets for alternative financing instruments for SMEs, this report aims to provide ASEAN policy makers with detailed analysis of the suitability of a series of instruments to specific profiles of SMEs, and an overview of the level of development of these instruments at the global level or in benchmark regions. The report provides data and information on the state of the markets for such alternative financing instruments in each of the ASEAN Member States and provides information on the regulatory and policy framework for such instruments in AMS. The report offers high-level policy recommendations to further develop these markets in AMS and increase their take-up by SMEs. The following instruments are analysed: leasing; factoring; private equity, venture capital and angel funding; public equity; P2P lending/ debt crowdfunding; equity crowdfunding; blockchain-based financing through initial coin offerings; and trade finance.

SMEs are the backbone of ASEAN economies

The following table presents a breakdown of businesses by size for all ASEAN countries, and their contribution to total employment. In most countries, SMEs represent 98-99% of businesses.

Table 1.1. Breakdown of businesses by size across ASEAN countries and MSMEs' contribution to total employment

	Share of micro enterprises	Share of small enterprises	Share of medium enterprises	Total share of MSMEs	Share of large enterprises	MSMEs' contribution to total employment
Brunei Darussalam	40.4	41.2	15.6	97.2	2.8	35.38
Cambodia	95.61	2.65*		98.26	1.74	72.9
Indonesia	98.68	1.22	0.09	99.99	0.01	97
Lao PDR	86	13.8*		99.8	0.2	82.3
Malaysia	75.35	20.94	2.24	98.53	1.47	66
Myanmar	..	62.03	22.30	84.33	15.67	..
Philippines	88.45	10.58	0.49	99.52	0.48	63.19
Singapore	..	..	..	99.00	1.00	72
Thailand	..	99.19	0.51	99.70	0.30	79.48
Viet Nam	72.82	23.45	1.74	98.01	1.99	51.7

Note: *These figures represent the combined share of small and medium-sized enterprises for these two countries.

Source: OECD compilation based on country data, using country definitions. Please see country profiles for sources and definitions.

Access to finance in ASEAN

Table 1.2 builds on data from the World Bank Enterprise Survey, for ASEAN countries in which the survey was undertaken. It highlights several interesting features:

- In almost all ASEAN countries, a significant share of surveyed firms identified access to finance as a major constraint (about one firm out of six in Cambodia, Indonesia and Lao PDR, and about one firm out of ten in Malaysia, Myanmar, the Philippines and Viet Nam). Thailand is the exception with only 2.4% of surveyed firms not identifying access to finance as a major constraint.
- In almost all ASEAN countries the share of loans requiring collateral stands at around 80-90%, with only two exceptions (the Philippines with 51% and Malaysia with 64.5%).
- The value of collateral needed is particularly high, ranging from a minimum of 165.1% in Cambodia to 412.9% in Myanmar, and generally standing at around 200%.
- In all ASEAN countries firms tend to rely on internal finance to fund investments (up to 96.3% of surveyed firms in Cambodia). The proportion of investments financed by banks is low: from a minimum of 0.9% in Cambodia to a maximum of 15.7% in Malaysia.
- While banks appear to be more involved in funding ASEAN SMEs' working capital needs, SMEs also resort to supplier/customer credit.

Table 1.2. Firms' replies to finance questions of the World Bank Enterprise Survey in ASEAN countries

Excluding Brunei Darussalam where the survey was not conducted

Indicator	Country									
	All countries	East Asia and Pacific	Cambodia (2016)	Indonesia (2015)	Lao PDR (2018)	Malaysia (2015)	Myanmar (2016)	Philippines (2015)	Thailand (2016)	Viet Nam (2015)
Percent of firms with a checking or savings account	85.2	74.7	39.4	59.8	54.6	74.7	43.7	93.2	87.7	55.8
Percent of firms with a bank loan/line of credit	31.6	29.2	19.9	27.4	27.4	31.9	11.3	28.9	15.5	40.8
Proportion of loans requiring collateral (%)	79.5	82.2	77.5	80.4	93.2	64.7	98.4	51.0	93.4	91.0
Value of collateral needed for a loan (% of the loan amount)	208.9	235.2	165.1	241.1	225.1	182.6	412.9	156.7	320.1	216.0
Percent of firms not needing a loan	46.4	50.3	58.3	42.8	49.8	49.3	61.2	68.9	40.5	50.0
Percent of firms whose recent loan application was rejected	11.0	6.7	3.0	0.1	9.6	0	3.4	14.8	33.8	5.6
Percent of firms using banks to finance investments	24.2	19.9	2.5	36.6	8.6	35.3	7.1	12.4	15.3	29.3
Proportion of investments financed internally (%)	72.1	78.6	96.3	66	88.7	67.2	91.4	81.2	86.4	67.3
Proportion of investments financed by banks (%)	13.7	10.0	0.9	12.8	6.4	15.7	3.2	10.1	8.9	15.4
Percent of firms using banks to finance working capital	27.7	26.2	18.2	32	23.1	42.6	11.2	12.4	28.9	32.3
Percent of firms using supplier/customer credit to finance working capital	25.8	20.5	2.5	31.1	3.8	39.3	14.8	7.4	18.1	21.2
Proportion of working capital financed by banks (%)	10.8	10.9	7.4	9.9	11.7	16.7	4.4	5.1	15.4	13.1
Percent of firms identifying access to finance as a major constraint	25.1	11.9	16.9	16.5	17.4	12.0	9.9	10.7	2.4	10.8

Source: World Bank Enterprise Surveys.

According to one estimate, the SME funding gap in ASEAN countries may range from USD 0.2 billion in Lao PDR to USD11.8 billion in Indonesia or Thailand (Table 1.3) (Wignaraja, 2014^[2]).

Table 1.3. Estimate of the SME Funding Gap in ASEAN, 2014

Country	Total funding gap (USD billion)	Average Credit Value Gap per Enterprise (USD)
Brunei Darussalam	7.2	756 000
Cambodia	0.4	50 000
Indonesia	11.8	29 000
Lao PDR	0.2	13 000
Malaysia	8.0	126 000
Myanmar	..	..
Philippines	2.0	59 000
Singapore	7.1	856 000
Thailand	11.8	126 000
Viet Nam	4.3	42 000

Source: (Wignaraja, 2014^[2]).

Providing ASEAN SMEs with a diverse set of financing instruments can contribute to filling this gap, while also providing them with options better suited to their needs. The next section presents the various types of financing options available to SMEs.

Diverse instruments to address diverse SME financing needs

There is an increasing range of financing options available to SMEs, although some of these are still at an early stage of development or, in their current form, are accessible only to a small share of SMEs. Up to now, insufficient awareness and understanding on the part of SMEs, financial institutions and governments of these alternative instruments, their modalities and operations has held back their broader use. Improving knowledge of the full range of financing instruments for SMEs and entrepreneurs represents a first step towards broadening access to these finance options.

Traditional debt includes instruments such as bank loans, overdrafts, credit lines and the use of credit cards. This type of finance offers moderate returns for lenders and is therefore appropriate for low-to-moderate risk profiles, i.e. firms that are characterised by stable cash flow, modest growth, tested business models, and access to collateral or guarantees. Alternative financing instruments alter this traditional risk sharing mechanism.

Table 1.4. Alternative finance instruments along the risk-return spectrum

Low Risk/ Return	Low Risk/ Return	Medium Risk/ Return	High Risk/ Return
Asset-Based Finance	Alternative Debt	"Hybrid" Instruments	Equity Instruments
Asset-based lending	Corporate Bonds	Subordinated Loans/Bonds	Private Equity
Factoring	Securitised Debt	Silent Participations	Venture Capital
Purchase Order Finance	Covered Bonds	Participating Loans	Business Angels
Warehouse Receipts	Private Placements	Profit Participation Rights	Specialised Platforms for Public Listing of SMEs
Leasing	Crowdfunding (debt)	Convertible Bonds	Crowdfunding (equity)
		Bonds with Warrants	Initial Coin Offerings (ICOs)
		Mezzanine Finance	

Source: (OECD, 2015^[3]).

The following chapters of the report look into a series of instruments in detail. They analyse their suitability to specific profiles of SMEs, and provide an overview of their level of development at the global level or in benchmark regions, before focusing on their usage and policy initiatives in ASEAN and making recommendations for further development. The specific instruments analysed are the following: leasing; factoring; private equity, venture capital and angel funding; public equity; debt crowdfunding; equity crowdfunding; blockchain-based financing through initial coin offerings (ICOs); and trade finance.

2. Leasing

Lease financing for SMEs: structure and characteristics

Lease financing for SMEs: definition and market trends

Lease financing is a type of asset-based financing, and a popular alternative to traditional (cash-flow based) debt, whereby an asset is made available to an enterprise or individual for a certain period of time, in exchange for payment (Leaseurope and Oxford Economics, n.d.^[4]). According to the international accounting standard for leases IAS17, a lease is defined as "an agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time" (Deloitte, 2019^[5]). There are many different leasing contract types, and the common feature of such contracts is that the lessor retains the ownership of the leased asset throughout the life of the contract.

In lease contracts, the legal ownership of the asset is effectively dissociated from the economic ownership of the asset, and the lessee may have the option to acquire the asset at the end of the lease period, depending on the contract. Contracts that specifically provide for such transfer of ownership at the end of the contract are known as 'hire-purchase' contracts.

Based on international standards, leases can be classified under two main categories, namely: (a) *finance leases*, whereby virtually all the risks and rewards of ownership are transferred, giving rise to asset and liability recognition by the lessee and a receivable by the lessor; and (b) *operating leases*, whereby the lessee commits to expense recognition, with the asset remaining recognised by the lessor. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incident to ownership. All other leases are classified as operating leases.

Leasing is used to finance a wide variety of assets, and leases can be tailored to meet the needs of clients. The most commonly leased assets are vehicles; production or office equipment (for instance renewable energy equipment, healthcare equipment and printing equipment); machinery; real estate; ITC and software applications, to name a few.

Lease financing can be extended by banks that have leasing subsidiaries or directly by leasing companies. Lease financing can also be arranged and distributed by vendors and dealers of equipment, at the point of sale of the asset, or the vendor channel, where the customer can access the lease directly from the manufacturer.

Leasing can be considered an attractive financing instrument for companies with low current returns but with high growth opportunities, characteristics akin to the description of SMEs in most ASEAN countries.

Benefits of lease financing for SMEs

Leasing allows firms to invest in fixed assets without necessarily having the liquidity required to purchase such assets, the down-payment or collateral,¹ or the credit rating required by banks to receive a loan.

¹The asset underlying the lease agreement serves as collateral for the transaction given that the lessor retains the ownership of the asset for the lease period.

Through leasing, they can finance up to 100% of the purchase price of an asset, basing repayment instalments on the cash flow and profitability generated by the use of this asset. This can also enable them to increase their debt capacity and better manage working capital, given that payments are spread over the lifetime of the asset. In addition, leasing can increase SME resilience, making them less vulnerable to downturns in the credit cycle, when the supply of traditional loans may be more limited, particularly for SMEs.

Smaller, less profitable companies are more likely to require leasing instruments than larger cash-generating firms. Contractors of lease financing benefit from the cost transparency and predictability related to the use of an asset. Lease financing is also thought to be simpler and more convenient for SMEs wishing to acquire or make use of an asset, especially when compared to bank lending. Depending on the country and the conditions of the market, leasing can be a price competitive form of financing for SMEs (Leaseurope and Oxford Economics, n.d.^[4]).

Academic research suggests that the share of total annual fixed capital costs attributable to either capital or operating leases is substantially higher at lower-rated, non-dividend-paying, cash-poor firms (Sharpe and Nguyen, 1995^[6]), i.e. SMEs likely to face relatively high premiums to access external funds such as bank lending. Nevertheless, leasing is also preferred to debt by those companies who face agency costs and informational asymmetry problems.

Leasing allows SMEs to generate liquidity, by releasing equity capital and improving accounting ratios. This, in turn, allows companies to improve their credit ratings and gain better access to bank lending, either through higher availability of granted credit, or through the approval of loans at better rates. Similarly to a bank's credit rating, leasing companies evaluate the potential for the asset to improve the profitability of the lessee. As such, SMEs may choose to finance their investment by leasing, even when they are credit rationed (Neuberger and Rähke-Döppner, 2013^[7]).

In addition, the discounted present value of cash disbursements over the term of the lease is significantly lower than the discounted present value of payments associated with an equivalent credit-financed acquisition of an asset (Gallardo, 1999^[8]). This is because lease payments can often be booked as a business expense, and thus be shielded against tax liability. Additionally, the asset financed through leasing is depreciated over the life of the lease, a period shorter than its economic life (Gallardo, 1999^[8]).

The use of leasing can also improve the competitiveness of SMEs – a benefit that is particularly important for exporting SMEs. This is because it enables firms to upgrade their assets, improve efficiency and keep pace with the latest technological developments. Some leasing firms offer additional services related to the asset (for instance insurance, maintenance), and this can facilitate management of the asset. Contract duration can be adjusted to the needs of the lessee SME, offering additional flexibility.

Depending on the jurisdiction, the fiscal treatment of leasing payments may bring additional benefits for SMEs in terms of their tax obligations. Nevertheless, research suggests that most small firms select to apply for lease financing on the basis of growth considerations rather than taxation incentives. The inverse seems to be true for larger companies (Lasfer, 1998^[9]).

Barriers to the wider use of lease financing by SMEs

The existence of a clear and transparent legal, regulatory and taxation framework for lease financing transactions is a pre-requisite for the development of a sound leasing market. For the use of leasing to scale, a supportive institutional framework and an enabling regulatory environment should be in place to strengthen the supply side.

Some examples of considerations for a sound legal and regulatory environment include: *i*) licensing requirements; *ii*) contract enforcement, *iii*) enforcement of legal ownership rights / property law; *iv*) bankruptcy and repossession frameworks; *v*) existence of central registries; *vi*) tax treatment; and *vii*) depreciation frameworks (see Table 2.1).

Table 2.1. Characteristics of a Regulatory Environment Friendly to Leasing

Regulations	Recommended actions to promote leasing industry
Licensing	Recognize existence of leasing; Restrict leasing to licensed institutions and require banks to set up separate subsidiaries to do leasing
Prudential requirements	Minimum capital requirements may be lower than for many other financial institutions; Other prudential requirements may be less strict than those for traditional deposit-taking institutions
Lessor's ownership	Clearly stated with simple, effective and timely procedures for repossession if lessee defaults
Lessee's rights	Clearly stated: uninterrupted use of leased asset for the lease period if lease rental payments are current
Central registry	Registry system and procedures for debt obligations and security rights, especially movable property
Tax treatment - lessor	Allowed to depreciate asset; lease payments taxed as income; asset depreciated over a time period shorter than or equal to lease contract
Tax treatment – lessee	Lease payments treated as deductible expense for tax purposes
Sales tax	Post-contract sale of leased asset exempt from sales tax
Capital allowances	Given to lessor or lessee; equal treatment compared to other financing
Foreign investment regime	Free transferability and remittance; possible exemption from withholding tax; Capital equipment imports (for on-leasing) should receive same customs and tax treatment as if imports were undertaken directly by end-users; free convertibility of leasing co.'s paid-in capital to foreign currency-denominated deposit account

Source: (World Bank, 1997^[10]).

Lease financing activity in the ASEAN region

Leasing activity in AMS is uneven, and data on its usage is scarce. A complete picture is further obscured by the fact that there is no uniform way to account for such activity on an aggregate level covering both bank and non-bank institutions.

Given the potential benefits of leasing over other methods of financing, particularly traditional bank lending, it is expected that this market will continue to grow in the Southeast Asian region, particularly given the difficulties that ASEAN SMEs have in accessing bank credit. Such growth is likely to be commensurate with the broader growth of financial service markets in Southeast Asia.

Brunei Darussalam

Finance companies in Brunei Darussalam are companies licensed by the AMBD under the Finance Companies Act (Cap 89). Under the Finance Companies Act, finance companies are permitted to accept public deposits (unlike leasing companies) and undertake financing business including through hire purchase arrangements. Finance companies represent 9.1% of total assets in the financial system as of 2018.

There are currently two finance companies operating in the country, which are subsidiaries of the locally incorporated banks.

Brunei Darussalam has a centralised collateral registry and an excellent framework for securitisation and asset-based financing products, however, there is still a lot of room for the leasing market to take off. A possible lack of reliable valuers, auctions or the absence of a vibrant secondary market may impede the development of lease financing. SMEs in Brunei Darussalam may also be unaware of the benefits of leasing, an issue that can be addressed through appropriate financial education strategies and policy efforts.

Cambodia

Cambodia introduced a specific regulatory framework to govern the financial leasing market in 2009 (Council for the Development of Cambodia (CDC), 2009^[11]). The Law on Financial Leases offers participants in leasing transactions the flexibility to structure the terms of their lease in accordance with their needs *vis-a-vis* the use of the asset and maintenance requirements, their payment options (including advance payments and security deposits), and ownership transferal at the end of the lease term.

In 2011, the National Bank of Cambodia issued a guidance note that intends to promote the set-up, promotion, and development of the financial leasing industry. It has also issued a *Prakas* on bank provisioning requirements for financial leases (National Bank of Cambodia, 2011^[12]). Commercial banks, specialised banks, and microfinance institutions can all provide lease financing in Cambodia, provided that they have obtained a license from the National Bank of Cambodia. Other non-bank institutions can also extend lease financing, and the requirements for these entities are governed by other *Prakas*.

Based on data from the National Bank of Cambodia, rental and operational leasing activities accounted for 2.3% of total bank lending in Cambodia (data as of December 2017) whilst leasing activity has scaled quite rapidly over the past few years. There is currently no data available on the lending activity of specialised financial leasing companies.

Table 2.2. Distribution of bank lending by sector in Cambodia, as of December 2017

in KHR million

Sector	Gross loans	Share in percent
Financial Institutions	1,891,203	2.80
Agriculture, Forestry and Fishing	7,064,894	10.30
Mining and Quarrying	241,151	0.40
Manufacturing	4,271,083	6.30
Utilities	512,658	0.80
Construction	6,381,169	9.30
Wholesale Trade	8,365,732	12.30
Retail Trade	12,134,327	17.80
Hotels and Restaurants	3,055,248	4.50
Transportation and Storage	1,267,964	1.90
Information, Media and Telecom	559,939	0.80
Rental and Operational Leasing Activities	1,568,207	2.30
Real Estate Activities	4,005,003	5.90
Other Non-Financial Services	4,913,019	7.20
Personal Essentials	11,060,481	16.20
Other Lending	979,049	1.40
TOTAL	68,271,128	100

Source: National Bank of Cambodia.

Indonesia

Leasing in Indonesia is provided by banks and by multi-finance companies. The latter offers a range of financial products such as factoring, financial and operating leasing.

Indonesia established a regulatory framework for financial leasing in 1974, through a Joint Decree on 'License for Leasing Companies,' released by the Minister of Finance, the Minister of Industry and the Minister of Trade. The Ministry of Finance further expanded the definition of "leasing activities," under

Decree no. 1251/KMK.00/1989 (1989), to include the concept of an operating lease (Gautama, Wiknyosastro and Jatim, 1993^[13]).

Lao PDR

Lease financing is an increasingly popular instrument for SMEs in Lao PDR. A 2010 survey of Lao SMEs, conducted nationwide and sampling 198 SMEs in total, found that lease financing was the most common form of financing requested by sampled SMEs, accounting for 54.8% of total requests (Kyophilavong, 2011^[14]). The other two forms of financing requested were *i*) equity financing and *ii*) supplier and government financing (Table 2.3).

Table 2.3. Requests for financing by SMEs in Lao PDR

In percentage of the sample analysed

Type of Financing	In the last 12 months	In the last 3 years	More than 3 years ago	Total
Request for Lease Financing	47.5	47.5	5.0	54.8
Request for Equity Financing	78.6	0.0	21.4	19.2
Request for Supplier and Government Financing	21.1	15.8	63.2	26.0
Total	46.6	30.1	23.3	100.0

Source: (Kyophilavong, 2011^[14]).

This survey also suggested that requests had increased over time, primarily driven by an expansion in the supply of lease finance provided by specialised firms. It can be expected that the leasing industry will continue to grow in-line with broader financial sector development in Lao PDR.

Finally, the survey suggested that SMEs in Lao PDR primarily use leasing to finance machinery, vehicles and other equipment (Table 2.4) – and thus a non-negligible share of leasing products appear to be used for productive purposes.

Table 2.4. Types of assets financed through leasing in Lao PDR

In percentage of the sample analysed

Type of asset	Percentage
Business or Office Space	17.3
Vehicles	22.7
Computer hardware and software	16.0
Other Machinery and Equipment	38.7
Other	5.3

Source: (Kyophilavong, 2011^[14]).

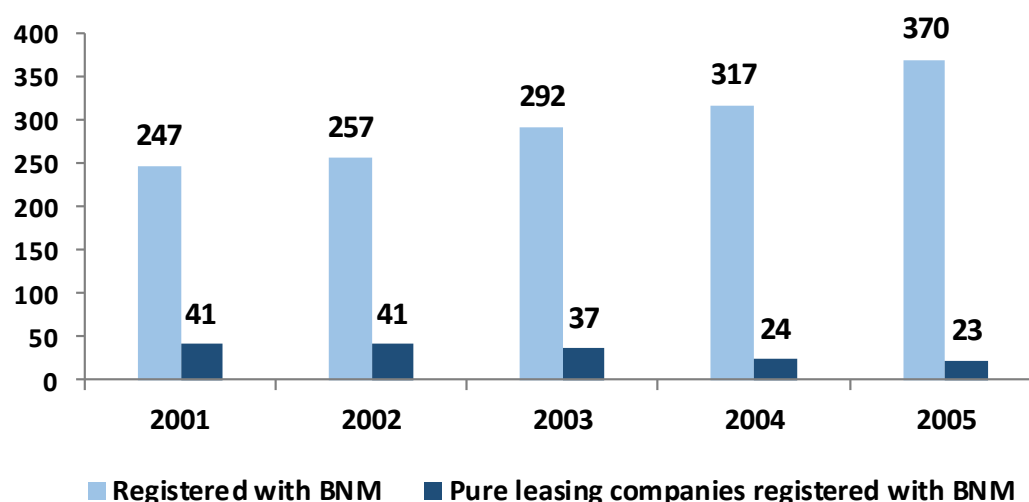
Malaysia

Alternative financing (a term that covers a range of instruments including venture capital, angel investment, leasing, factoring and P2P financing) currently accounts for a small share of SME financing in Malaysia – or less than 3% of the total volume extended. Furthermore, the market for SME financing is very fragmented (Bank Negara Malaysia, 2019^[15]).

Leasing accounts for a very small share of the Malaysian financial system overall – as of December 2018, leasing and factoring companies held only 0.4% of total financial system assets (Bank Negara Malaysia, 2019^[15]). The number of leasing companies, nonetheless, has continued to grow since the start of this decade (Figure 2.1).

Figure 2.1. Development of the leasing sector in Malaysia (non-bank leasing)

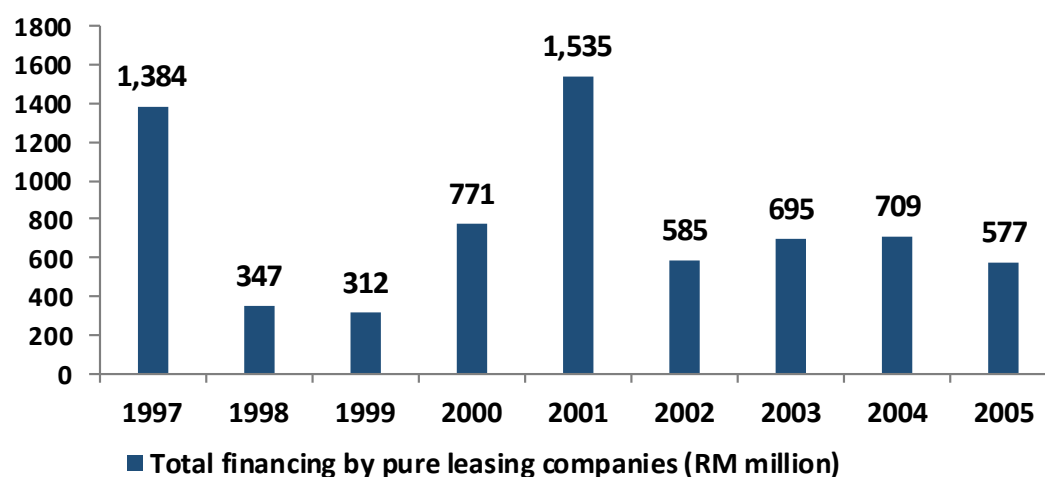
Number of Leasing companies in absolute numbers



Source: Bank Negara Malaysia Annual Reports (2001, 2002, 2003, 2004 and 2005).

Figure 2.2. Total financing by non-leasing companies in Malaysia

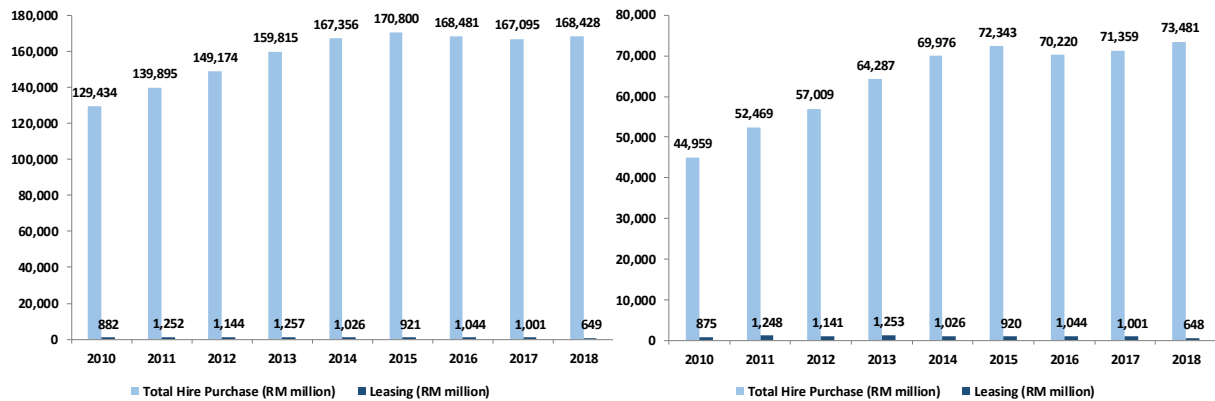
Total financing by pure leasing companies in MYR millions (RHS)



Source: Bank Negara Malaysia Annual Reports (2001, 2002, 2003, 2004 and 2005).

Figure 2.3. Development of the leasing sector in Malaysia (banking and Islamic banking)

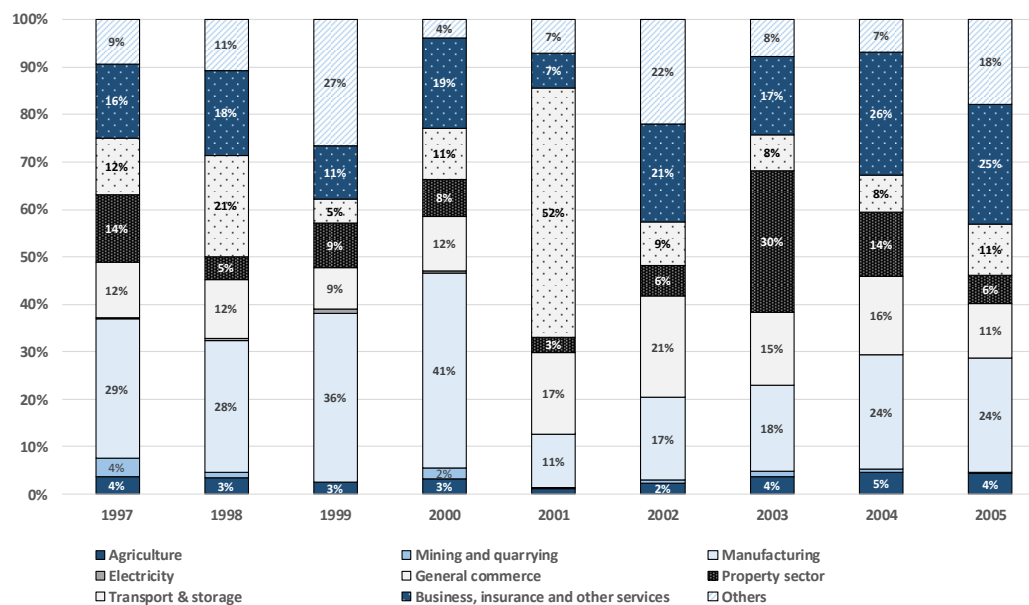
In MYR million, banking sector (LHS) and Islamic banking sector (RHS)



Source: Bank Negara Malaysia Monthly Statistical Bulletin, monthly basis, 2013-18.

Figure 2.4. Breakdown of leasing financing by sector of activity

% of total lease financing



Source: Bank Negara Malaysia Annual Reports (2001, 2002, 2003, 2004 and 2005).

Based on a survey conducted by SME Corp Malaysia in Q1 2019, about 36.1% of 1,346 sampled respondents have applied for financing, out of which only 1.2% sought alternative financing channels. Of these, 33.3% had sought funding from a leasing company. These were mainly firms operating in the manufacturing and services sectors.

Studies suggest a relatively low level of financial literacy in Malaysia relative to its peers. In the 2016 OECD/INFE survey of Adult Financial Literacy Competencies, Malaysia stood in 26th position among 30 participating countries (G20/ OECD INFE, 2016_[16]). These same findings have also been corroborated

more recently, for instance in the AKPK Financial Behaviour Survey 2018. To address this issue, the Government of Malaysia has launched a range of initiatives, including the National Strategy for Financial Literacy 2019-2023. These policies aim to strengthen foundational financial literacy skills amongst the general population, enabling them to become more active and informed consumers of financial products and to strengthen money management. They are likely, therefore, also to increase awareness of alternative financing instruments, including amongst smaller firms.

The Government of Malaysia's financial literacy efforts are also attempting to increase awareness of Islamic finance. Islamic financing is growing rapidly in Malaysia, with Islamic banks posting 11% financing growth in 2018, compared to 3.3% by conventional banks in the same year (Fitch Ratings, 2019). Aligning with this trend, the Central Bank of Malaysia, in collaboration with the International Shariah Research Academy (ISRA) and the Islamic Banking and Finance Institute Malaysia (IBFIM), launched an Educators' Manual on Shariah Standards and Operational Requirements in 2016. This manual included an overview of *ijarah*, a sharia-compliant leasing product (Bank Negara Malaysia, 2019^[15]).

Myanmar

At present, specialised financial service firms such as finance and leasing companies do not play an important role in the financial system of Myanmar. Finance companies offer lending, hire purchase and leasing products, whilst leasing companies focus solely on leasing. As of January 2013, there was only one finance company in Myanmar. This was the Oriental Leasing Company Ltd, a subsidiary of the Myanmar Oriental Bank Ltd, funded by the bank and offering hire-purchase for motor vehicles, agricultural machineries and electrical goods (Foerch, 2016^[17]).

Since then, the market has developed rapidly – fourteen additional finance companies were granted a license over the period 2013 – H1 2016, and over ten more applied for a license just after that period (Foerch, 2016^[17]). Two foreign finance companies, BTMU Leasing (Thailand) Co. Ltd. and ACELEDA Bank Plc., have also established representative offices in Myanmar.

Myanmar regulates finance companies under the 2016 Financial Institutions Law (Pyidaungsu Hluttaw Law No. 20), wherein such companies are permitted to perform lending, hire-purchase and leasing activities (CBM, 2016^[18]). Finance companies are required to hold MMK 3 billion of minimum capital and are not allowed to accept deposits. They can, however, receive long-term loans from institutional investors and foreign financial institutions subject to the approval of the Central Bank of Myanmar.

Table 2.5. Licensed finance companies in Myanmar, as of August 2016

Company name	Year of license
Oriental Leasing Company Ltd.	1996
Myat Nan Yone Finance Company Ltd.	2013
Ryuju Finance Company Ltd.	2013
Mahar Bawga Finance Company Ltd.	2014
Jewel Spectrum Company Ltd.	2014
Century Finance Company Ltd.	2014
Win Progress Services Company Ltd.	2014
Z Corporationn Company Ltd.	2014
Global Innovations Finance Company Ltd.	2014
Citizen Finance Company Ltd.	2015
Mother Finance Company Ltd.	2016
Mawganite Company Ltd.	2016
Best Merchant Finance Company Ltd.	2016
Myanmar Ruby Hill Finance Company Ltd.	2016
A1 Capital Company Ltd.	2016

Source: Central Bank of Myanmar.

According to the Central Bank of Myanmar, the total loan portfolio for hire purchase stood at MMK 468,247 million as of Q4 2018, equivalent to around 45% of the total financing extended to SMEs (Table 2.6).

Table 2.6. Breakdown of bank lending in Myanmar, as of Q4 2018

In MMK million

Sector	State-owned banks loan portfolio	Private banks loan portfolios	Total loan portfolio
Agriculture	3,385,917.27	468,149.83	3,854,067.10
Production	162,805.33	2,825,825.51	2,988,630.84
Trading	433,389.06	6,439,192.10	6,872,581.16
Transportation	18,783.76	504,807.09	523,590.95
Construction	133,718.57	3,967,302.00	4,101,020.57
Services	162,763.24	3,348,925.20	3,511,688.44
General	421,236.66	2,805,855.14	3,227,091.80
Hire Purchase	0	468,246.79	468,246.79
Housing loans	678.45	84,621.69	85,300.14
SME loans	12,545.90	1,026,075.50	1,038,621.40
TOTAL	4,731,838.24	21,939,000	26,670,639.09

Source: Central Bank of Myanmar.

The Philippines

Leasing companies in the Philippines fall under the general regulation applied to all financing companies, which is the Financing Company Act or Republic Act No. 5980/1969 (amended through Republic Act No. 8556/1998). This Act established the Securities and Exchange Commission (SEC) as the supervisory authority. The SEC issued Circular 13 in 2001, which requires all entities involved in direct lending activities to comply with the requirements of the Financing Company Act of 1998. This Act effectively obliges them to take on the form of financing companies (SEC, 2001^[19]). Thereafter, a large number of new entities registered to extend leasing and financing products, though only a small handful were actively engaged in leasing. As of July 2019, 747 financing companies were registered with the SEC (Securities and Exchange Commission Philippines, 2019^[20]).

The leasing sector of the Philippines was initially dominated by purely financing companies. The sector has developed substantially since then, however, and now comprises subsidiaries and affiliates of major commercial banks and foreign leasing banks. The 15 largest leasing providers in the country held combined assets of PHP 292.1 billion as of 2018 – an annual increase of 17.6% on a year-on-year basis (AFSA, 2019^[21]). The largest player in the market is Toyota Financial Services (in terms of total assets), with assets amounting to PHP 83.5 billion, or around 16% of total assets held by the country's 15 largest leasing companies (as of 2018).

Both operating lease and financial lease agreements are recognised under the Philippines' regulatory framework. Operating leases are mostly offered by construction equipment dealers, rent-a-car companies, or computer dealers. Financial leases are extended mainly by leasing and financing companies affiliated with banks. The main types of assets leased in the Philippines include automobiles, transport equipment, construction and heavy equipment, and other industrial and manufacturing equipment (AFSA, 2019^[21]).

Table 2.7 highlights the distribution of financial lease receivables amongst the 15 largest financial leasing companies in the Philippines in 2017 and 2018.

Table 2.7. Financial lease receivables of top 15 leasing companies in the Philippines

In PHP million

	FINANCIAL LEASE RECEIVABLES		Year-on-year evolution
	2017	2018	%
TOYOTA FINANCIAL SERVICES PHILIPPINES CORP.	57,869	65,818	13.7%
BDO LEASING AND FINANCE INC. & SUBSIDIARY	18,249	20,009	9.6%
BPI CENTURY TOKYO LEASE & FINANCE CORP. (conso with BPI Ct Rental Corp.)	11,279	14,126	25.2%
ORIX METRO LEASING & FINANCE CORP.	6,082	6,658	9.5%
BOT LEASE AND FINANCE PHILIPPINES., INC.	2,953	3,193	8.1%
RCBC LEASING & FINANCE CORP.	2,701	2,913	7.8%
PNB IBJL LEASING & FINANCE CORP.	2,108	2,269	7.7%
SBM LEASING, INC.	1,601	2,035	27.1%
LBP LEASING CORPORATION & FINANCE CORP.	1,775	1,903	7.2%
DBP LEASING CORP.	1,299	1,472	13.3%
UCPB LEASING & FINANCE CORP.	1,034	1,076	4.0%
ALGO LEASING & FINANCE, INC.	465	527	13.5%
ASIA UNITED LEASING & FINANCE CORP.	783	471	-39.8%
LEAGUE ONE FINANCE & LEASING CORP.	227	249	9.7%
FINACOR FINANCE CORP.	151	213	41.1%

Source: (AFSA, 2019^[21]).

The majority of leasing companies in the Philippines rely on short- and medium-term bank lending for their funding, with rates ranging from 5.5% - 8.0% as of early 2019 (AFSA, 2019^[21]). This exposes them to interest and liquidity mismatches, unless they are affiliated to a bank where they can source liquidity. Non-affiliated leasing firms may benefit from efforts to scope out alternative sources of funding, in order to reduce their exposure to such risks.

Issuance of debt by such firms is one way to mitigate these risks. Indeed, some leasing companies operating in the Philippines are authorised by the *Bangko Sentral ng Pilipinas* (BSP) to operate with a quasi-banking license, which, whilst preventing them from accepting deposits, allows them to issue bonds, provided that they satisfy SEC requirements. Financial ratio requirements (debt-to-equity and risk asset-to-capital ratios) can apply to such entities.

Singapore

Many major finance companies operating in Singapore are active in lease financing, and a number of specialised leasing companies also operate in the country – some of which are established as joint ventures between local finance companies and foreign partners. Under this arrangement, local companies offer their network of clients and market knowledge, whilst foreign partners provide their leasing expertise and technical experience.

The ratio of leasing to total capital investment is relatively low in Singapore compared to large markets such as the US or the UK. This may be attributed, *inter alia*, to the absence of a unified national system for the treatment of security interests in personal property (or a personal property securities register) similar to the ones existing in the US or Australia.

Assets that can currently be financed through leasing products include construction equipment, residential property, vehicles, computers and other office equipment, manufacturing equipment and medical

equipment. Important players in the Singapore leasing market include ORIX Leasing Singapore Ltd, Orient Leasing and Singapore Leasing International.

Thailand

The Bank of Thailand has developed a framework to govern hire purchase and leasing products extended by commercial banks. In order to support commercial banks to further expand their leasing activity, the Bank of Thailand has permitted commercial banks to extend hire purchase and leasing products since September 2004. This has enabled commercial banks to broadening the scope of their operations, and it has permitted them to perform a range of functions, including sale and lease back.

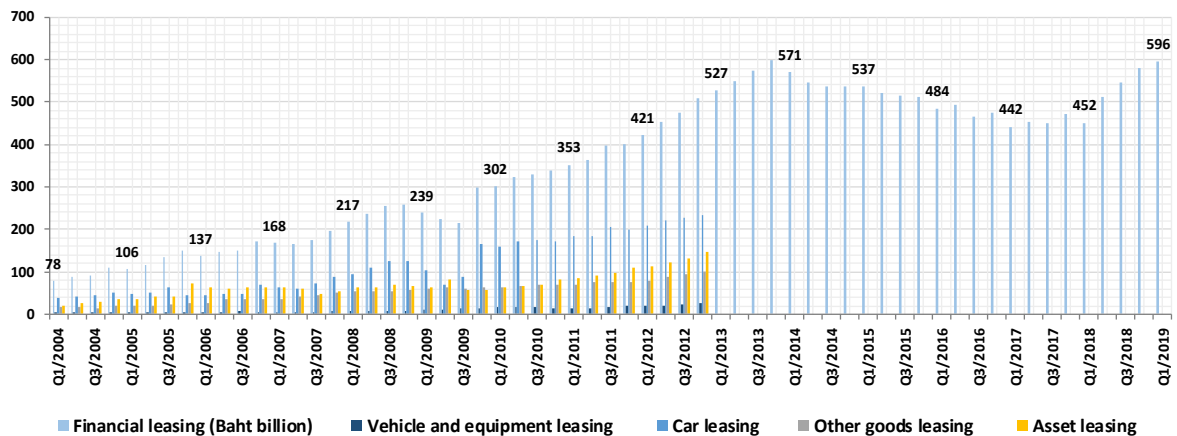
In March 2008, this scope was expanded still further, by allowing commercial banks to serve individual customers without any restriction on the type of assets covered (Bank of Thailand, 2008^[22]). This has broadened the range of assets that the applicant can put up as collateral, increasing the use of asset-based financing.

Under this regulation, commercial banks wishing to extend hire purchase and leasing products must comply with a number of criteria that demonstrate financial soundness and the existence of sufficient risk management and control systems. They are also required to obtain a special license from the Bank of Thailand.

The provision of lease financing by commercial banks in Thailand has grown consistently since 2004, for all types of lease (Figure 2.5).

Figure 2.5. Commercial bank leasing credits in Thailand, classified by type of lease

In THB billion



Source: Bank of Thailand Statistics

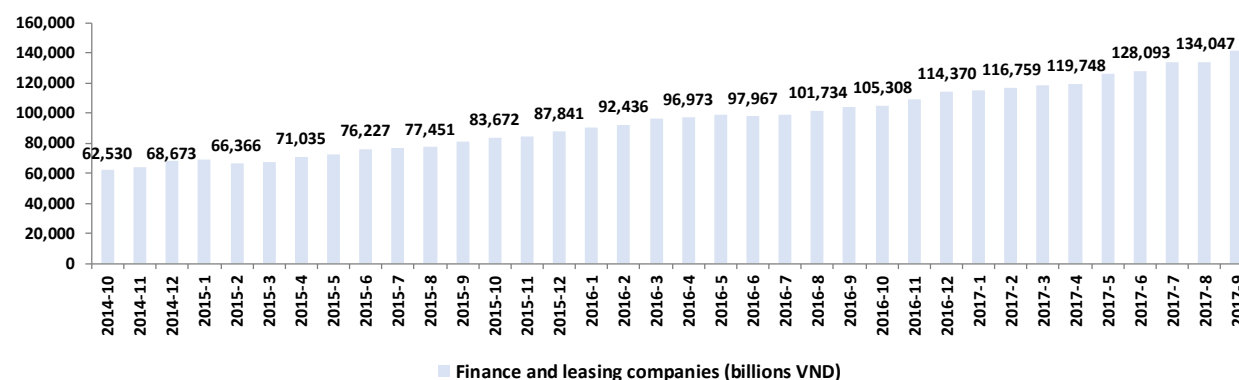
<https://www.bot.or.th/English/Statistics/EconomicAndFinancial/Pages/StatMainAssetsLiabilities.aspx>

Viet Nam

Leasing activity in Viet Nam has also grown consistently over the period 2014-17 (Figure 2.6).

Figure 2.6. Total assets of finance and leasing companies in Viet Nam

In VND million



Source: State Bank of Viet Nam, Monthly Key Statistical Ratios.

Lease financing for SMEs: High level policy implications for ASEAN SMEs

Leasing can have an important development impact, and play a critical role in bridging the financing gap for SMEs, as well as contributing towards financial market development more generally (IFC, 2009^[23]). Leasing enables SMEs to make use of an asset over a fixed period, without the need to consider asset obsolescence or asset disposal at the end of its useful life.

As with most alternative financing instruments, a strong institutional framework is necessary to support the development of lease financing. This framework should include appropriate regulations, incentive systems and necessary infrastructure. Coordination between authorities responsible for the legal, fiscal, and other regulatory aspects of leasing will help to build an enabling ecosystem that can lead to the organic growth of a sound leasing market. Adequate financial literacy policies will also help to raise awareness of this instrument, and how it can serve as a viable alternative to traditional debt.

In OECD countries, public policy intervention in the leasing market principally takes the form of tax incentives. These consist of offsetting lease payments against income before tax, similar to a depreciation allowance or tax deductibility for interest payments on traditional debt.

Public sector authorities can help to catalyse the leasing market through direct and indirect measures. Direct measures include contributing towards the funding of leasing companies or banks active in leasing, by sponsoring and investing in leasing companies. Indirect measures the provision of credit to financial institutions active in leasing, which can then be on-lent to targeted SMEs through the extension of lease agreements.

Public support can also be provided through official sector participation in the securitisation transactions of lease financing portfolios. Here, the public sector provides a positive signalling effect in the leasing market and 'crowds-in' private resources, as in the example of the numerous transactions with the involvement of the European Investment Fund (Kraemer-Eis, 2012^[24]).

3. Factoring

Structure and characteristics

Modalities

Factoring is short-term financing mechanism, whereby a firm ('seller') receives cash from a specialised institution ('factor'), in exchange for its accounts receivable, resulting from the sale of goods or provision of services to customers ('buyers'). In other terms, the factor buys the right to collect a firm's invoices from its customers, by paying the firm the face value of these invoices, minus a discount. The factor then proceeds to collect payment from the firm's customers at the due date of the invoices.

The difference between the face value of invoices and the amount advanced by the factor constitute the "reserve account". This is paid to the seller when the factor receives payment for the receivables, minus interest and service fees. Typically, the interest ranges from 1.5% to 3% over base rate and service fees range from 0.2% to 0.5% of the turnover (OECD, 2015^[3]).

Factoring differs from asset-based lending in various ways. First, it relies on accounts receivable only, rather than on a broad set of assets. Second, the underlying asset is sold rather than collateralised. Third, factoring companies do not only provide working capital for their clients, but also provide other services such as protection against bad debt, sales ledger administration, a debt collection service and the provision of credit information on customers and/or legal advice (OECD, 2015^[3]).

Factoring can take different forms, dependent on the modalities and the services provided. In full service factoring, the factor provides the services outlined above, receives ownership of all the accounts receivable and bears the cost of a default (under certain conditions). For these reasons, this form of financing comes at higher costs and expenses compared to other contracts where fewer services are provided. Recourse factoring differs in that the factor has the right to assign the debt back to the client and thus bears no losses in case of a default. In high-income countries, factoring arrangements are most often non-recourse, while the reverse holds true for firms based in developing economies (Auboin, Smythe and Teh, 2016^[25]).

With invoice discounting, the client keeps responsibility for the sales ledger, payment chasing, and invoice processing (which means the customers are not in contact with the factor). Under advance factoring, the factor provides the client with pre-advance on uncollected and non-due receivables at a particular rate of interest. Maturity factoring, by contrast, is an arrangement under which the factor provides the client with payment of the account receivables at the end of collection period or on the day of collection of receivables, whichever is earlier (UK HM Revenue & Customs, 2016^[26]).

Reverse factoring differs from traditional factoring: in reverse factoring, the customer initiates the use of the instruments rather than the supplier. In other words, the buyer secures the financing of the invoice, allowing for better conditions for the seller. This form of financing is especially relevant when a large company with a good history of payments purchases goods or services from a range of smaller suppliers. The seller may agree to more favourable terms and conditions under this arrangement.

Factoring can be used both for domestic as well as international transactions and can be a useful financing instrument to reduce the risks and uncertainties related to international trade. Forfeiting, for instance, is a

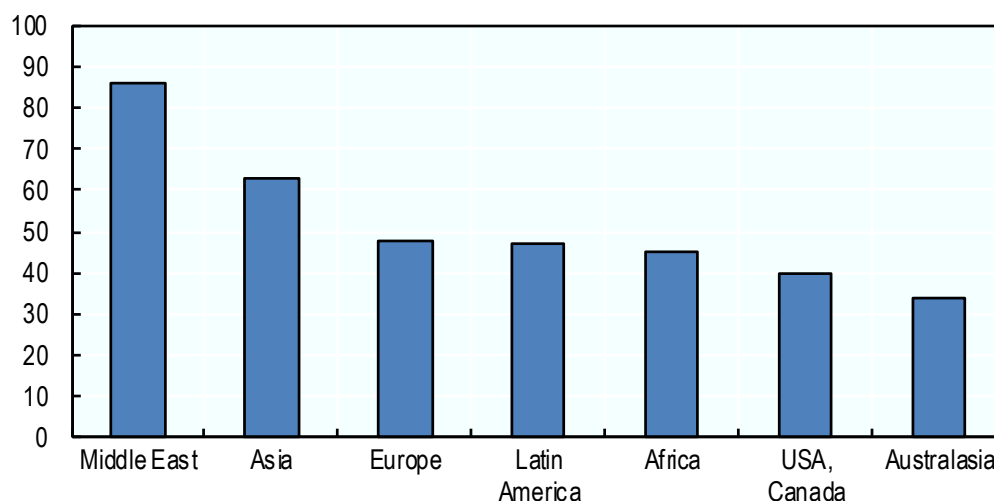
financing instrument tailored for internationally active businesses whereby an exporter sells his claim to trade receivables to a financial institution (the “forfeiter”) and receives payment immediately with the importer’s bank typically guaranteeing the amount. Empirical evidence indicates that the availability of international factoring arrangements enables SMEs to participate in global value chains (GVCs) and trade internationally (Auboin, Smythe and Teh, 2016^[25]).

Profile of firms and enabling factors

Factoring is especially relevant for businesses with working capital needs and significant outstanding accounts receivable. Data indicate that small firms tend to have a poorer working capital performance than their larger counterparts, and may thus specifically benefit from the take-up of this financing instrument. Smaller firms tend to have longer payment cycles, in part due to their limited abilities to get timely payments from their suppliers compared to large enterprises (PwC, 2019^[27]).

In addition, there is substantial variation in payment culture and practices across countries, for example as measured by days sales outstanding (DSO). This is a commonly used indicator that measures the average number of days that it takes a company to collect payment after a sale has been made, and a useful proxy for outstanding receivables.

Figure 3.1. Days Sales Outstanding (DSO) by region



Source: (PwC, 2019^[27]).

Factors base their lending decisions primarily on the quality of accounts receivable, rather than on the creditworthiness of the firm. For this reason, factoring is an especially appropriate source of finance for firms that find it hard to access funding from banks or whose creditworthiness is difficult or expensive to assess. This is the case for SMEs that have an opaque or high-risk business model, rely heavily on intangible assets that are highly collateralised or are relatively young and therefore have no proven track record.

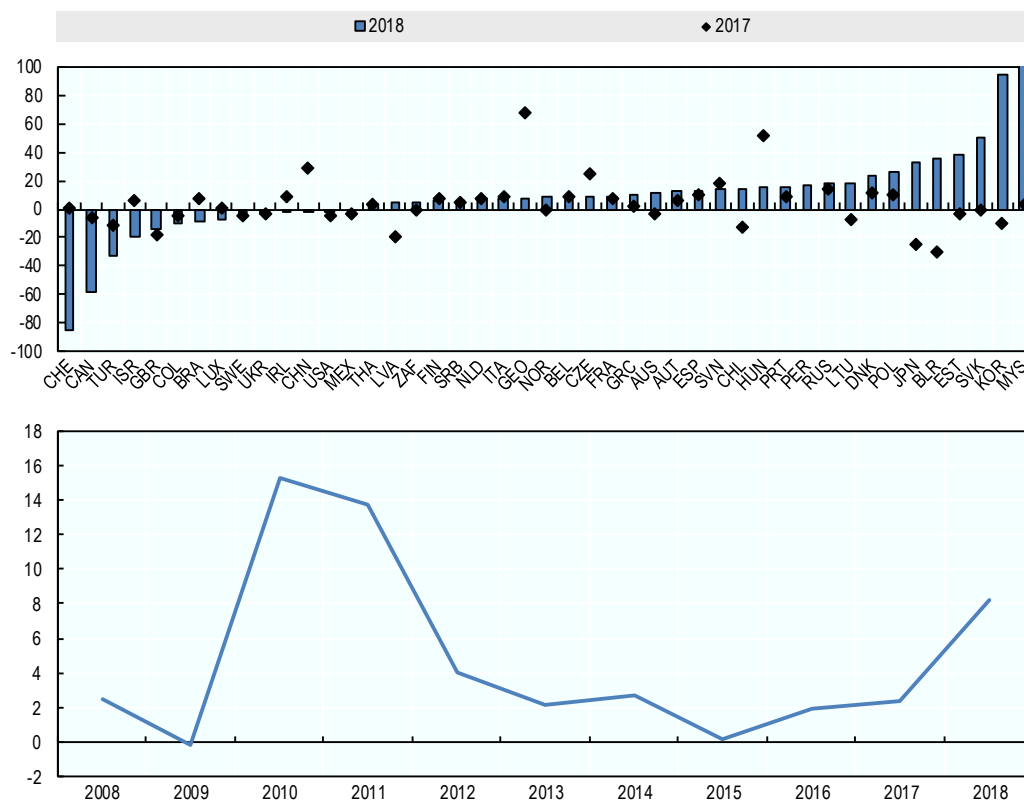
Given that the ownership of the underlying asset is transferred to the factor, the instrument can be of relevance in countries with weak creditor rights and/or an inefficient judicial system (even though improvements in these areas would benefit factoring activities nonetheless – see below) (Klapper, Udell and Bakker, 2004^[28]).

Global trends

A database covering mainly high-income countries indicates a strong expansion of factoring volumes between 2010 and 2018 with the highest median growth observed in 2010 and 2011 at 15.34% and 13.77% respectively. This suggests that factoring became a more widely adopted financing instrument for finance-constrained SMEs in the aftermath of the financial crisis. The growth pace slowed after 2011, but remained positive with a median expansion of 8.26% between 2017 and 2018. This overall picture masks significant cross-country variability, with volumes roughly doubling in Korea and Malaysia, but decreasing strongly in Canada and Switzerland (see Figure 3.2).

Figure 3.2. Factoring growth rates by country and median

Year-on-year growth, as percentage



Note: All represented data are adjusted for inflation using the OECD GDP deflator. Data for non-OECD countries were extracted from the World Development Indicators from the World Bank. Due to the scale, the 2018 figure for Malaysia (+ 167.87%) is not represented. Source OECD, Financing SMEs and Entrepreneurs 2020 (forthcoming).

Policies to support the development of factoring for SMEs

The regulatory framework plays a crucial role for the factoring industry because it can enable firms to sell accounts receivable to financiers safely. Overly strict regulation tends to lead to a concentrated market dominated by banks that may offer factoring as a secondary service. This offers few opportunities for smaller players to enter the market and offer more specialised, tailored products. On the other hand, gaps in the regulation may similarly impede the development of the market, lead to legal risks and court challenges, unnecessarily raise prices and result in “adverse selection” (EBRD, 2019^[29]).

A recent survey of 37 countries in Eastern Europe, Central Asia and the Middle East and North Africa highlights the divergence of regulatory practices (EBRD, 2019^[29]). While a majority of these countries have established a specific regulatory framework and/or established court practices, many have not.

In principle, general contract law regulates factoring activities. However, specific provisions on factoring contracts and/or established court practices are considered helpful in developing the market, especially in light of the complexity of factoring contracts, which usually contain a number of services beyond the provision of working capital. The absence of specific provisions in contract law may thus create uncertainty when legal disputes arise.

The Chinese experience illustrates the importance of a clear and specific regulatory framework. The absence of such framework has led to the proliferation of disputes. In 2018, courts in the Beijing area dealt with around 10 000 legal disputes involving factoring, about as many as the number of legal cases in the whole country over the 2013-17 period. Not surprisingly, the growth of industry slowed substantially between 2017 and 2018 in China (FCI, 2019^[30]).

A case in point is the lack of clarity regarding recourse factoring. In the absence of specific legislation it is unclear whether recourse factoring is considered a secured transaction of the underlying asset or not. This status is typically crucial in bankruptcy law (EBRD, 2019^[29]).

In addition, the following regulatory issues have been identified as relevant (EBRD, 2019^[29]) (FCI, 2019^[30]):

- The existence of regulatory body supervising factoring companies and ensuing supervisory practices;
- The imposition of capital adequacy requirements for factoring companies;
- The inclusion on whether the re-assignment of the claim to third parties is allowed for or not;
- The overall efficiency, predictability, independence and timeliness of the judicial system to facilitate the collection of receivables;
- Clear and standardised procedural rules in court settlements to drive down costs and expedite decision making in case of disputes;
- Special procedures for speedy collection for undisputed claims;
- Clarity on the tax regime for factoring transactions (see below).

The fiscal treatment of factoring activities provides another avenue for legislations that seek to spur the industry. For example, factoring expenses, such as commissions or set-up fees are tax-deductible in some jurisdictions, such as in the United States, but not universally. An important consideration is to allow factoring to remain cost-competitive in relation to traditional bank debt. . If interest payments to banks are tax deductible (as is often the case), a similar deductibility could apply for interest on factoring arrangements for similar reasons for instance. How VAT is applied (e.g. covering only expenses or the financing as such), may also impact the cost-competitiveness of factoring solutions (Klapper, 2006^[31]).

Finally, many emerging economies have established a central registry for accounts receivable in recent years, which supports the development of the factoring industry. This enables potential lenders and other interested parties, most notably factors, to be notified of existing security interests and to help establish the priority of creditors over the security interest.

India, for instance, established CERSAI, the *Central Registry of Securitisation Asset Reconstruction and Security Interest* in 2011 and extended its mandate in 2012 to include the registration of security interests created through assignment of accounts receivables or factoring. Every factor active in the country is now required to register the assignment of receivables, thereby limiting the risks of fraudulent behaviour and uncertainties about ownership (World Bank Group, 2018^[32]).

China created its security interest registry for account receivables in October 2007. This is a nation-wide registry with an internet-based filing system. It is easily accessible online, notice-based (meaning that no

documents have to be submitted and information is limited to the creditor, debtor, loan amount and the description of assets) with reasonable fees and all information centralised in one place, and could therefore be considered a good international practice (IFC, 2012^[33]).

Developments in ASEAN member states

Brunei Darussalam

As of 2018, factoring is not offered in Brunei Darussalam. Interest in such alternative financing instruments is starting to grow, particularly among SMEs. Recent reforms in modernising the secured transaction framework, particularly the enactment of Secured Transactions Order and the establishment of the unified electronic collateral registry in 2016, may spur development in the factoring industry in the country.

Cambodia

Cambodia has developed a legal framework for leasing and factoring, but the use of such products is rather limited, mainly due to difficult court procedures that make it difficult to liquidate assets. Moreover, there are conflicting legal provisions on secured transactions. The first financial institution to offer factoring in 2017 in Cambodia was Canada Bank PLC. In 2017, the FCI and the International Finance Corporation (IFC) jointly organised a conference in Phnom Penh to share international expertise on factoring and help local lending institutions, illustrating an appetite for the tool (OECD, 2018^[34]). A collateral registry was launched in 2007, but only a limited number of firms have registered.

Indonesia

Factoring within Indonesia is beginning to gain momentum. In 2016, Indonesia counted 29 leasing and two factoring companies, and total factoring turnover amounted to EUR 682 million (compared to EUR 40.6 billion in Singapore), of which the majority (99.7%) was domestic. Asset-based financing instruments are mostly extended by multi-finance companies, and these activities are regulated by the OJK (Financial Services Authority). A collateral registry was launched in 2013, and 580 207 SMEs had received loans secured with movable assets as of 2018 (MacEachern, 2018^[35]).

Lao PDR

The factoring market in Lao PDR remains nascent. The International Finance Corporation (IFC) has been active in promoting asset-based financing instruments in the country and organised a workshop on the topic in 2017. The country's new framework for secured transactions, including an electronic collateral registry implemented in 2017, is expected to spur factoring activities for local firms.

Malaysia

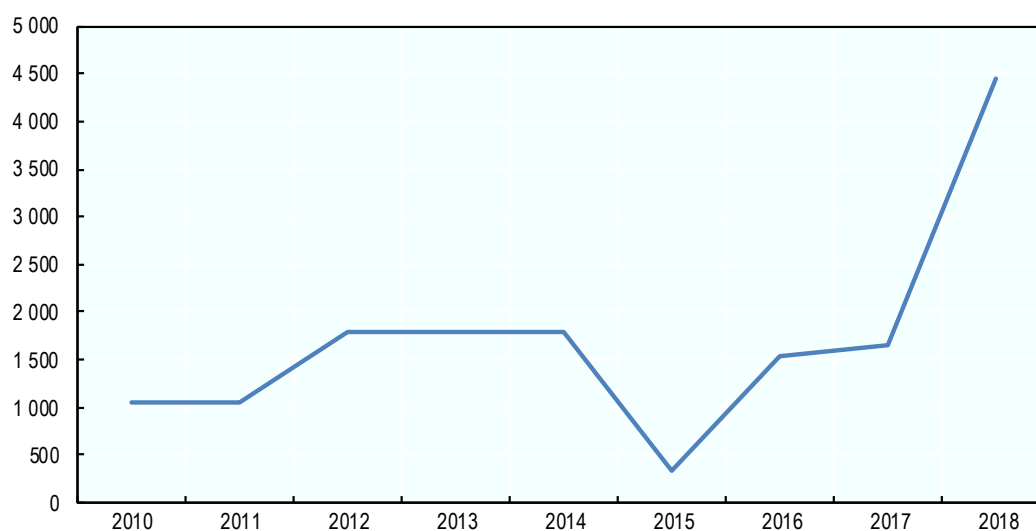
Factoring is growing strongly in Malaysia. Total factoring volumes stood below EUR 2 000 million until 2017, but reached EUR 4 459 million in 2018, accounting for a 170% year-on-year growth rate in 2018 (FCI, 2019^[36]). A total of 25 factoring companies were active in Malaysia in 2018. Domestic factoring activities dominated the market in 2018 (98.4% of the total volume).

The Companies Commission of Malaysia (SSM) is proposing a new legal framework for collateral registry to register security interests similar to Brunei Darussalam. This legal framework will be made available to any person, whether legal or natural persons, both incorporated or unincorporated. Under the proposed framework, a registration will entitle a secured creditor to make a claim on the movable property (which was used as collateral) which would then be transparent to any third parties. The establishment of a registry

is also planned, which will serve as a single electronic database with all information about existing security interests in movable asset, accessible to the public in real time.

Figure 3.3. Total factoring volumes in Malaysia, 2010-18

In EUR million



Note: Figures are not SME-specific.

Source: (Factors Chain International, 2019^[37]), (FCI, 2017^[38]).

Myanmar

A new secured transactions framework is being developed in Myanmar, with support from the IFC. Most loans are backed by immovable assets such as real estate (up to 90% according to one estimation), and the law could offer firms the possibility to pledge movable assets as collateral in the country. Myanmar's work with the IFC should also support the creation of a collateral registry that could also allow the factoring market to grow in Myanmar (Maw, 2018^[39]).

The Philippines

The Philippines were an early adopter of factoring instruments before the Asian financial crisis in 1997. Following the crisis, factoring disappeared in the Philippines, in part due to the lack of a strong framework for secured transactions. A new law (known as the Personal Property Security Act) was passed in 2018, aiming to modernise the legal framework for secured transactions. Its implementation is expected to mark the return of factoring in the country. Various local collateral registries are pending consolidation in a unified registry, which could also enable more SMEs to access this financing instrument (FCI, 2018^[40]).

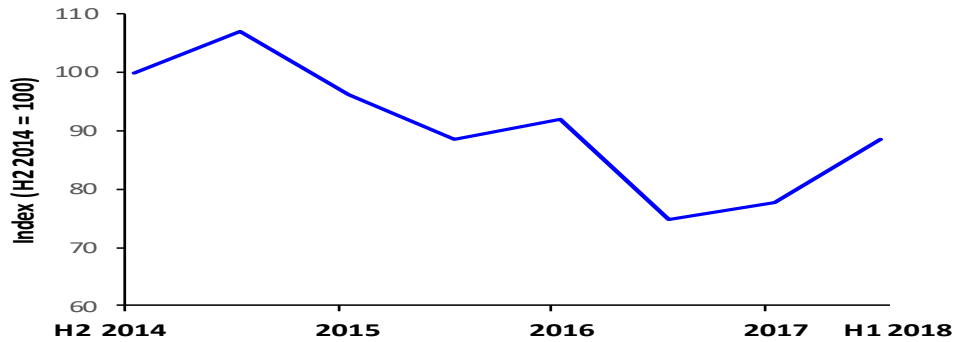
Singapore

Factoring is an important instrument for SME financing in Singapore, especially compared to other ASEAN countries. Overall, factoring still forms a relatively small proportion (<2%) of total outstanding credit facilities to SMEs, but factoring volumes in Singapore are high as a share of GDP, and totalled EUR 44 billion in 2018. According to Factors Chain International (FCI), the factoring market as a whole in Singapore has experienced constant expansion in 2012-2018, with slower growth towards the end of the period, especially compared to other ASEAN countries (see Figure 3.4). The highly developed financial market in Singapore,

coupled with a strong legal framework for creditors, has contributed to the development of asset-based instruments in Singapore (Huong, 2018^[41]).

Figure 3.4. Total factoring volumes in Singapore, 2010-18

In EUR million



Note: Figures are not SME-specific.

Source: Monetary authority of Singapore

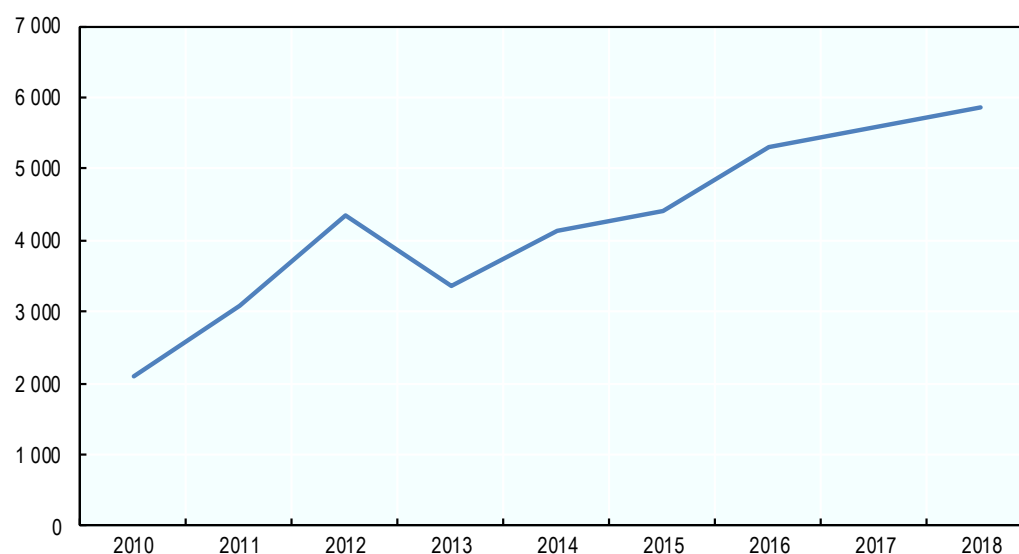
Thailand

Thailand has the second highest factoring volume in ASEAN after Singapore. It registered total factoring turnover of EUR 5 877 million in 2018, mostly directed at the domestic market, and had six specialised factoring companies. Despite the relatively high volume of asset-based financing instruments extended (compared to Thailand's regional peers), they are not used in scale by SMEs.

Reforms to the country's secured transaction framework via the introduction of the *Business Security Act* in 2016, may have marginally increased access to financing instruments by SMEs. The Act included the establishment of a collateral registry. Although the registry's coverage could be expanded and some movable assets remain difficult to collateralise under the new framework, it represents significant progress for the industry in Thailand (MacEachern, 2018^[35]).

Figure 3.5. Total factoring volumes in Thailand, 2010-18

In EUR million



Note: Figures are not SME-specific.

Source: (Factors Chain International, 2019^[37]), (FCI, 2017^[38]).

Viet Nam

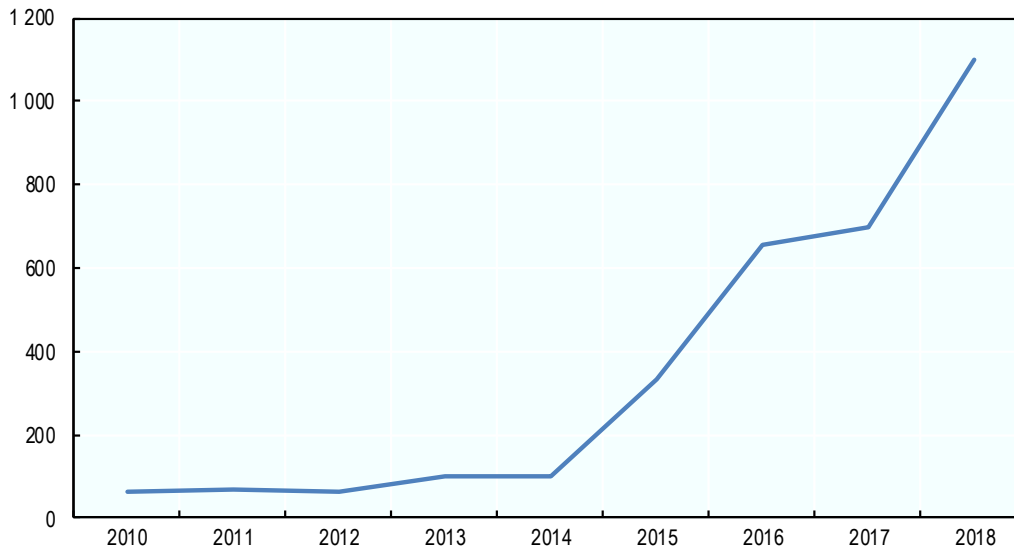
In Viet Nam, the factoring market has experienced strong expansion since 2014, when volumes totalled EUR 100 million. In 2018, factoring volumes stood EUR 1.1 billion. Following subdued growth until 2012, this figure is quite remarkable, with an average growth rate of 76.5% over 2013-2018. A legal reform in 2012, combined with the launch of a new online registry, could have contributed to this growth (MacEachern, 2018^[35]).

Nonetheless, the market remains relatively small as a share of GDP, and most SMEs are unlikely to consider it as a financing option. While free-trade agreements have greatly expanded international trade opportunities in Viet Nam, SMEs may be held back by the factoring gap. Indeed, factoring can back international trade by offering support for open account transactions, for example.

Viet Nam has a robust legal framework for factoring, but credit information is scarce, which could be hindering the further development of the factoring market (Huong, 2018^[41]). As of 2016, there were eight official providers of factoring services in Viet Nam, three of which are members of Factoring Chain International (FCI). The International Finance Corporation (IFC), working with Viet Nam International Bank (VIB), Factors Chain International (FCI) and Viet Nam Banks Association (VNBA) have been active in promoting factoring in Viet Nam, including through conferences and training sessions, and the market is expected to grow in years to come.

Figure 3.6. Total factoring volumes in Viet Nam, 2010-18

In EUR million



Note: Figures are not SME-specific.

Source: (Factors Chain International, 2019^[37]), (FCI, 2017^[38]).

Policy implications for ASEAN member states

Factoring is often considered as having high relevance for SMEs in low and mid-income countries. Reliable and accessible credit information, which is scarce in some ASEAN countries, is a crucial enabling condition. Information-sharing institutions can take the form of a public credit registry, generally managed by the national bank or the financial supervisor, or a private credit bureau. Both can address the information asymmetries that hinder the growth of factoring activities. These databases typically providing evidence on on-time payments, late payments/arrears, defaults, bankruptcies on previous contractual financial obligations, etc. (Boschmans and Pissareva, 2018^[42]).

A study from the World Bank reveals that 31 out of 34 OECD countries have a functioning credit bureau or credit registry (or both), covering at least 5% of the adult population (World Bank, 2014^[43]). The regulatory and practical design of these institutions varies a lot, however. There are marked differences in terms of the information that is provided by these institutions, such as on historical information on repayments, inclusion of balance sheet data, reporting requirements and so on (OECD, 2012^[44]). In addition, credit registries are often used for regulatory purposes rather than to provide information about creditworthiness, limiting their usefulness for factors to use the information to assess risks.

ASEAN countries would benefit from adopting good practices in this area. The Japanese Credit Risk Database (CRD) stands out as a good example. The database covers financial and non-financial information, such as data on sales and profits, information on investments and inventories, ratios such as the operating and ordinary profits to sales, ratios expressing SMEs' net worth, as well as their liquid, fixed and deferred assets and liabilities. It also lists interest and personnel expenses, and default information (covering three months or more arrears, subrogation by credit guarantee corporations, bankruptcies and de facto bankruptcies) (Boschmans and Pissareva, 2018^[42]).

A registry on collateral and accounts receivable stands out as a particularly useful instrument to spur the factoring industry, and many ASEAN countries have already established such a tool. Nevertheless,

coverage is sometimes too low and the information must be comprehensive enough in order for financial institutions to be able to assess risk and assist SMEs seeking credit. Moreover, the registry should be notice-based, web-based, easily accessible and with reasonable fees in order to have maximum impact (MacEachern, 2018^[35]). Countries in the region could consider adopting best practices, for example from the registry China created in 2007 (see above).

Most countries have a solid legal framework in place for factoring activities, with the exception of Brunei Darussalam or Myanmar. Furthermore, the framework is fragmented in Viet Nam, with regulation scattered among different government bodies. Slow court proceedings, practical difficulties to enforce contracts, deal with unpaid invoices and well-functioning procedures to resolve competing claims over the same asset also hamper the industry in many countries (OECD, 2018^[34]). Lagging countries could significantly spur factoring activities by adopting (often well-established) practices from leading economies in the above respect, most notably from Malaysia and Singapore.

Likewise, countries in the region could consider streamlining their judicial procedures. Factoring activities benefit from unbiased, efficient and predictable court system in general and, more specifically, from standardised procedural rules in court settlements in case of a dispute and special procedures for speedy collection for undisputed claims.

Finally, international experience highlights the importance of a conducive fiscal environment. In particular, tax regimes in which factoring is priced out of the market compared to bank debt, should be avoided.

4. Private Equity, Venture Capital, Business Angel Financing

Private Equity, Venture Capital and Business Angel Financing: structure and characteristics

Private Equity and Venture Capital Financing for SMEs: definitions and market trends

Private Equity (PE) and Venture Capital (VC) financing consists of direct investment by professional investors in risk equity capital of young startups and SMEs. Such equity is unquoted, non-privately listed or traded and represents interest in a privately-held company. Investors trade-off the illiquidity of their investments with a prospect of greater future returns.

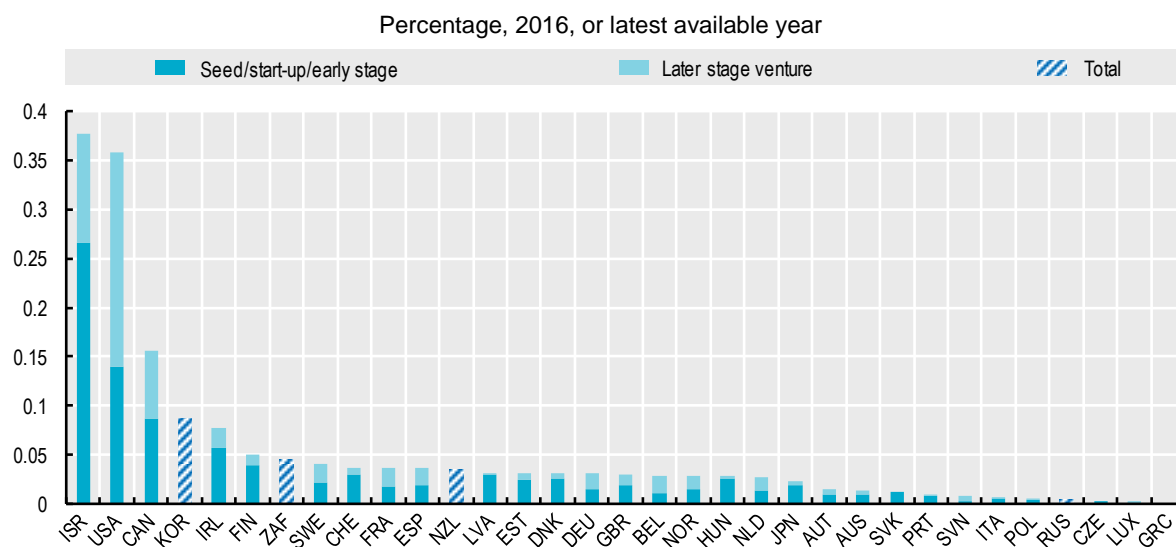
Within a PE/VC firm, General Partners (GPs) are responsible for the management, operation and administration of the fund (which includes investment decisions), whilst the fund's capital is committed by institutional and private investors, known as Limited Partners (LPs). Pension funds, insurance companies, sovereign wealth funds typically constitute the LPs of large PE/VC firms.

The distinction between a PE and a VC firm is mainly based on the size of their investments, the size of the companies they invest in, and the stage of the business lifecycle that this company is currently in – although there is currently no standard international definition of either VC or VC investment by development stage (OECD, 2017^[45]). According to the traditional divide, VC investment is deployed to young startups and SMEs in their initial phases of development (pre-launch, launch, and early stage development), in exchange for an equity stake in that company. Companies receiving VC investment may not have recorded profits at the time of the investment, have untested models, limited track record but high growth potential. PE financing, on the other side, is invested in more mature companies and may involve in many cases the acquisition of the entirety of the company, as in the case of Leveraged Buy-outs (LBOs) where the acquisition is financed entirely through leverage.

However, it is important to note that VC is not used exclusively for early stage and startups funding. In practice, the line between VC and PE is often blurred, and is influenced by the size of the market and the characteristics of the SME population in that market. The contribution of VC goes far beyond a textbook definition, and the term PE is increasingly used to describe both kinds of activity (Wright and Robbie, 1998^[46]). For the purpose of this report, the two categories are discussed as a single financing instrument.

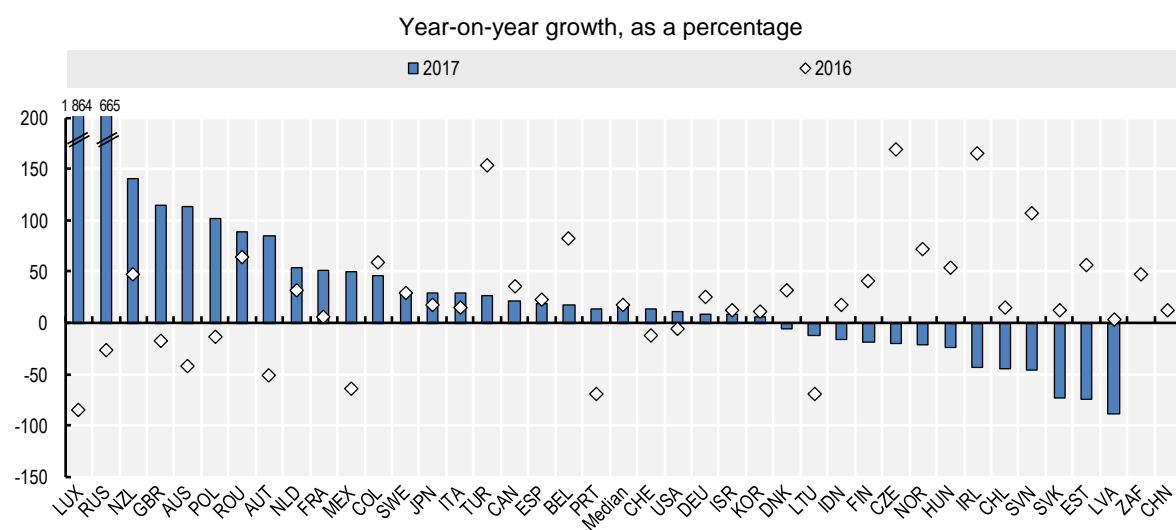
PE/VC funding is particularly appropriate for early-stage companies that lack an established record of activity and profitability; that exhibit high uncertainty around levels of cash flow generation; and for companies with highly-specialised business models and assets (for instance, digital/high tech businesses). All of these parameters make it difficult for such companies to obtain financing through traditional debt instruments. In addition, the high levels of risk implicit in their activity may mean that equity finance (provided through PE/VC funds) is a more appropriate, and even preferable, instrument to debt financing.

Figure 4.1. Venture Capital Investment as percentage of GDP



Source: (OECD, 2017^[45]).

Figure 4.2. Venture Capital Investments across the world



Note: 2017 data are not available for China, Greece, and South Africa. Data are YoY change of current USD volumes, at the exception of Chile, China, Colombia, Indonesia, Japan and Turkey, for which these changes express variations of volumes in current local currencies.
 Source: (OECD, 2017^[45]); (OECD, 2019^[47]): based on Entrepreneurship Finance Database, and data compiled from the individual country profiles of Financing SMEs and Entrepreneurs 2019 when the information was not otherwise provided.

Benefits of PE/VC financing for SMEs

PE/VC investors are more actively involved in funded companies than as shareholders in publicly-held companies, even when compared to institutional investors. PE/VC investors have an active approach that may include involvement in management and/or other governance mechanisms (for instance, by electing representatives to a Board of Directors), and they typically intervene in the decision-making of the company. They are typically involved in assessing the risks attached to the enterprise, so as to calculate their required returns, and in defining the financing structure that is appropriate for such a risk level. They

also often contribute specialised skills to the management and operation of the company, and provide other non-monetary contributions.

Non-monetary contributions can include expertise, industry knowledge, connections and network of contacts, as well as managerial and strategic assistance. VCs provide "coaching" to startups and play an active role in the monitoring of a firm's evolution (Fried and Hisrich, 1995^[48]). Most of the value creation in PE/VC investment comes from the heavier involvement of GPs in project realisation, active ownership, transformation of governance structure, expertise in the management of the business and people involved. This is particularly beneficial to SMEs and entrepreneurs who may have high technical capabilities but low managerial skills, or who may lack the knowledge and skills to manage the financial side of their operations.

This strategic managerial assistance caters to the needs of startups at the early stage of their development, filling a gap left by traditional financing mechanisms. In addition to knowledge and skills, PE/VC funds can also offer extended networks, through other companies within their portfolio, for prospective collaborations (e.g. potential suppliers/clients). They can also connect the company to co-investors and other financiers that could provide funding for the next stages of the company's lifecycle.

PE/VC investors carefully scrutinise the business model, business plan and its viability, as well as managerial capacity of the firm. This rigorous due diligence process is undertaken in a detailed and systematic manner, and encourages the company to educate themselves around investor disclosure and transparency and prepare for the public scrutiny that they will face, should they go public at a later stage (e.g. IPO).

Indeed, the strategic support and ongoing interaction of small companies with their PE/VC-backers improves their suitability for a public equity offering in terms of transparency, governance practices and reporting discipline (Nassr and Wehinger, 2016^[49]). In fact, many PE/VC investors remain involved in backed companies as anchor investors even after a company's IPO, using public equity markets for further rounds of capital raising rather than a complete exit.

Importantly, PE/VC investment can be regarded as a financing mechanism that remains active through economic downturns when capital is scarce and ailing firms have most difficulty in securing financing. Such investment can therefore have a counter-cyclical effect on the economy.

Given the contribution of PE/VC investment to real economy growth and job creation, public policymakers in a number of countries are encouraging such investment through the granting of tax incentives; the establishment of co-investment schemes between the public and the private sector; and the introduction of capacity building programmes for SMEs and entrepreneurs.

Barriers to PE/VC investment

Solid economic fundamentals and investor confidence are the cornerstones of a healthy and vibrant PE/VC market. Institutional quality and a transparent and efficient regulatory environment allow small businesses to thrive and attract PE/VC investors and other types of investors alike. The level of investor protection provided in the regulatory framework of the country is of particular importance to PE/VC investors, especially when it comes to cross-border investment. Conversely, an uncertain or unstable investment and business climate and/or low institutional and regulatory quality discourages both entrepreneurs and investors from allocating resources in the economy.

PE/VC investors in particular, face a double principal-agent problem, both vis-à-vis their LPs who have committed their capital to the fund, as well as vis-à-vis the founders/owners and managers of the companies in which they invest (Sahlman, 1990^[50]). The structure of compensation arrangements as well as full transparency are mechanisms that can be put in place to address such agency issues arising in PE/VC investment.

On the demand side, SMEs may not be well-prepared to present their projects to PE/VC funds and/or sufficiently equipped to face the requirements of such investors. SMEs wishing to fund their project through PE/VC funding need to provide well-structured and meaningful information about their company, including accounting information, forward-looking projections of cash flows and full business plans based on which the PE/VC investors will perform a valuation analysis.

Entrepreneurs and founders of young, early-stage companies or other SMEs may not have the skills or capacity to prepare themselves for the detailed due diligence of PE/VC investors. Despite being operationally knowledgeable about their business, many entrepreneurs and founders lack sophisticated financial knowledge and skills. The lack of financial education in founders and managers of startups and SMEs may inhibit their ability to present their business case to PE/VC investors (Atkinson, 2017^[51]). In addition, founders may not understand the benefits of having PE/VC investors funding their projects and may be reluctant or unwilling to give away equity or management control.

What is more, firms seeking financing may not be aware of the networks of PE/VC investors in their country and the possibility of securing funds through such sources. Such lack of awareness about the possibility of securing PE/VC investment is an important demand-side impediment to the proliferation of such financing mechanisms.

PE/VC investments are extremely illiquid and it can take several years for a fund to be able to exit and realise their investment. Exit options consist of full or partial sale to another investor or to an industrial/corporate; secondary buy-out; or listing in a public market through an IPO. Interestingly, venture capital stays involved in a business even after the initial investment period has ended, acting as anchor investors in public offerings. Based on the above, the depth of the capital markets of an economy is one of the most crucial parameters for PE/VC investors who will likely assess their exit options as one of the criteria defining their decision to invest.

A number of issues surround the exit of a PE/VC investor and may limit the willingness of such investors to enter the investment and deploy the funds in the first place. The existence of a healthy ecosystem comprising other forms of SME financing is of paramount importance for the development of each and every one of the financing mechanisms separately. Strong links and interconnections exist between public equity markets for SMEs and the PE/VC financing space as public equity offerings by small growth companies have traditionally been one of the most important exit avenues for PE and VC. In the absence of vibrant and healthy public equity markets, PE/VC investors are faced with limited exit options, which, in turn, creates negative feedback loops that risk stunting the development and growth of PE/VC instruments and limit the willingness of such funds to deploy financing in SMEs of such markets (Nassr and Wehinger, 2016^[49]).

The role of Business Angel financing

Angel investors are usually experienced entrepreneurs or high net worth individuals (HNWI) who invest in companies seeking early-stage financing without having a personal connection to the company prior to the investment (i.e. they are not part of the “Friends and Family” group). They are particularly important for the financing of very early stage ventures and for small amounts, with VC investors coming in in subsequent rounds. For example, business angel funding can assist a company in preparing their business plan or pitch, or create a prototype that can be marketed to venture capital financiers. Similar to VC investors, angel investors provide strategic and operational expertise and access to their personal networks in addition to funding.

Business angels are investing on their own or through formalised business angel groups and networks. They typically invest locally, and the level, sophistication and dynamics of their investment varies greatly across regions in the same country and also across countries. However, there is a lack of data around

their investment patterns and levels given that, traditionally, angel investors have preferred to keep information about their investments private (Wilson, 2011^[52]).

Public policies targeting angel investors are a growing trend in a number of countries and mainly consist of tax exemptions and co-investment schemes with the public sector and participation in funds of funds, similar the policies designed to catalyse PE/VC investment.

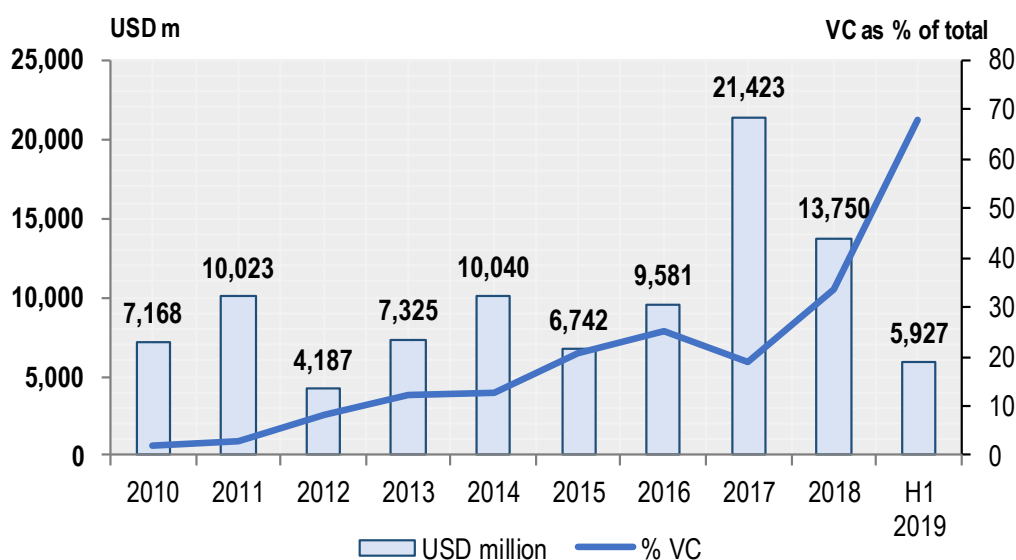
Private Equity and Venture Capital financing activity in the ASEAN region

Although still a nascent industry compared to OECD economies, Private Equity (PE) and Venture Capital (VC) activity in the ASEAN region has followed a rather stable pattern over the past decade, with on average USD 10 billion of aggregate activity per year over the period 2010-2019 (Figure 4.3). Total privately held equity activity peaked in 2017 with over USD 21 billion invested in AMS, dropping to USD 13.8 billion as of end of 2018. A large part of the activity was concentrated in jurisdictions with well-developed PE/VC ecosystems, such as Singapore and Indonesia, and/or directed towards regional 'unicorns' that offer regional alternatives to US competitors such as Uber/Amazon etc. ASEAN represents a regional block with great potential to drive growth in the PE/VC industry of Asia, supported by a strong macroeconomic backdrop and favourable demographic trends.

The ASEAN PE/VC landscape is diverse, with mature markets in countries such as Singapore, Malaysia and Indonesia, and nascent markets in Viet Nam and Myanmar. AMS are increasingly under the radar of investors, particularly in an era of persistent low yields and a dearth of yield. Singapore remained the champion of PE/VC investment in the region over the period 2010-2018, followed by Malaysia and Indonesia. Regional pension and sovereign wealth funds have an important role in the investment landscape of the region, given their substantial size and reach. Their role could be leveraged further through policy instruments such as co-investments schemes in particular.

Figure 4.3. Aggregate Private Equity and Venture Capital activity in ASEAN

In USD m (LHS) and in % of (RHS), 2010-H1 2018

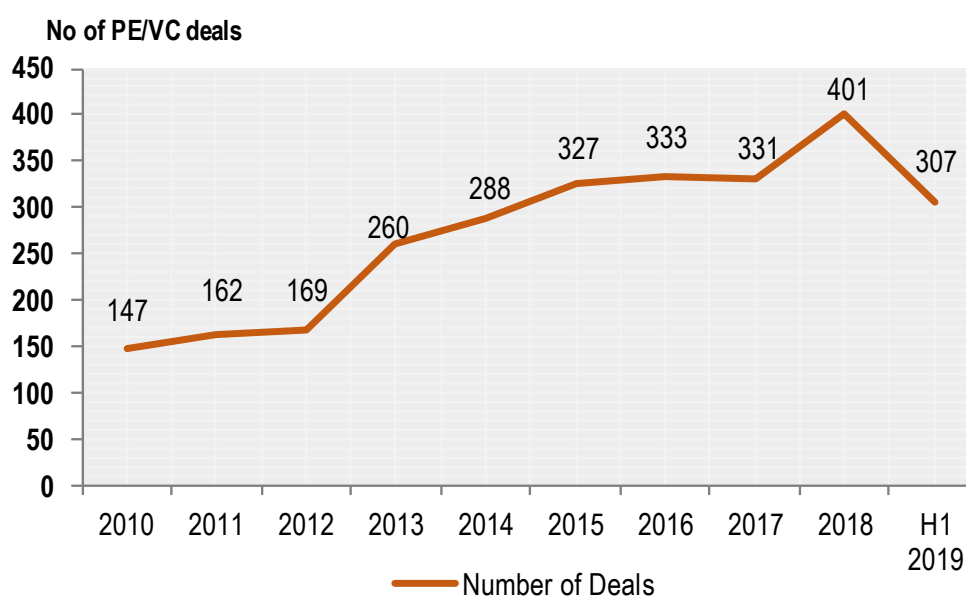


Source: AVCJ - Asian Venture Capital Journal, OECD calculations.

The activity peaked in 2017, when the aggregate funds deployed in PE/VC investment more than doubled on a year-to-year basis, reaching the highest recorded level of PE/VC investment activity in the region. The increase was, however, mainly due to increased deal size rather than to an increase in the number of transactions, with the latter standing at almost the same levels as in 2015 and 2016 (Figure 4.4). The privatisation of Global Logistics Properties Ltd of Singapore, in particular, accounted for the lion's share of the 2017 activity, accounting for SGD 16 billion (equivalent to around USD 11 billion).

Figure 4.4. Number of PE/VC transactions in ASEAN, 2010-H1 2019

In absolute numbers



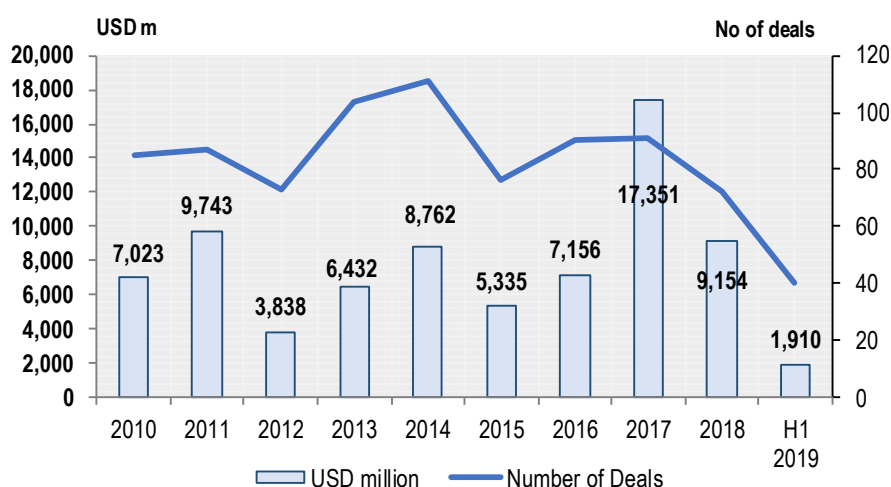
Source: AVCJ - Asian Venture Capital Journal, OECD calculations.

Looking at the breakdown between PE and VC investments in AMS in the past decade, VC accounted for less than a third of aggregate PE and VC investment in the past decade up until, and including, the year 2017 (Figure 4.5). In 2018 and during the first half of 2019, VC investment picked up and accounted for almost 40% of total activity in 2018, exceeding 60% in H1 2019. Nevertheless, the majority of investment in absolute numbers is carried out through much larger PE funds.

When it comes to historical trends on the activity of each of the two components of privately held equity investment in SMEs, it is interesting to highlight that VC investment in AMS has followed a consistently growing pattern in the past decade, with a few occasions where activity has doubled on a year-on-year basis (Figure 4.6). On the contrary, PE activity on a standalone basis has been less consistent and has recorded a downward trend since its peak in the year 2017 (Figure 4.5).

Figure 4.5. Private Equity activity in ASEAN, 2010-H1 2019

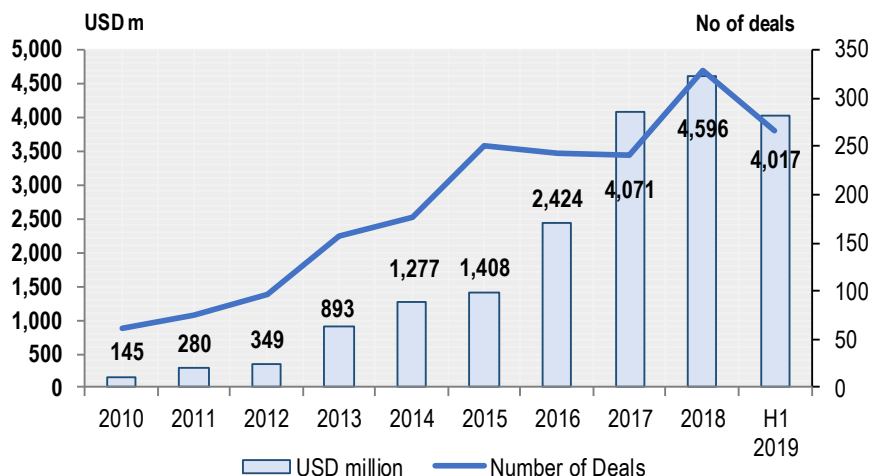
In USD m of investment (LHS) and in number of transactions (RHS)



Notes: Includes PE Investment, PE Privatization, PE Receivership and PE Buyout.
Source: AVCJ - Asian Venture Capital Journal, OECD calculations.

Figure 4.6. Venture Capital activity in ASEAN, 2010-H1 2019

In USD m of investment (LHS) and in number of transactions (RHS)



Source: AVCJ - Asian Venture Capital Journal, OECD calculations.

Interestingly, the main driver underlying VC investment growth is **Corporate Venture Capital (CVC)**, i.e. venture capital representing corporate funds of private companies who wish to directly invest in other, unrelated and external to them, private companies. CVC is allocated to special divisions of large multinationals/conglomerates, whose sole purpose is to undertake strategic investments in startups or high-growth companies, either through standalone investments or through co-financing transactions with traditional PE/VC funds. Startups and high-growth companies with presence across AMS are considered attractive targets for large companies and corporate groups wishing to have a presence in a region that exhibits high growth prospects, such as Southeast Asia.

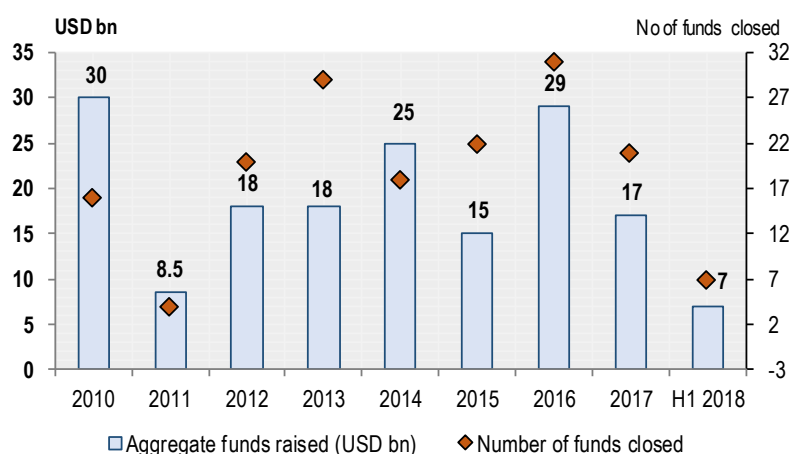
In the period 2016-17, CVC investment registered a twofold increase, with several notable ‘mega-deals’ exceeding USD 1 billion (SVCA, 2018^[53]). Examples of such transactions included the USD 2 billion investment in Grab Holdings by Didi Chuxing and Softbank in Singapore, and the USD 1.5 billion investment in Go-Jek Indonesia by a consortium of PE and corporate VC investors including KKR and Blackrock as traditional PE investors and Google, Tencent, Temasek Holdings and Samsung Venture Investments from the CVC side. Such funding had an impact on the wider ASEAN region, as it facilitated the expansion of Go-Jek into new markets in Southeast Asia, such as Viet Nam (‘Go Viet’).

Fundraising of PE/VC funds in AMS has been more or less stable with USD 20 billion of aggregate capital raised on average every year by new funds (Figure 4.7), pointing to a consistent investor confidence in the region. Singapore-based funds account for the lion’s share of the aggregate capital secured by funds in the ASEAN region.

Contrary to OECD countries, where LPs comprise mostly pension funds, insurance companies and foundations, the majority of LPs in Asia are corporate investors, banks and investment companies (Preqin, 2018^[54]). According to some market participants, the region is still considered risky by many institutional LPs which translates into difficulties in fundraising. Local knowledge is particularly important in PE/VC in AMS, and investors need to have a good understanding of the local characteristics in order to understand unmet needs in the market and consumer behaviour in the region.

Figure 4.7. Fundraising by ASEAN-based Private Equity/Venture Capital funds

In USD billion (LHS) and in No of funds closed (RHS), 2010-H1 2018

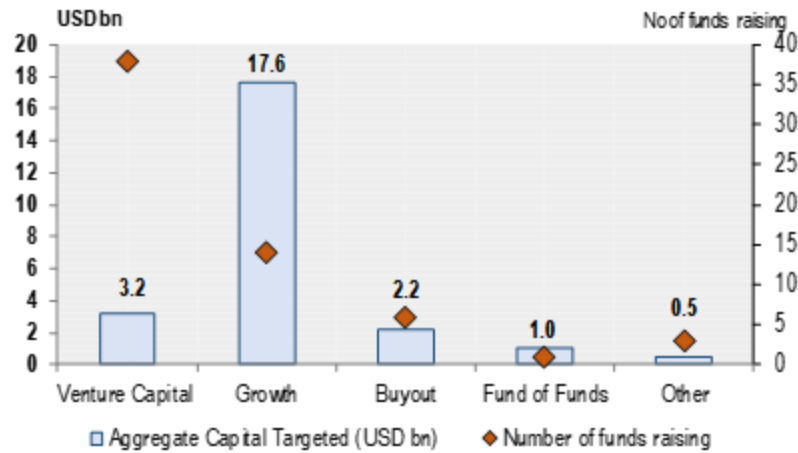


Source: Preqin, OECD calculations.

Venture capital funds are the most prominent fund type in the ASEAN market when measured by the number of PE/VC funds focused on VC investment (Figure 4.8). In terms of institutional funds committed to the region, the majority is allocated to growth capital, followed by VC, buyout and fund-of-funds investment. It should be noted, however, that the borders between VC investment and growth capital are blurry and it is difficult to separate growth capital from some VC investments directed to startups as follow-ons to early-stage investments.

Figure 4.8. Breakdown of ASEAN-based Private Equity/Venture Capital funds by type

In USD billion (LHS) and in No of funds closed (RHS), as of H1 2018



Source: Preqin, OECD calculations

In terms of exits, two of ASEAN's largest unicorns, Sea (formerly Garena) and Razer both entered the public equity market through an IPO in 2017. Such profitable exit precedents in the region tend to encourage more PE/VC investment by offering prospects of positive returns to early-stage investors.

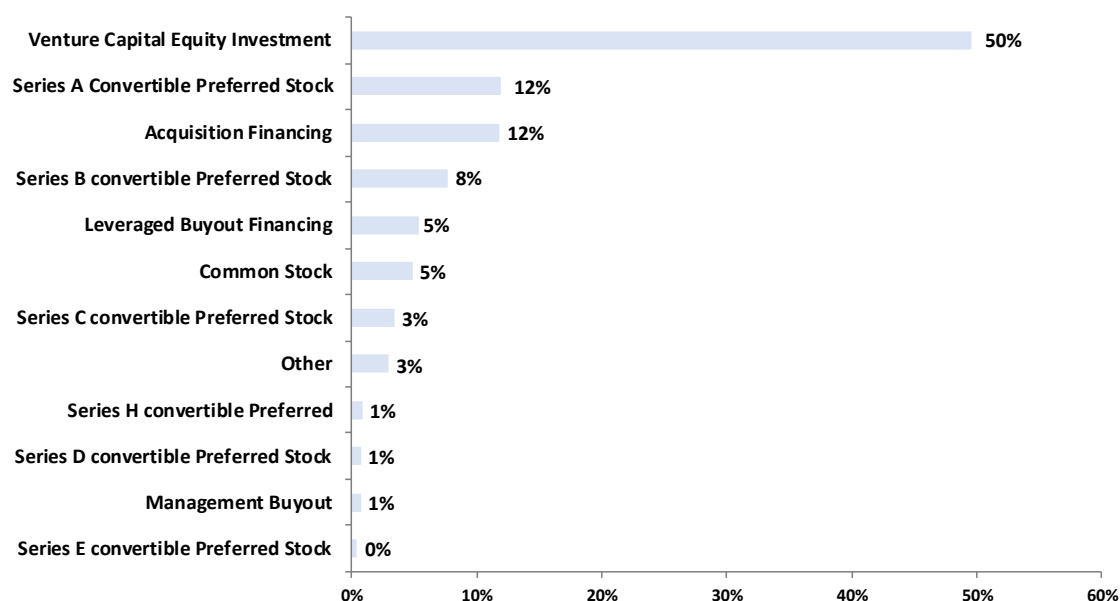
Half of the transactions by PE/VC funds in AMS over the past decade involved allocation of capital in the form of VC equity investments, with early stage security types (Series A) prevailing (Figure 4.9). Interestingly, a non-negligible part of the remaining investment is done through acquisition financing involving traditional loans or credit lines allocated for the purpose of acquiring a company. The debt is paid back either as a conventional loan (interest and principal) or as shares in the company.

There have been less Series B recipient companies than Series A, and even less companies succeeded in receiving follow-on growth and scaling up investment (Series C and beyond) over the period 2010-19. This may be explained by the fact that the largest effort by policymakers has been concentrated in very early stage financing (Series A) or by low quality projects which resulted in low survival rates for startups.

Leveraged buy-out (LBO) and management buy-out (MBO) financing represented only five percent and one percent of the total number of transactions, respectively, with lower emphasis placed on financial leverage in the region. This could be explained by the relative attractiveness of convertible or mezzanine funding which is more liquid and/or by a possible preference of ASEAN founders to cooperate with parties wishing to create value through organic and operational growth, rather than through financial engineering. The cost of debt in the region compared to OECD economies may further inhibit LBOs and MBOs in AMS.

Figure 4.9. ASEAN PE/VC investment by type of security

In % of total number of PE/VC transactions



Note: Based on 3,255 transactions that took place in AMS over the period 2010-H1 2019.

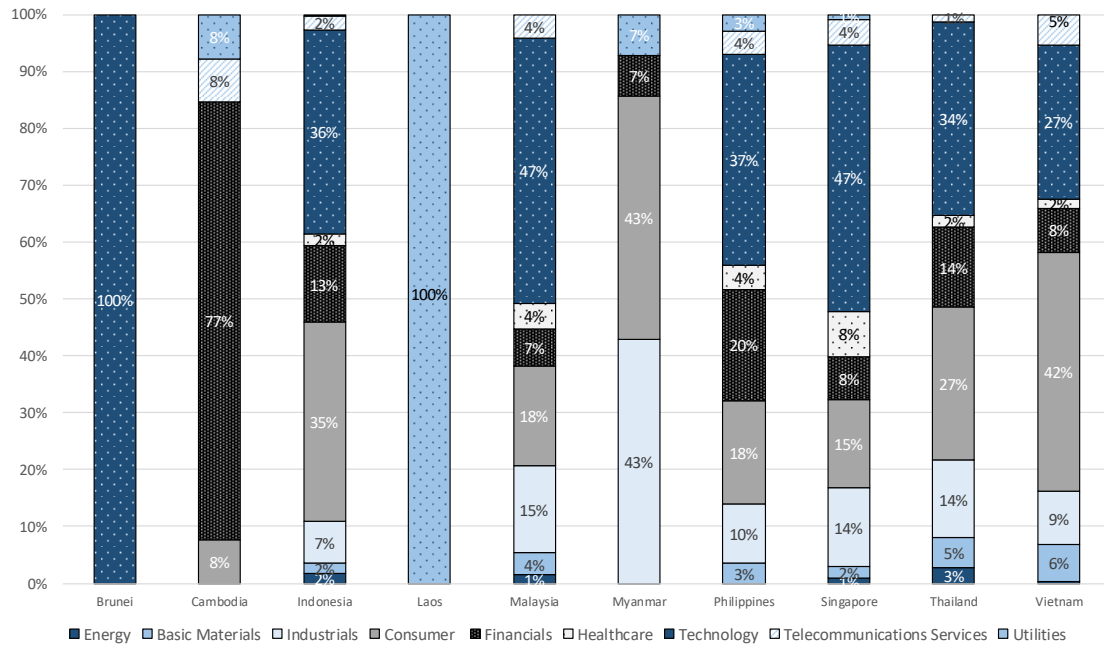
Source: OECD calculations, based on data by Thomson Reuters Eikon.

Technology and consumer products are the key sectors benefiting from PE/VC investment in most AMS over the last decade (Figure 4.10). Finance is also at the centre of PE/VC capital allocation strategies and, in some of the cases, this can be interlinked with the technology or consumer industry. This seems to particularly be the case for companies applying technology in financial services (for instance, FinTech activities such as digital wallets and payment platforms) or in consumer services (for instance, food delivery platforms, ride hailing companies and tech companies active in medical diagnostics). Industry participants expect strong investor interest to be sustained in the region, driven by a developing technology sector and other consumption-based industries (Ernst and Young, 2019^[55]). In fact, AMS may have a competitive advantage in the use of technology to leapfrog developed economies that still use costly legacy systems and infrastructure in certain activities (for instance in adopting FinTech-related services).

In terms of geographic distribution of PE/VC activity in AMS, the vast majority of PE/VC investment is in most cases injected in companies based in the capital city, with the exception of the Philippines and Viet Nam where significant levels of activity are also observed in urban areas outside the capital city (Figure 4.11).

Figure 4.10. Breakdown of PE/VC transactions by industry

In % of total number of PE/VC transactions

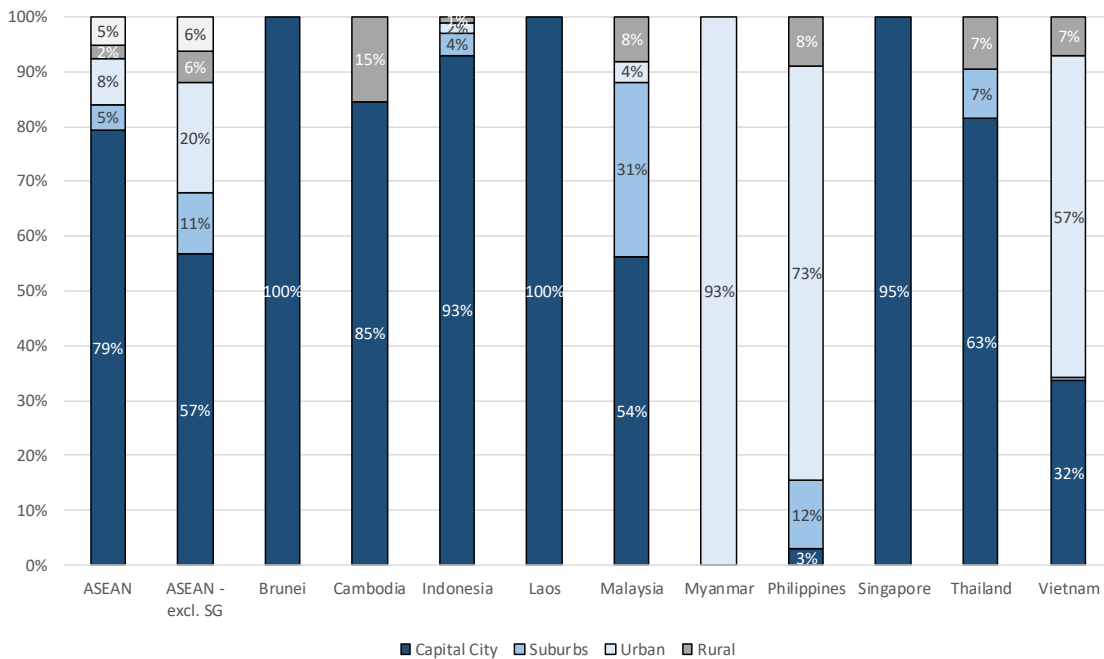


Note: Based on 3,255 transactions that took place in AMS over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.11. Geographic distribution of PE/VC activity

In percentage of total number of transactions, based on the location of the recipient of PE/VC funding

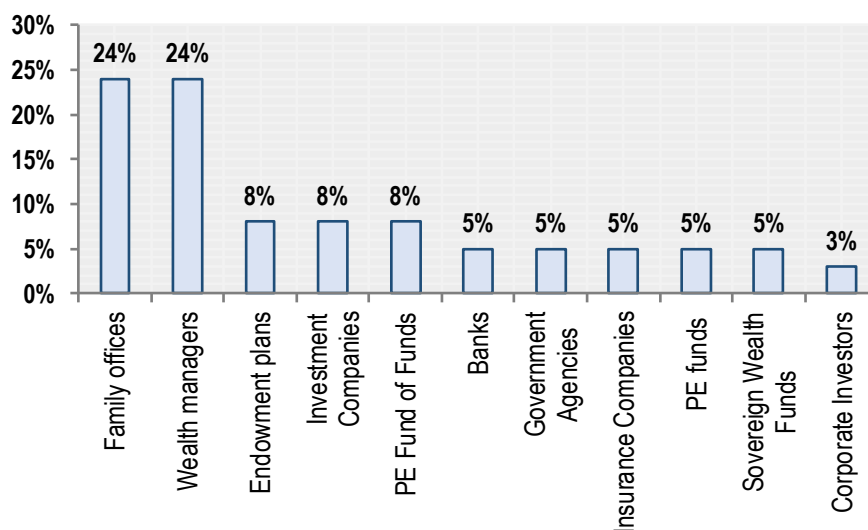


Note: Based on 3,255 transactions that took place in AMS over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Business angel investment in ASEAN has great potential, driven by the dramatic increase in the world's wealthiest individuals coming from Asia. This is most pronounced in Singapore, where wealth fund managers and family offices based in Singapore account for 48% of investors in Private Equity as of 2014 (Figure 4.12). Business angel networks are beginning to form in ASEAN countries, as in the case of Malaysia, where the Malaysian Business Angel Network (MBAN) represents the official trade association and governing body for angel investors and angel clubs in Malaysia (MBAN, n.d.^[56]).

Figure 4.12. Distribution of Singapore-based PE investors by type, as of 2014



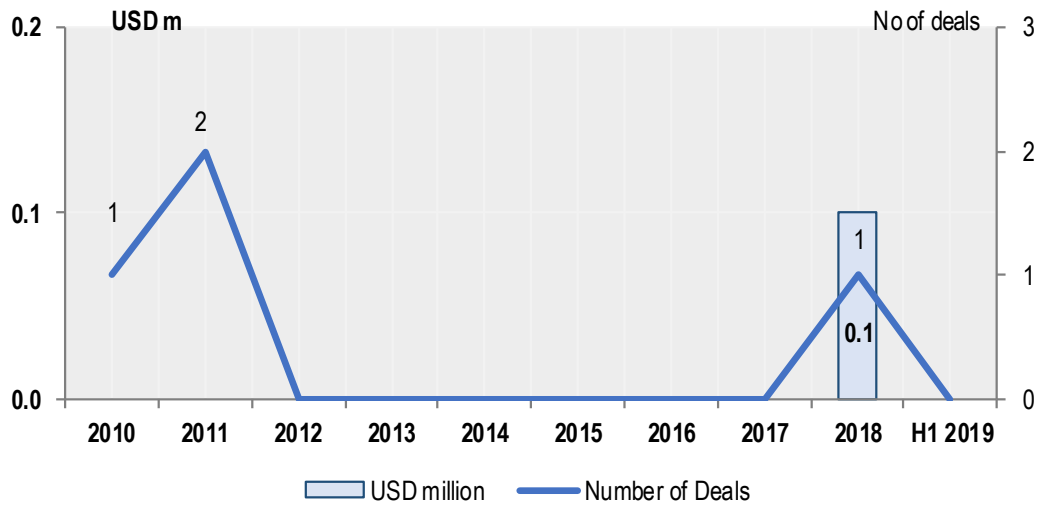
Source: Preqin.

Brunei Darussalam

There has been little PE/VC activity reported in Brunei Darussalam in the past decade, and the local market for private risk financing remains to be developed. This could be due to the supply side, to the extent that Bruneian investors do not find sufficient deal opportunities locally and direct their investment to Singapore and other countries of the region instead. Most of the activity reported is concentrated in the software and IT sector and concerns exclusively venture capital financing (see Figure 4.13).

Figure 4.13. VC investment in Brunei Darussalam, 2010-H1 2019

VC Investment in USD million and in number of deals



Source: AVCJ - Asian Venture Capital Journal.

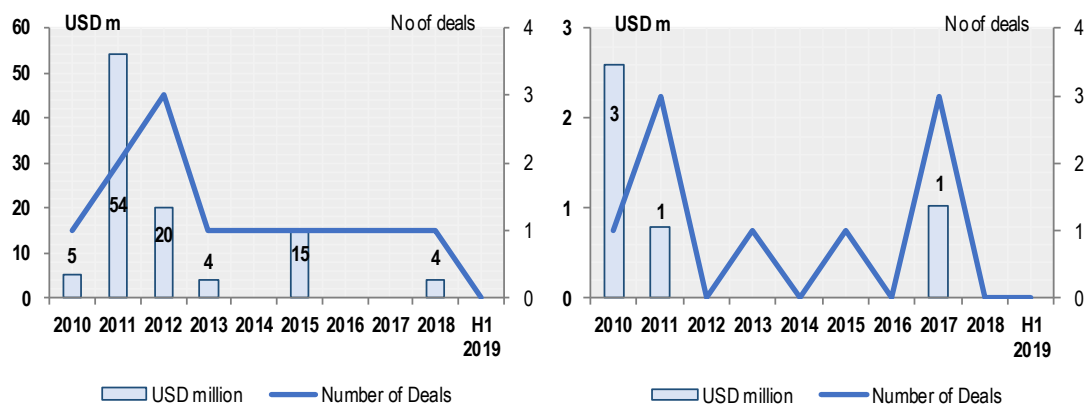
The establishment of the Brunei angel investment network is still in its early stages of development. To date, Darussalam Enterprise (DARE) organised angel investment awareness talks and engagements on the benefits of becoming an angel investor.

Cambodia

Cambodia has been one of the fastest-growing PE/VC markets in the ASEAN region, although starting from a very low base (see Figure 4.14). In 2017, vehicles located in Cambodia collectively raised 19% of total capital secured by ASEAN-based funds (Preqin, 2018^[54]).

Figure 4.14. PE and VC investment in Cambodia, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals



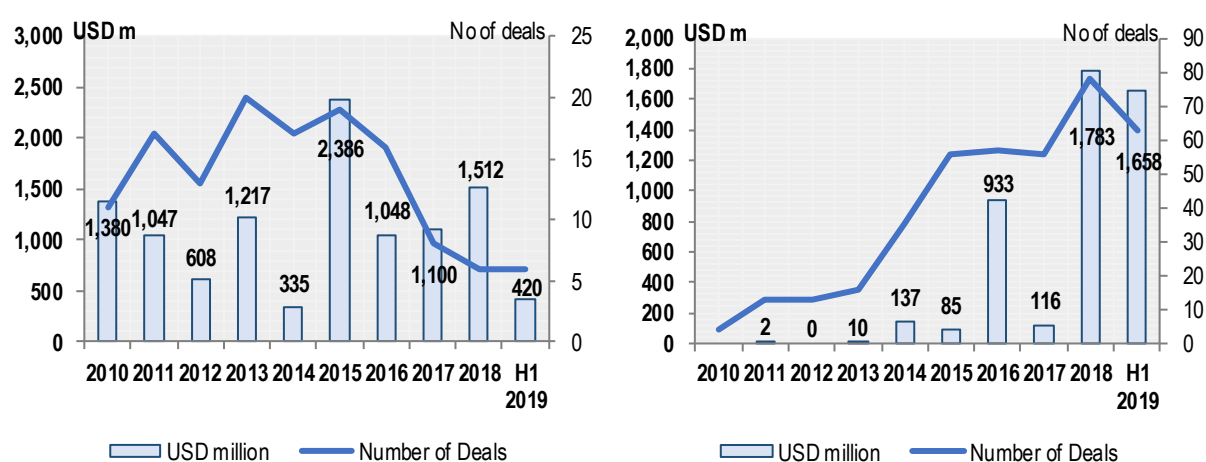
Source: AVCJ - Asian Venture Capital Journal.

Indonesia

Indonesia enjoys a rapidly growing PE/VC sector, with notable growth observed in the venture capital space in the past couple of years (Figure 4.15). Indonesia and Singapore are the major recipients of PE/VC investment in ASEAN and account for the lion's share in terms of general activity, but also in terms of large-sized deals. Several unicorns have emerged in Indonesia, growing from young startups to unicorn status (e.g. Go-Jek and PT Tokopedia). Such unicorns based out of Indonesia and Singapore (e.g. Grab) dominate the league tables in 2018 with transactions involving more than USD 1 billion raised as growth capital (Ernst and Young, 2019^[55]). A number of the largest buyout funds in ASEAN are based in Indonesia, such as Capsquare Asia Partners II, focused exclusively on Indonesia.

Figure 4.15. PE and VC investment in Indonesia, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals



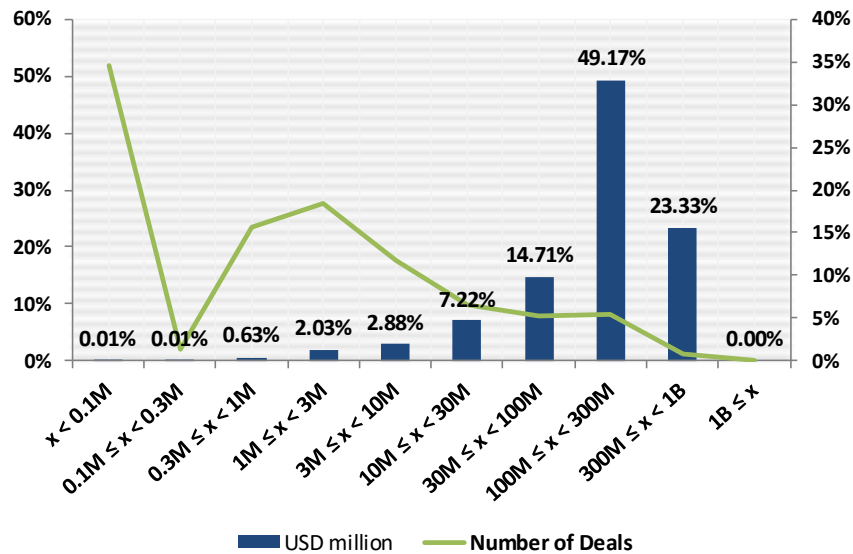
Source: AVCJ - Asian Venture Capital Journal.

The Indonesian PE market is characterised by large-sided deals, especially relative to other AMS markets with the exception of Singapore (Figure 4.16). VC activity has recorded a rapid growth since 2016, both in terms of number of deals and in aggregate funds raised (Figure 4.16). Transactions are widely distributed across business sectors with a slight emphasis in the software and IT services, technology equipment, and food and drug retailing.

Anecdotal evidence by industry participants suggests that many potential target companies in Indonesia are family owned or controlled businesses, and many of the deals are executed without a formal sale process being organised (e.g. auction or other) (Mita Djajadiredja and Gerrit Kleute, 2018^[57]). It is therefore crucial for PE/VC investors in Indonesia to have strong local roots or contacts in the country, whether or not based in Jakarta.

Figure 4.16. PE/VC deal size distribution in Indonesia

In percentages for each deal size bracket (LHS) and in % of total deals (RHS)

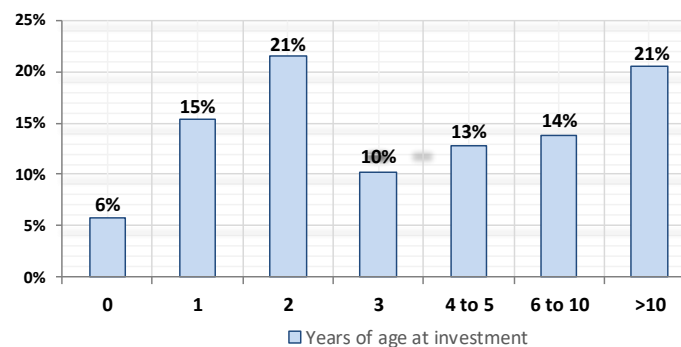


Note: Based on 364 transactions that took place in Indonesia over the period 2010-H1 2019.
 Source: OECD calculations, based on data by Thomson Reuters Eikon.

Based on a sample of 364 PE/VC transactions that took place in the period 2010-H1 2019, most of the investment was deployed in primary transactions and only 14% of transactions in the sample were follow-on investments. Most transactions involve direct equity participation, and convertible bonds are also commonly used by PE funds in Indonesia. In terms of size, the Indonesian market consists mainly of mid-market transactions with deal sizes between USD 30- 300 million.

Figure 4.17. PE/VC investment by company age at the time of the investment in Indonesia

In percentages for each company age



Note: Based on 364 transactions that took place in Indonesia over the period 2010-H1 2019.
 Source: OECD calculations, based on data by Thomson Reuters Eikon.

Complicated bureaucracy and uncertainty of regulation have been identified by some PE investors as the key impediments to their participation in the market (ICLG, 2019^[58]). This has led some PE/VC investors to require the founders or startups to establish a holding company in a country they consider more

business-friendly, such as Singapore (ICLG, 2019^[58]). In such cases, the investors invest directly in the holding company, which in turn acquires the Indonesian target entity.

Indonesia restricts foreign investment to a limited shareholding for a number of sectors (e.g. warehousing businesses has a limit of 67% foreign ownership; insurance companies an 80% threshold). This is driving a lot of joint ventures with co-investment by foreign and local investors and limited 100% buyout transactions. Co-investing with local partners does, however, have an important upside which comes in the form of assistance and knowledge of how to navigate the complexities of the local markets. Indonesian-based PE funds, despite having foreign LPs as their investors, are deemed as Indonesian entities and are therefore exempt from this ownership restriction (Thomson Reuters, 2018^[59]).

Other challenges to PE/VC investment in Indonesia include compliance risks and long administrative processes applying to investments and delaying transactions. These challenges make even offshore deals more difficult to execute in comparison to other AMS, such as Singapore and Malaysia (Mita Djajadiredja and Gerrit Kleute, 2018^[57]).

Indonesia does not have any rules specifically tailored for PE/VC investors, including with regards to tax, and PE/VC investment is treated like any other investment. However, there is a general tax incentive for investing in unlisted companies if certain conditions are met, granting exemptions from import duty for capital goods; VAT exemption for capital goods and export duty, if the company is located in a specific bonded zone or industrial zone (Thomson Reuters, 2018^[59]).

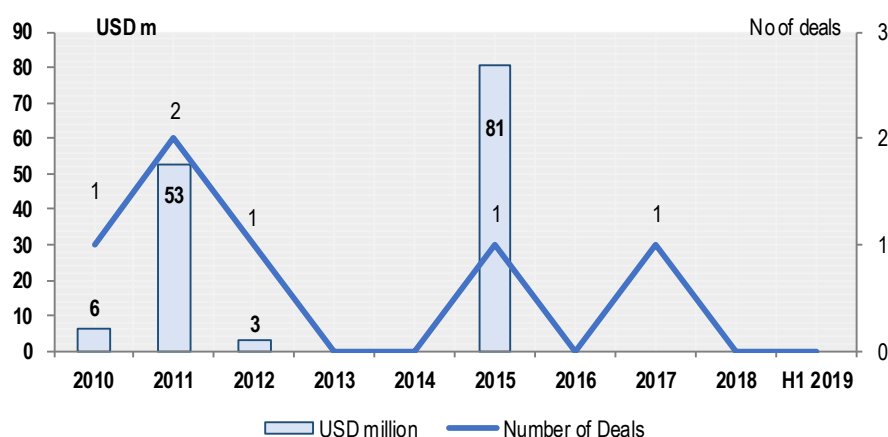
The Indonesian government has tried to simplify the investment process, to provide a conducive and attractive environment for PE/VC investors. In 2018, Indonesia's Investment Coordinating Board (BKPM) launched the Online Single Submission (OSS) system (<https://www.oss.go.id/oss/>). The OSS system is a web-based business licensing system that aims at cutting the red tape that is involved when investors try to obtain business permits in Indonesia and therefore aims to address one of the major obstacles in Indonesia's investment climate, by making the licensing process in Indonesia easier and faster. In 2019, BKPM launched an upgrade to the OSS system (Indonesia Investments, 2019^[60]).

Lao PDR

Reported PE/VC investment activity in Lao PDR is scarce, with a small number of transactions reported solely in the PE market (see Figure 4.18). Some of the transactions reported involved companies active in the utilities sector.

Figure 4.18. PE investment in Lao PDR, 2010-H1 2019

PE investment in USD million and in number of deals



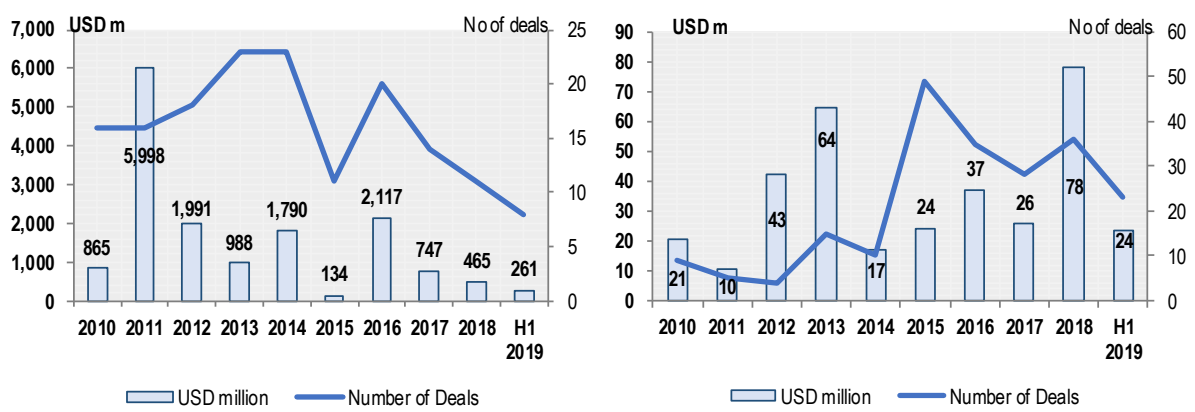
Source: AVCJ - Asian Venture Capital Journal.

Malaysia

The Malaysian market for PE/VC investment has achieved multi-billion USD activity more than once in the past decade, an achievement accomplished by only two other ASEAN countries, Singapore and Indonesia. Malaysia has two of the five largest ASEAN-based PE/VC funds, Navis Capital Partners and Creador Management Company, with USD 4 billion aggregate capital raised over the past decade (Preqin, 2018^[54]). PE activity has decreased since 2016 both in terms of funds invested and in number of deals executed. Conversely, VC activity has picked up in the past two years and in 2018 VC funds invested reached a 10-year high (Figure 4.19).

Figure 4.19. PE and VC investment in Malaysia, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals

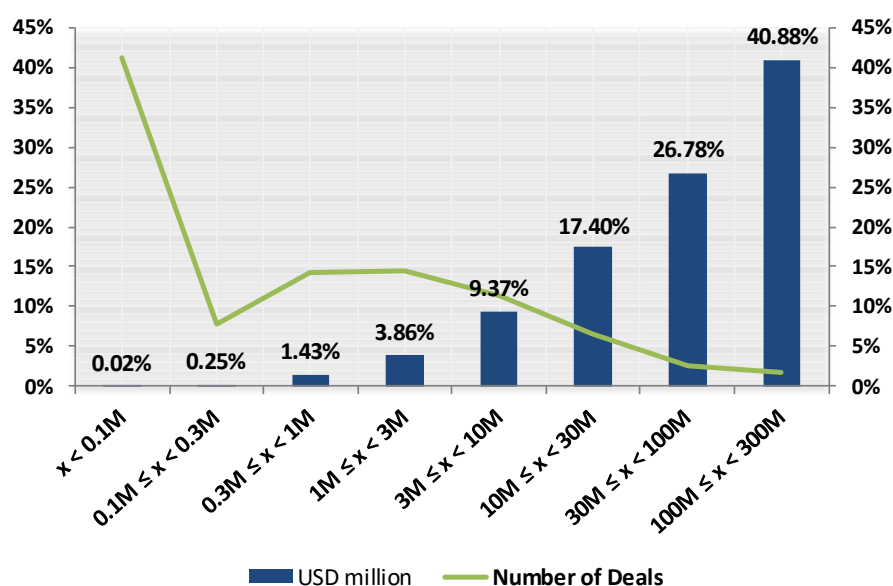


Source: AVCJ - Asian Venture Capital Journal.

Almost 45% of PE/VC transactions are small-sized ones (up to USD 100,000) based on a sample of publicly announced transactions over the period 2010-H1 2019 (Figure 4.20). About 20% of the investment is injected in companies at their first two years of operation, while almost a third of PE/VC funding goes to mature companies with a decade of activity (Figure 4.21).

Figure 4.20. PE/VC deal size distribution in Viet Nam

In percentages for each deal size bracket (LHS) and in % of total deals (RHS)



Note: Based on 337 transactions that took place in Malaysia over the period 2010-H1 2019.

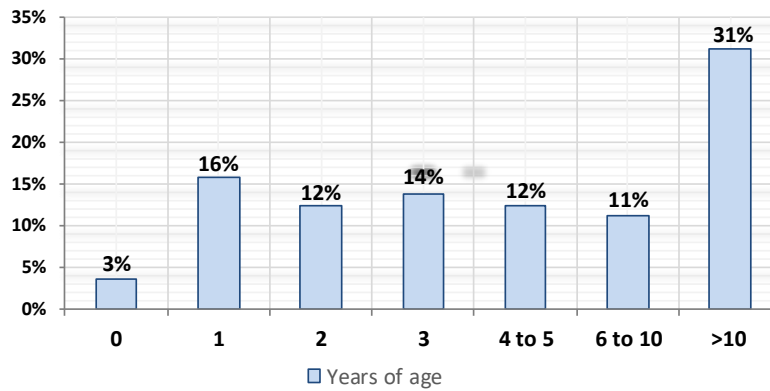
Source: OECD calculations, based on data by Thomson Reuters Eikon.

Most of the investment is new (89% of total investment in the sample examined) with only 11% corresponding to follow-on investment in companies that have already received PE/VC funding. Based on the same sample of transactions, VC equity investment accounts for almost a third of transactions, and a larger proportion of LBOs is observed in Malaysia compared to other AMS, perhaps thanks to the existence of developed financing markets. In terms of industry, almost 40% of transactions in the sample analysed concerned the software and IT sectors.

In terms of geographic split, the rapid urbanisation of Malaysia has boosted consumer spending and generated investment opportunities for PE/VC investors, although activity is very much centralised in the Kuala Lumpur metropolitan area (85.4% of activity in a sample of 323 publicly announced transactions in the past decade is concentrated in the metropolitan area). The activity was significantly lower in the 1990s. At that time, the evolution of Malaysia's VC industry was guided by a number of affirmative action policies and programmes that sought to redress socio-economic imbalances in the country. Whilst these policies may have contributed to social peace, evidence suggests that they may have had the unintended effect of incentivising many Malaysian entrepreneurs to launch their startups abroad (Kaley Lyons and Martin Kenney, 2007^[61]).

Figure 4.21. PE/VC investment by company age at the time of the investment in Malaysia

In percentages for each company age



Note: Based on 337 transactions that took place in Malaysia over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

The Malaysian PE/VC industry has followed an upward trajectory since the liberalisation of 45 sectors of the economy, which allowed for 100% equity participation by foreign entities. In addition, investment guarantee agreements signed with more than 70 countries facilitated free transfer of profits or capital and provide for enhanced investor protection (Ernst & Young, 2017^[62]).

Malaysia has a comprehensive regulatory framework for PE/VC activity. The Securities Commission Malaysia issued in 2015 revised Guidelines on the Registration of VC and PE Corporations and Management Corporations (Securities Commission Malaysia, 2015^[63]). These guidelines extend the regulatory purview of the previous guidelines to include PE funds and corporations, and aim to streamline the regulation of conventional and Islamic VC funds. With the new regulation, Limited Liability Partnership structures are recognised and PE firms are allowed to invest in publicly listed companies.

The Guidelines also set out registration requirements with the Securities Commission for corporations who act as investment managers or co-investment managers of PE/VC funds, when these have in-house management teams. Registration procedures for PE/VC funds relate to minimum capital requirements, the appointment of a suitably qualified and fit and proper responsible person, and fulfilment of the criterion that approval of the applicant would be in the "best interest of Malaysia." Such requirements set a new standard that intends to support the development of a robust PE/VC industry.

Malaysia has introduced tax incentives for VC investments as early as 2011, and updated these in 2014 (Securities Commission Malaysia, 2014^[64]). The tax incentives granted fall under three main categories: (i) tax exemption for venture capital companies investing in companies under the Income Tax Exemption No. 11 - Order 2005; (ii) tax deduction incentives for individuals or companies investing in a company under the Income Tax Deduction for Investment in a Venture Company Rules - 2005; and (iii) tax incentives for venture capital management companies under the Income Tax Exemption No. 12 - Order 2005, with tax benefits being mutually exclusive and valid for 10 years.

Qualifying VC companies must be residents of Malaysia, invest in non-listed companies and hold their investment for at least 2 years. They are also required to obtain a certification by the Securities Commission, confirming that they have invested at least 70% of their invested funds in venture companies in the form of seed capital, startups and/or early stage financing, or at least 50% in the form of seed capital (Securities Commission Malaysia, 2014^[64]).

For the tax incentive framework to function, the administrative arrangements and processes related to claiming and receiving such tax benefits has to be straightforward and easy to navigate for investors and participating companies alike. Time-consuming bureaucratic processes and tedious red tape discourage PE/VC investors who are more constrained by time than by money. A survey of venture capitalists investing in Malaysia in the early 90s suggested that investors were discouraged by the red tape and excessive bureaucratic difficulties linked to claiming and receiving tax credits granted by the Malaysian government, which dissuaded them from going through the claiming process altogether (Boocock, 1995^[65]).

Malaysia benefits from an active business angel community, which has been formalised through the establishment of the Malaysian Business Angel Network (MBAN), the official trade association and governing body for angel investors and angel clubs in Malaysia (MBAN, n.d.^[66]). The government of Malaysia is encouraging business angel investment in early stage companies through a special tax exemption for angel investors, the Angel Tax Incentive (MBAN, n.d.^[66]), administered by the Angel Tax Incentive Office, a unit under Cradle Fund Sdn Bhd. The investment made must be approved and endorsed by the Ministry of Finance and investee companies have to obtain an approval for investment under Angel Tax Incentive by the Ministry. Eligible investors get their accreditation by the Malaysian Business Angel Network, valid for two years (MBAN, n.d.^[66]).

The Malaysian Government plays a key role in promoting the development of the PE/VC industry, *inter alia* by being one of the key contributors to invested funds for the industry. One of the largest venture capital firms is publicly funded Malaysia Venture Capital Management Bhd (MAVCAP), which focuses on startups and early-stage ventures in the ICT and high technology industries. The Malaysia Venture Capital and Private Equity Development Council (MVCDC) is a body comprising policymakers and practitioners mandated to provide strategic vision and direction for the development of the PE/VC industry. It acts as a one-stop-agency to ensure a coordinated implementation or strategic initiatives of the Malaysian government for the development of the Malaysian VC industry and has various working groups tasked to identify areas of improvement within the PE/VC ecosystem, such as increasing its capacity.

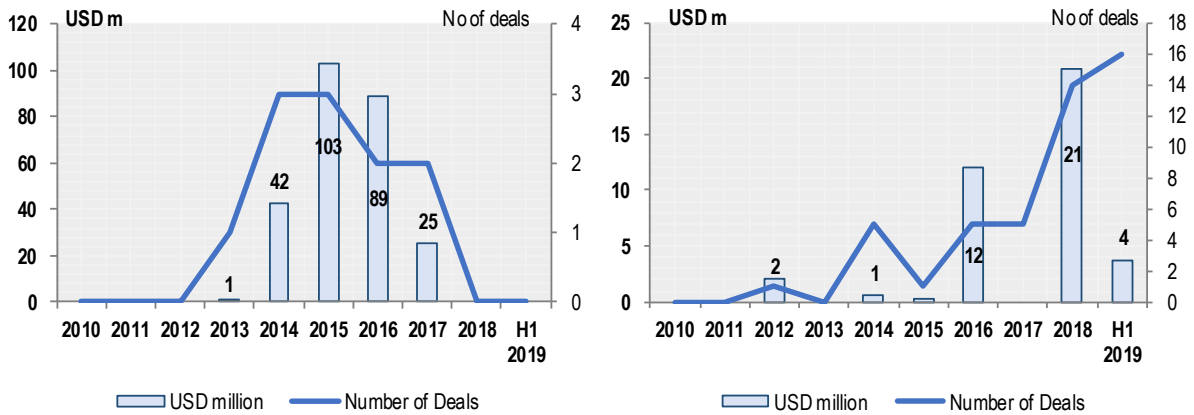
Government-affiliated venture capital represents a large sector of the entire PE/VC industry, especially when considering that the government controls some large banks and that many of the corporations involved in the industry are state-owned. Anecdotal evidence suggests that the government involvement may be crowding out private investors, to some extent (Kaley Lyons and Martin Kenney, 2007^[61]). The predominant role of the government in the VC market in particular, some have argued, may have led to an over-reliance on government funding, instead of catalysing and encouraging participation by the private sector (Institute for Capital Market Research, 2018^[67]).

Myanmar

PE/VC activity in Myanmar has been growing since 2012, with the PE activity slowing down from 2016 onwards and VC activity picking up in the same period (Figure 4.22). The slowdown in activity may be attributed to economic and political uncertainty in that period. Most of the funding activity is concentrated in SMEs active in the services sector (consumer services, industrial and commercial services) with strong performance in the tourism industry in recent years. This may be driven by the rapid and sizeable mobile penetration and the development of FinTech products and services, many of which benefit from PE/VC financing (see also chapter 5).

Figure 4.22. PE and VC investment in Myanmar, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals

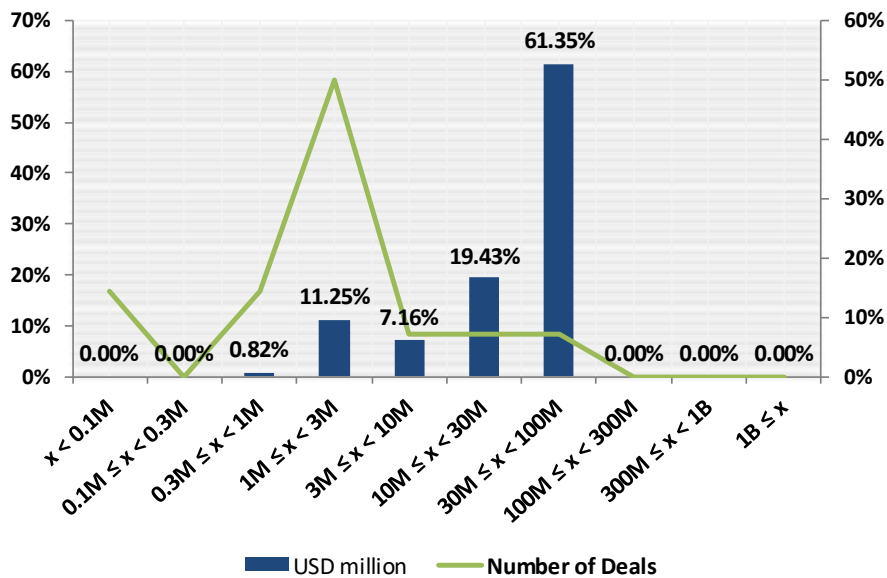


Source: AVCJ - Asian Venture Capital Journal.

Out of a total of 58 publicly announced transactions over the period 2010-H1 2019, all transactions involved primary financing and no follow-on investment was reported in that sample. Contrary to the majority of AMS, where the majority of transactions is found in the lowest bracket of deal size, in Myanmar most of the activity in number of deals is observed in the USD 1 – 3m, and in terms of total financing injected in SMEs in the USD 20 – 100m bracket (Figure 4.23). Based on the same sample, most financing was received by companies between 6-10 years of age, and the rest by SMEs with three years of operation (Figure 4.24).

Figure 4.23. PE/VC deal size distribution in Myanmar

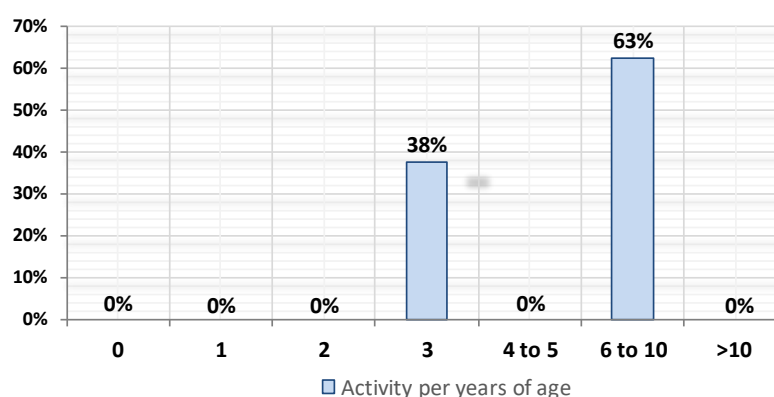
In percentages for each deal size bracket (LHS) and in % of total deals (RHS)



Note: Based on 58 transactions that took place in Myanmar over the period 2010-H1 2019.
 Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.24. PE/VC investment by company age at the time of the investment in Myanmar

In percentages for each company age



Note: Based on 58 transactions that took place in Myanmar over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Significant legal and regulatory reforms have been undertaken by Myanmar in the past years and are creating a more investor-friendly environment for doing business and for deploying capital in the country, resulting in a growing number of GPs willing to commit funds to Myanmar's SMEs (Figure 4.25). The enactment of a new Myanmar Investment Law (MIL) 2016 in October 2016, the release of a series of investment related rules and notifications in April 2017, and the recent enactment of the new Myanmar Companies Law 2017 (MCL) to modernise the companies regulatory framework, including the establishment of an online companies registry, are some of these regulatory initiatives that the Myanmar government has undertaken with a view to promote entrepreneurship and create the necessary conditions for FDI to flow in the country (Chester Toh and Jainil Bhandari, 2018^[68]).

Figure 4.25. Overview of Myanmar-focused General Partners

#	General Partner	Founded in	Chief executive(s)	Funds raised (USD m)	Sector focus	Investments/ Local franchises
1	Delta Capital Myanmar	2013	Nick Powell	Fund I: 50 m Fund II: ~70 m ¹⁶	Consumer, MFI, Telecom, Energy, Manufacturing.	
2	Anthem Asia	2012	Josephine Price	40 m ¹⁷	Consumer goods and services, Agribusiness, Leisure, F&B, Tech.	
3	Myanmar Investments International Limited (MIL)	2013	Aung Htun	40 m ¹⁸	Telecom, MFI, Healthcare	
4	Myanmar Strategic Holdings	2013	Enrico Ceserani	23 m+	Hospitality and Tourism, Education, Security services	
5	Golden Rock Capital	2014	Thura Soe-Paing, Marvin Yeo ¹⁹	20 m+	Consumer goods	
6	Singapore Myanmar Investco (SMI)	2013	Patrick Ho, Mark Bedingham	?	Retail, Food & Beverage, Auto Services, Construction Services and Logistics / Supply Chain ²⁰	

Note: LPs: Mix of European and/or Asian family offices, institutional investors, global bodies (e.g. IFC in the case of Anthem), and HNWIs.

Source: (Ashwin Bhat, 2018^[69]).

In addition, Myanmar has bilateral investment treaties with over 12 countries, including China, India, Japan, Lao PDR, the Philippines, Singapore and Thailand, has entered into avoidance of double taxation agreements with the United Kingdom, Thailand, Singapore, India, Malaysia, Viet Nam, Lao PDR and South Korea and has signed regional free trade agreements signed with China, South Korea, Australia, New Zealand, and India.

The key regulatory authority for the PE/VC industry is the Myanmar Investment Commission (MIC), a government-appointed body formed under the Myanmar Investment Law and comprising representatives and experts from government ministries, departments and governmental and non-governmental bodies (Directorate of Investment and Company Administration, 2018^[70]). The MIC is responsible for verifying and approving investment proposals and regularly issues notifications about sector-specific developments. The new Myanmar Investment Law changed the role of MIC with fewer investment proposals requiring formal MIC approval (Government of Myanmar, 2016^[71]). It also introduced a new endorsement process whereby proposals are fast-tracked through endorsement by the MIC.

Investors who obtain the approval of the Myanmar Investment Commission (MIC) may be entitled to apply for tax incentives and other benefits prescribed in the Myanmar Investment Law, particularly for investments in promoted sectors. Such tax incentives include income tax exemptions, exemption or relief from income tax on profits that are reinvested within one year, as well as certain customs duties exemptions for imported materials or equipment (Chester Toh and Jainil Bhandari, 2018^[68]). Separately, investors in special economic zones are also entitled to tax incentives and other benefits which are available under Myanmar's Special Economic Zone Law 2014 (SEZ Law) – the SEZ Law provides a separate investment regime for investments in special economic zones in Myanmar.

Restrictions on foreign investment still exist and foreign investors are prohibited from undertaking some activities (e.g. small to medium-scale mineral refining); are required to form joint-ventures with local partners for other activities (including certain manufacturing activities, as well as property development); or are subject to approval or conditions imposed by the relevant ministry (e.g. marine fishing).

Further improvements should be pursued in the areas of investor protection, investor confidence, market access and investment incentives (Asia-Pacific FDI Network, 2018^[72]). Reforms should be accompanied by increased transparency, clarity, and faster implementation of new legislation. Increased focus should be also placed on modernising the administrative procedures related to investments, with a view to reducing complex and lengthy administrative procedures.

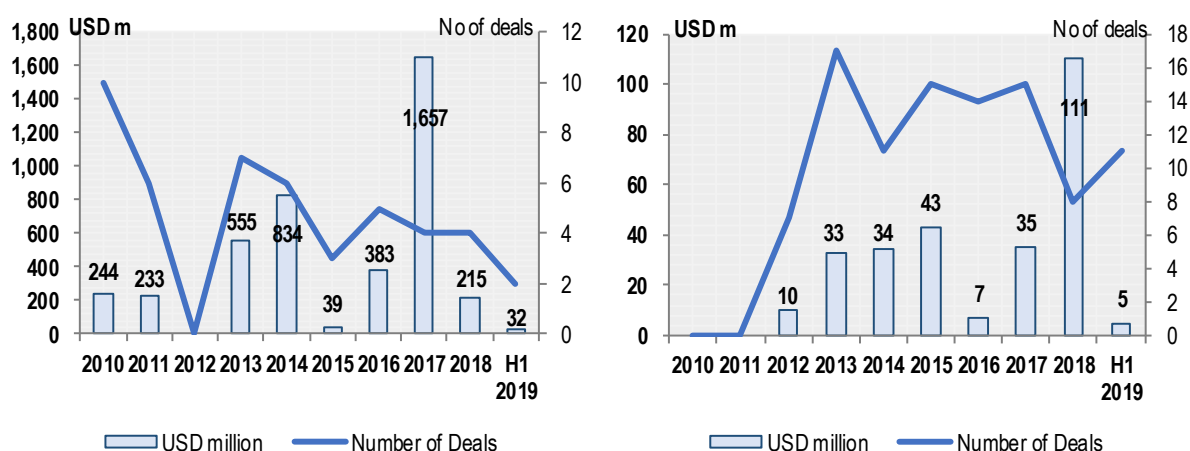
On a micro level, anecdotal evidence from industry participants suggests that SMEs in Myanmar face considerable barriers to obtaining PE/VC financing. These barriers include incomplete, incorrect, unreliable or at times completely unavailable data (Ashwin Bhat, 2018^[69]). Financial education policies targeted at SMEs and entrepreneurs can assist them in building financial projections and business plans; information that is often a critical prerequisite to obtaining PE/VC funding.

The Philippines

The Philippines economy is one of the fastest growing in the region (following Viet Nam), supported by rapidly rising consumption levels and FDI inflows. Large part of the inflows is attributed to the large diaspora of Filipinos abroad. The Philippines is the largest remittance destination in ASEAN, and financial remittances are a vital economic lifeline for the country. Based on estimates by the World Bank, USD 65 billion of remittances were sent to AMS, out of which USD 33 billion to the Philippines. Increased spending capacity of the population and a growing middle class are likely translated into growth in the consumer sector. The country is increasingly becoming a favoured destination for private capital, together with Viet Nam.

Figure 4.26. PE and VC investment in the Philippines, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals

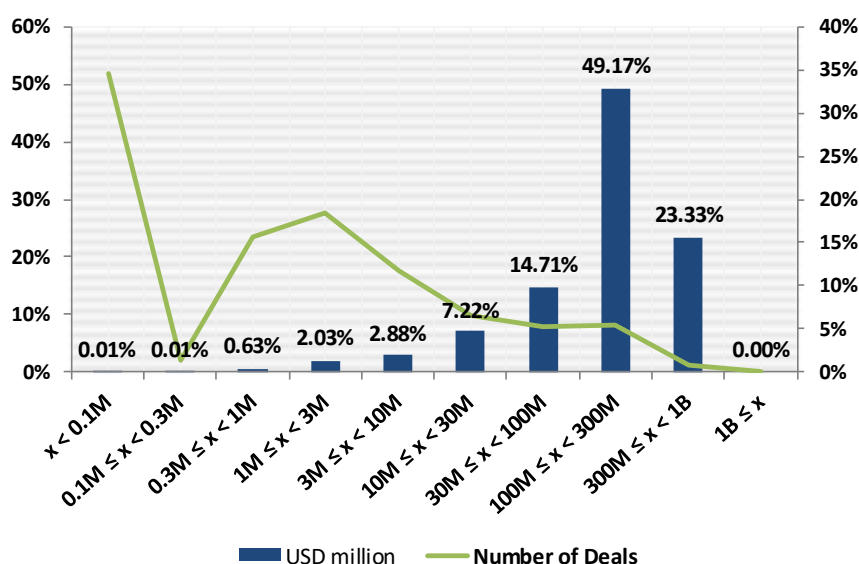


Source: AVCJ - Asian Venture Capital Journal.

The number of PE transactions has steadily decreased since 2016, despite a spike in funds invested in 2017, likely due to a few large-sized deals. In addition, Venture Capital is a very small fraction of the overall PE/VC market, therefore a lot more emphasis can be placed in the seed and early-stage financing segment.

Figure 4.27. PE/VC deal size distribution in the Philippines

In percentages for each deal size bracket (LHS) and in % of total deals (RHS)

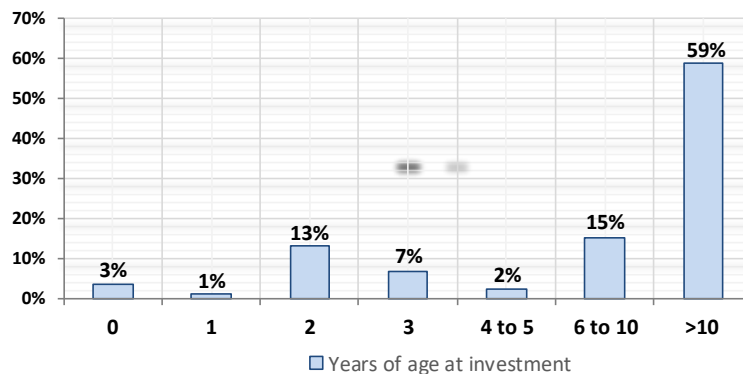


Note: Based on 143 transactions that took place in the Philippines over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.28. PE/VC investment by company age at the time of the investment in the Philippines

In percentages for each company age



Note: Based on 143 transactions that took place in the Philippines over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

The legislative framework of the Philippines imposes nationality and minimum capitalisation requirements, depending on the type of business of the domestic corporation or the branch office of a foreign corporation (SyCip Salazar Hernandez & Gatmaitan, 2018^[73]). Examples of industries where foreign ownership is limited are landholding (40% limit), natural resources (40% limit), and advertising (30% limit).

The lack of fully developed institutions and inefficient capital markets are noted as two of the main issues identified by PE/VC investors in the Philippines (Scheela, 2011^[74]). Other challenges include the lack of an attractive deal flow, and limited exit strategies available to PE/VC investors. In addition, and similar to other AMS with less developed ecosystems, there is often a lack of transparency on the demand side, and a resulting lack of credible business plans that can be shared with investors. It is therefore important for policymakers to look into financial education policies and capacity building initiatives for startups and SMEs wishing to receive PE/VC financing.

There is no tax policy specifically tailored for PE/VC investors in the Philippines. The Tax Reform for Acceleration and Inclusion Act is expected to support the government's infrastructure rollouts and further accelerate economic growth by stimulating greater investment in the country (Ernst and Young, 2018^[75]). The Philippine Competition Act, or the landmark anti-trust law, signed in 2015, further increases investor confidence by levelling the playing field among domestic and foreign investors.

Singapore

Singapore is the most developed PE/VC market and the major recipient of PE/VC investment in the ASEAN region. It is considered to have one of the most business-friendly environments in the region and benefits from a transparent institutional and regulatory regime, including solid investor protection framework and corporate governance regulations that encourage PE/VC investment.

Singapore constitutes a regional hub for investors in the wider Southeast Asia area, and benefits from its status as a mature and active financial market hub for the region. This has translated into Singapore enjoying a vibrant PE/VC ecosystem (fund administrators, placement agents, legal advisors, financial advisors, banks, listing venues, LPs, etc.), with investors based in Singapore and investing in the wider region. At the same time, the abundant supply of capital in the country has also drawn many companies to realise their projects in the country, offering a good deal flow and opportunities for investors wishing to allocate private capital to SMEs. World-class business schools and higher level learning institutions in

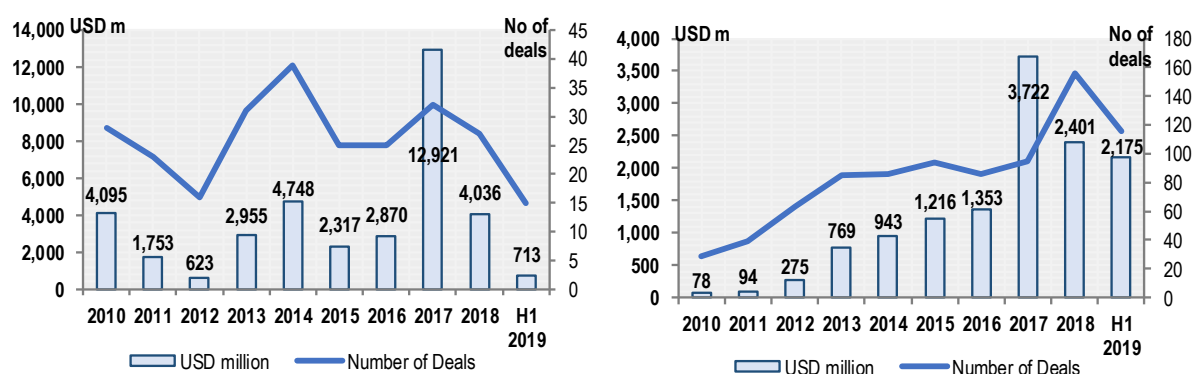
Singapore contribute to such deal flow by catalysing startups, and therefore demand and opportunities for PE/VC investment.

PE activity in Singapore has been volatile in the past decade, although remains at very high levels and accounts for the majority of PE investment in the ASEAN region. VC activity has followed a pattern of steady growth, both in terms of capital allocated in the country, as well as in number of transactions. VC activity peaked in 2017 but remains at historically high levels (Figure 4.29).

Unicorns based out of Indonesia (Go-Jek, Tokopedia) and Singapore (Grab) dominate the league tables in 2018 with deals of more than US\$1b raised as growth capital (Ernst and Young, 2019^[55]). Singapore has three of the five largest ASEAN-based PE/VC funds (Axiom Asia Private Capital, Northstar Group and Tael Partners), with USD6.4 billion aggregate capital raised over the past decade. More importantly, the country hosts the largest capacity by PE fund managers, with the five largest funds by available dry powder being headquartered in Singapore (namely Axiom, Nalanda Capital, Northstar, Vertex Ventures and Dymon, with an aggregate estimated dry powder of USD2.2 billion as of Q1 2018 (Preqin, 2018^[54]). The successful exits of two unicorns (Razer Limited and Sea Limited), both of which got listed on public equity markets (HKEX and NYSE, respectively) created a positive record of exits and increased the confidence of PE/VC investors, encouraging them to further commit capital in the country and confirming how important the availability of exit opportunities are for PE/VC investors.

Figure 4.29. PE and VC investment in Singapore, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals

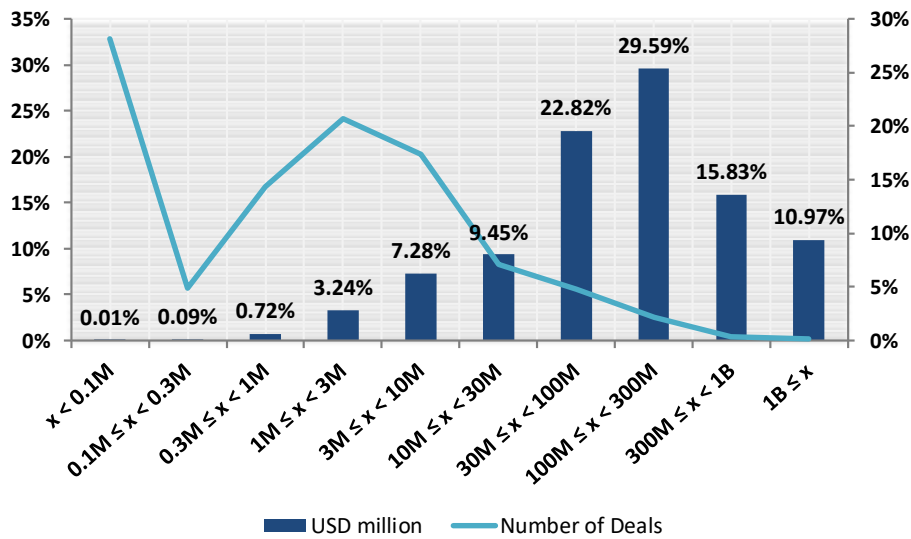


Source: AVCJ - Asian Venture Capital Journal.

In a sample of almost 2,000 publicly announced deals that took place in Singapore over the period 2010-H1 2019, 28% of financing involves very small transactions of less than USD 0.1 million (Figure 4.30) and half the transactions corresponded to investment of less than USD 1 million. In the same sample, 23% of investments were follow-on investments in a company that has already received investment. In terms of age of the recipient SME, 44% of transactions concerned companies that were 3 years old or less. More than 60% of investment in the sample used was injected in young companies during the first 5 years since their establishments.

Figure 4.30. PE/VC deal size distribution in Singapore

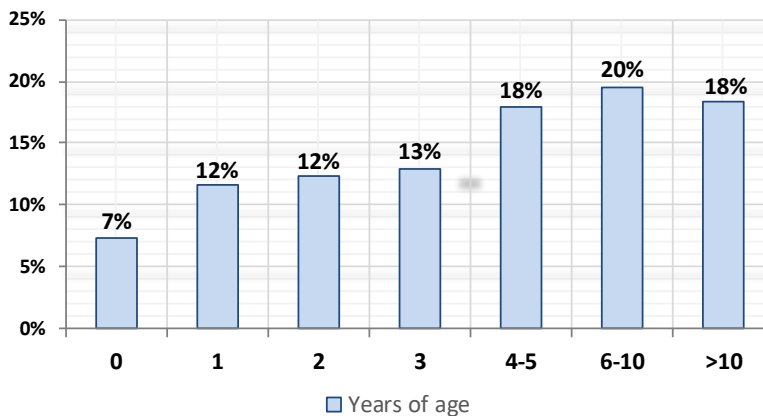
In percentages for each deal size bracket (LHS) and in % of total deals (RHS)



Note: Based on 1,885 transactions that took place in Singapore over the period 2010-H1 2019.
Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.31. PE/VC investment by company age at the time of the investment in Singapore

In percentages for each company age



Note: Based on 1,885 transactions that took place in Singapore over the period 2010-H1 2019.
Source: OECD calculations, based on data by Thomson Reuters Eikon.

PE/VC funds fall under the scope of the general regulation for funds and fund managers provided by the Securities and Futures Act (Government of Singapore, 2006^[76]). Singapore has implemented regulatory guidelines requiring all fund management companies to become either licensed or registered fund management companies since 2012. Although these changes may have increased the operating costs of funds, they encouraged their formalisation and compliance with regulatory requirements. This in turn seems to have increased market confidence and encouraged the growth of a supporting ecosystem.

In 2018, Singapore introduced a new legal entity form for investment funds, the Singapore Variable Capital Companies (VCC). This form is similar to specialised corporate structures in markets such as the UK (open-ended investment companies) or in Luxembourg (Société d'investissement à capital variable or SICAV) (Monetary Authority of Singapore, 2018^[77]). The new structure can be used for any type of investment fund in Singapore, including PE funds and funds with multiple sub-funds in their structure. It also presents a number of benefits, such as improved operational and tax efficiency.

In 2017, MAS simplified the regulatory regime for VC funds, aiming at facilitating startups' access to capital (Monetary Authority of Singapore, 2017^[78]). The new rules simplify and shorten the authorisation process for VC managers, by focusing on fitness and propriety and AML safeguards, instead of capital requirements and business conduct rules for VC managers. The administrative and compliance burden is reduced with corresponding cost and time-to-market benefits. Qualifying VC funds need to be backed by institutional and/or accredited investors and invest at least 80% of committed capital in young startups of less than 10 years old.

PE/VC funds in Singapore use corporate status which allow them to access a wide network of Double Taxation Agreements that Singapore has signed with 83 countries, which is perhaps the most extensive network of such agreements in the region (Inland Revenue Authority of Singapore, 2019^[79]).

Singapore has a stable and attractive tax regime for PE/VC funds, with a number of tax benefits provided to investors domiciled in Singapore. The three main tax exemption schemes for PE/VC funds and fund managers provided by the Income Tax Act include: (i) the Offshore Fund Tax Exemption Scheme (Section 13CA), the Onshore Fund Tax Exemption Scheme (Section 13R) and the Enhanced Tier Fund Tax Exemption Scheme (Section 13X) (Singapore Government, 2014^[80]). Based on the provisions of the above law, funds that have qualified until 31 December 2024, will benefit from an exemption on income and capital gains accrued to these funds for the life of these funds, provided that they fulfil some basic conditions, such as licensing and registration by the Monetary Authority of Singapore (see Table 4.1).

Table 4.1. Main conditions for tax incentive schemes of funds in Singapore

	Offshore Fund Tax Exemption Scheme	Onshore (Singapore Resident Company) Fund Tax Exemption Scheme	Enhanced Tier Fund Tax Exemption Scheme
Scheme exemption	Specified Income from Designated Investments is tax-exempt		
Fund's legal form	Companies, trusts and individuals	Company incorporated in Singapore	Funds constituted in all forms
Fund's residence	Non-tax resident with no presence in Singapore	Must be tax resident of Singapore	No restrictions
Fund manager	Singapore-based and holding a CMS licence or expressly exempted from holding a CMS licence or as otherwise approved by the Minister. In addition, the Section 13X funds must be managed or advised directly by a Singapore fund manager that employs at least 3 investment professionals. A VCC fund manager is required to be regulated and cannot be exempt from holding a CMS licence.		
Investors	Non-qualifying investors would need to pay a financial penalty to the Singapore tax authorities.	Non-qualifying investors would need to pay a financial penalty to the Singapore tax authorities.	No restrictions
Assets under management (AUM)	No restrictions	No restrictions	Minimum of S\$50 million at the point of application (committed capital concession available for real estate, infrastructure, private equity, debt and credit funds)
Approval requirement	No approval needed from MAS	Approval required from MAS. No change in investment strategy allowed after approval.	Approval required from MAS. No change in investment strategy allowed after approval.

Source: (Inland Revenue Authority of Singapore, 2019^[79]), (Deloitte, 2019^[81]).

Following the introduction of the Financial Sector Incentive Scheme, fund managers benefit also from a concessionary corporate tax rate of 10% instead of 17% on any fee income on the provision of fund management or investment advisory services to qualifying funds (Monetary Authority of Singapore, 2019^[82]).

The considerable tax benefits provided to PE/VC funds, coupled with Singapore’s extensive network of Double Taxation Agreements with other countries makes Singapore an attractive location for funds to domicile, fostering the country’s role as the regions hub for PE/VC and other funds.

Angel investors also benefit from a tax deduction on 50% of their investment, if they invest at least SGD 100,000 of qualifying investment in a qualifying startups company within 12 months from the date of his/her first investment in that company; and hold such investment for a continuous period of two years from the date of last qualifying investment (Inland Revenue Authority of Singapore, n.d.^[83]). The maximum investment amount is SGD 500,000 and the corresponding maximum tax credit granted is SGD 250,000.

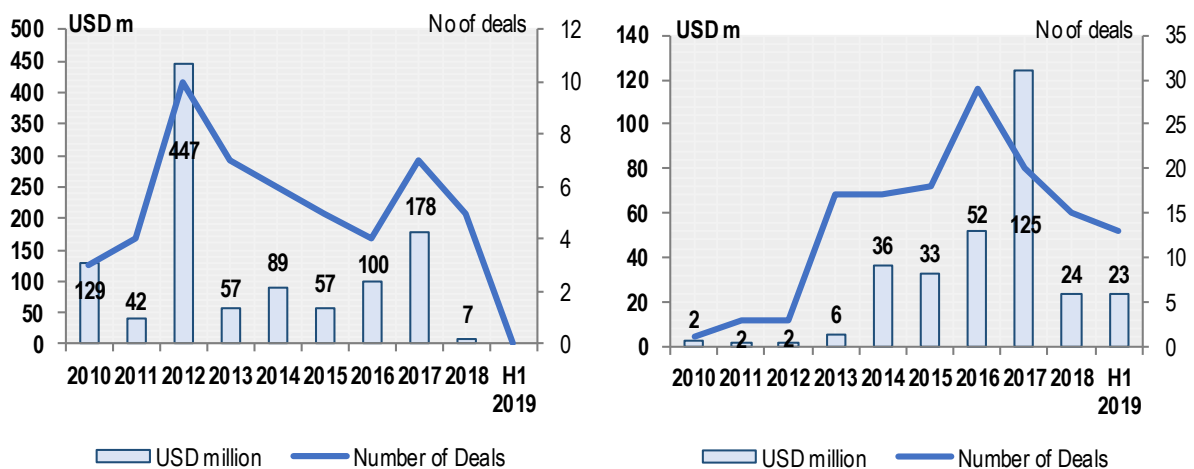
Singapore has also established government initiatives supporting the PE/VC market from the demand-side. Through the Startups SG Founder programme, the government co-matches funds raised by first-time entrepreneurs on a 3:1 ratio, up to a maximum amount of SGD 30,000. The government also co-invests with independent, qualified third party investors into eligible tech startups, up to SGD 2 million for general tech startups, and SGD 4 million for deep tech startups (see www.startupsg.net), (Institute of Innovation & Entrepreneurship, n.d.^[84]). These schemes are part of the Startup SG initiative, supported by Enterprise Singapore, the government agency responsible for helping startups and SMEs to upgrade their capabilities, innovate, transform and internationalise. Enterprise Singapore works closely with partners including Action Community for Entrepreneurship (ACE), IHLs such as NUS (the National University of Singapore) Enterprise, accelerators, incubators, VCs and other government agencies.

Thailand

PE/VC investment in Thailand has followed a pattern of steady growth over the period 2010 to 2017 (Figure 4.32). However, activity has declined over 2018 and H1 2019, with a more pronounced decline for PE. The expansion in PE/VC activity in Thailand was commensurate with GDP growth in the country (exceeding 4% in 2018), underpinned by an expansion in public investment coupled with a recovery in private investment. Thailand benefits from having the 4th largest labour market in Southeast Asia.

Figure 4.32. PE and VC investment in Thailand, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals

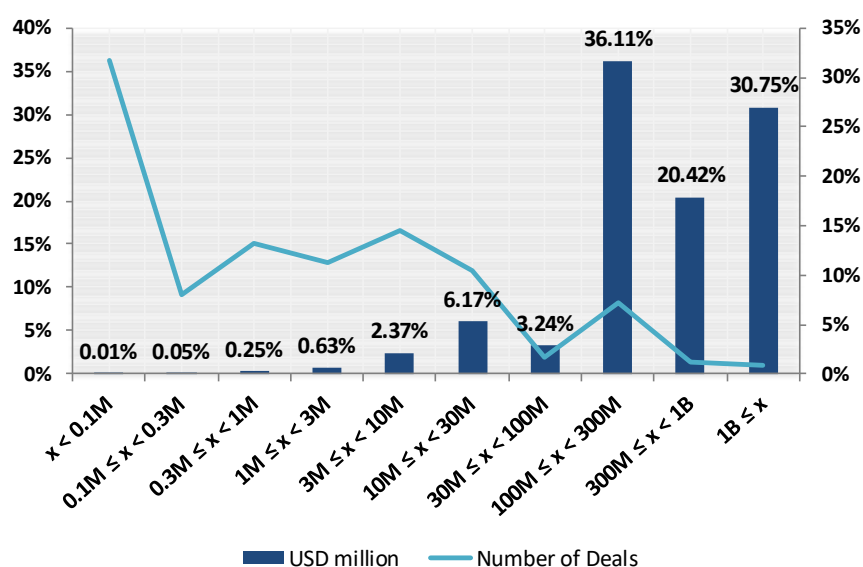


Source: AVCJ - Asian Venture Capital Journal.

The fastest growing sectors in Thailand are the hospitality (restaurants and hotels) and healthcare sectors, whilst a large share of transaction activity is concentrated in the software and IT services sector. Most activity seems to be directed towards very young firms – in a sample of 230 PE/VC transactions over the period 2010-H1 2019, a third of transactions took place in SMEs' first two years of operation (Figure 4.34). Most transactions are initial investments, and only 17% of transactions in this sample were follow-on investments in companies that had already received a first round of seed capital. Similar to most AMS, most transactions are equity injections smaller or equal to USD 100 000, whilst overall funding committed (in absolute terms) falls within the USD 100-300 million bracket (Figure 4.33).

Figure 4.33. PE/VC deal size distribution in Thailand

In percentages for each deal size bracket (LHS) and in % of total deals (RHS)

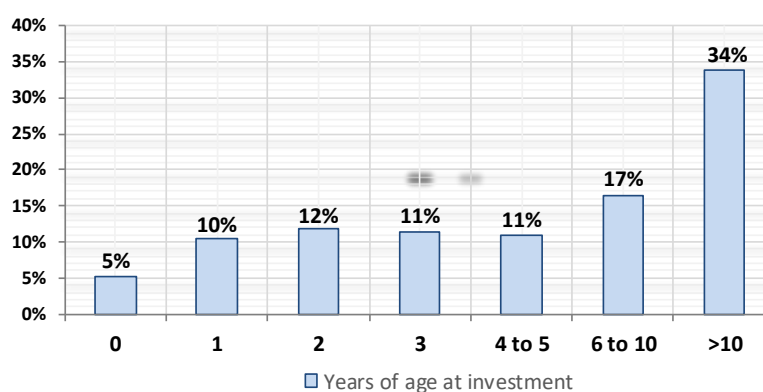


Note: Based on 230 transactions that took place in Thailand over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.34. PE/VC investment by company age at the time of the investment in Thailand

In percentages for each company age



Note: Based on 230 transactions that took place in Thailand over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Thailand benefits from a low corporate income tax rate relative to the region. The corporate income tax rate stood at 20% at the end of 2018, representing the second-lowest rate in Southeast Asia, while its VAT rate at 7% is lower than that of most AMS (Ernst and Young, 2018^[85]). Public sector authorities, such as the Board of Investment of Thailand and the Industrial Estate Authority of Thailand, have been established by the government, with the aim to promote investment in the country and provide incentive to local and foreign investors wishing to invest in the country.

The Government's "Thailand 4.0 policy" initiative aims to transform Thailand into a digital economy, inter alia by building technology and innovation capacity in the labour force. Thailand 4.0 introduces policies that support startups development at all stages and aims to push Thailand towards becoming a 'Centre of Connectivity and Destination for Startup Investment in ASEAN' by encouraging competition for business ideas, providing clear and strong incentives to angel and venture investors, undertaking policies to support incubation and growth of startups and establishing stock exchanges for startups to sell the equity of successful startups to interested investors (Bonggot Anuroj, 2019^[86]).

In the context of Thailand Board of Investment's policy, a number of tax incentives are provided to all investors in targeted industries ("sector-based incentives") or in sectors related to core technologies and R&D projects ("technology-based incentives") (Bonggot Anuroj, 2019^[86]).

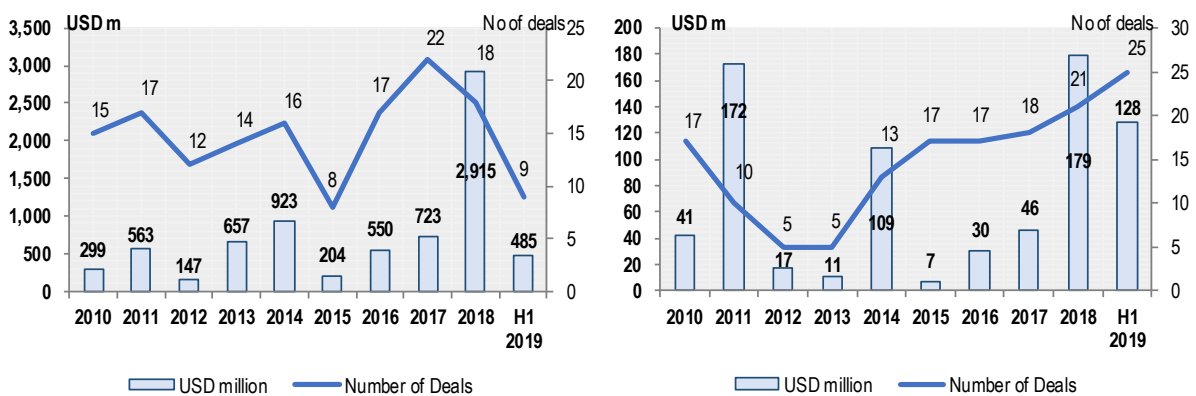
Viet Nam

PE/VC investment in Viet Nam has recorded a pattern of consistent growth and the country is becoming, together with the Philippines, an attractive market for PE/VC investment.

In 2018, aggregate PE and VC activity increased more than threefold to over USD 3 billion, although the number of deals remained constant, suggesting that the absolute growth in funds invested is driven by few large-sized deals/outliers (Figure 4.35).

Figure 4.35. PE and VC investment in Viet Nam, 2010-H1 2019

PE investment (LHS) and VC Investment (RHS) in USD million and in number of deals



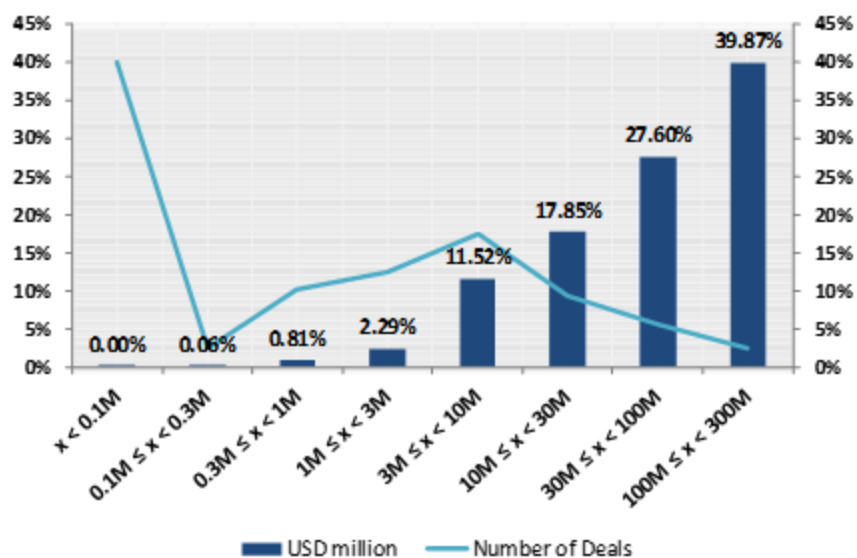
Source: AVCJ - Asian Venture Capital Journal.

Viet Nam and Indonesia are seeing increasing deal traction with sizeable investments from SWF and bulge bracket PE, including the Government of Singapore Investment Corporation, Warburg Pincus LLC, Kohlberg Kravis Roberts & Co. Inc. and Texas Pacific Group Capital, among others (Ernst and Young, 2019^[55]). For example, Viet Nam-based companies Techcombank (financial services) and Vinhomes JSC (luxury home developer) raised US\$0.9b each as pre-IPO funding from sovereign wealth fund (SWF) and leading PE.

Most of the activity seems to be concentrated in the range of USD 30 – 300 m, based on a sample of publicly-announced transactions over the period 2010-H1 2011 (Figure 4.36). Funding is most commonly received by SMEs in their first three years of operation (Figure 4.37), and in terms of type of financing, acquisition financing and VC equity investments appear most common, based on the sample analysed.

Figure 4.36. PE/VC deal size distribution in Viet Nam

In percentages for each deal size bracket (LHS) and in % of total deals (RHS)

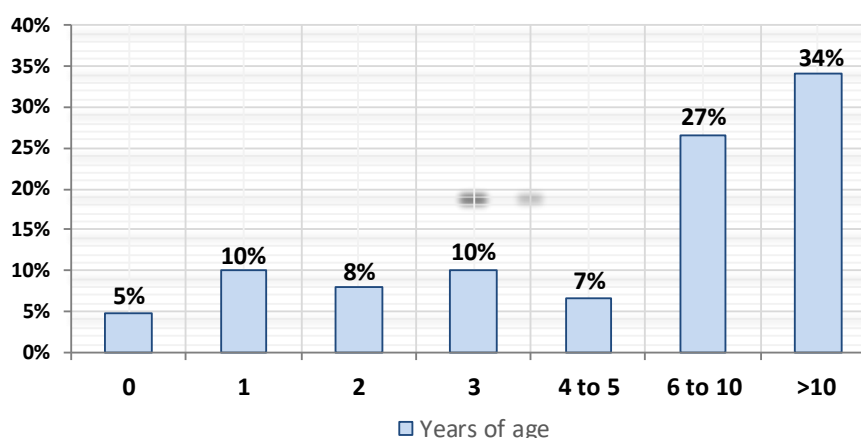


Note: Based on 247 transactions that took place in Viet Nam over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Figure 4.37. PE/VC investment by company age at the time of the investment in Viet Nam

In percentages for each company age



Note: Based on 247 transactions that took place in Viet Nam over the period 2010-H1 2019.

Source: OECD calculations, based on data by Thomson Reuters Eikon.

Although the PE/VC sector of Viet Nam is still small and volatile, a vibrant ecosystem is starting to develop and the market is picking up, in part thanks to official sector support. The involvement of the government has been indirect, with programmes aiming at developing the market and building an ecosystem for PE/VC investment that improves investment readiness for SMEs and startups. Examples of such programmes include MLAB East Asia and the Innovation Partnership Programme, as well as the establishment of accelerators and incubators such as the Viet Nam Silicon Valley accelerator, Expara, .egg, HTP, 5Desire and Hatch! Ventures.

Investment in Viet Nam has been held back by a number of restrictions concerning foreign ownership in local companies, whilst foreign investment in some sectors was conditional to approval by relevant government ministries (Allens and Linklaters, 2017^[87]). In 2014, the Investment and Enterprise Laws of Viet Nam were amended to create more favourable conditions for investment, mergers and acquisitions, thus facilitating PE/VC investment in the country. In 2015, the Decree No 60/2015/ND-CP lifted a 49% cap on foreign ownership in listed companies, opening up more exit opportunities for PE/VC investors (Investment and Trade Promotion Center Ho Chi Minh City, 2015^[88]). In the absence of deep financial markets in Viet Nam, trade sales and secondary sales to foreign strategic investors is the preferred exit route for PE/VC investors.

In addition, certain investment incentives were introduced in the form of lower corporate income tax, or exemption from import duties and land-related taxes.

In terms of support on the demand-side, the government of Viet Nam announced a programme of legal and financial support for startups in 2016, through its accelerator, Viet Nam Silicon Valley. The programme aimed to reach 2,600 startups over a 10-year period (Vietnam Silicon Valley, n.d.^[89]).

Private Equity, Venture Capital and Business Angel Financing for SMEs: High level policy implications for AMS

Investor interest and involvement in AMS has been growing over the past decade, as funds seek to benefit from the region's growth prospects. This interest notwithstanding, it is important to note that the region's PE/VC industry is characterised by rather volatile and uneven capital flows. There is room for AMS policymakers to foster a consistent flow of capital, and create the necessary conditions for PE/VC investment to become a more consistent source of funding for SMEs in these markets. This will depend to a large extent on the underlying investment environment and on investor confidence.

Follow-on investments are not frequent in AMS, as most of the transactions involve primary financing of companies. Therefore, emphasis should be placed on understanding whether this trend is due to the absence of opportunities/deal flow or to an unsatisfactory performance of primary investments, and in boosting follow-on funding.

Institutional transparency, regulatory and legal clarity, solid investor protection and corporate governance are all pre-requisites for stability and encourage both the establishment of new companies as well as investors to fund them. A 2013 investor survey revealed that 41% of respondents regard legal and regulatory frameworks as the biggest challenge for doing business in Southeast Asian countries, with the exception of Singapore (Prequin and SVCA, 2014^[90]). Policymakers could therefore strive to strengthen legal, regulatory and institutional frameworks, in order to promote market integrity and enhance market appeal for PE/VC and other investors.

Specifically, conducive environments, robust business infrastructure and a healthy ecosystem, including a skilled workforce, provide the basis for healthy deal flow and a safe environment for investors to allocate their capital. Such conditions have proved to be beneficial in the case of Singapore, and should be pursued by all AMS policymakers.

One of the biggest hurdles for PE/VC investment is a relative lack of good exits for PE/VC investors. The existence of deep and liquid public equity markets and exchange platforms can facilitate such exits. This demonstrates the importance of having a well-diversified financing environment for SMEs, as well as the strong links and interconnections that exist between different forms of SME financing (Nassr and Wehinger, 2014^[91]).

As such, AMS policymakers should make a conscious effort to support and promote different types of SME financing mechanisms simultaneously. This should be done with a view to promoting the expansion of a broader ecosystem for SME financing, which would also increase the range of exit options available.

Government participation in the PE/VC funding ecosystem should be carefully designed and calibrated, to avoid over-reliance of the industry on government funding, which leads to market distortions and the crowding out of private players. Instead, government participation has to play a catalytic role. This could be achieved, for instance, through conditional co-investment schemes and participation in fund of funds, instead of solely direct investment. The European Investment Group has many good examples of such public investment practices (European Investment Bank, 2019^[92]).

Attractive tax structures for funds, tax exemptions and other tax benefits are perhaps the most commonly used policy tool in the area of PE/VC financing. Tax reliefs provide a simple and straightforward way to incentivise investment in SMEs, and are used in many OECD economies as a quick and efficient way to induce participation in PE/VC markets. The Enterprise Investment Scheme and the Seed Enterprise Investment Scheme in the UK are two prominent examples of tax relief schemes designed to help small companies raise funds to grow their business (HM Revenue & Customs, 2016^[93]).

Tax incentives are also granted to venture capital investors. This can be seen in a number of AMS such as Malaysia, where a comprehensive tax exemption framework has been developed. Under this framework, VC companies that invest significantly in seed or early-stage SMEs can enjoy tax breaks on their income. Policymakers should ensure that granted tax benefits are easy to claim and that there is no administrative burden, red tape or unnecessary delays to have these claims approved. The effectiveness of tax incentive frameworks is reduced if the claim takes a long time and many bureaucratic procedures to process. This could be particularly disincentivising for PE/VC investors, who tend to be more constrained by time than money.

While it is generally agreed that a bias exists in the tax treatment of debt versus equity (tax deductibility of interest across the board), views differ over the effectiveness of tax breaks (and, for that matter, regulatory support) as a means to resolve the issue of suboptimal investment in SME equities in the long run. This is because they often do not address the structural cost disadvantages of small-sized deals, and might create vested interests, by providing benefits that go directly to the beneficiaries' profits (Nassr and Wehinger, 2016^[49]). That said, the effectiveness of tax incentives in boosting investor participation in specific parts of the private risk capital market, such as seed and early stage VC, is undisputed. As such, policy interventions involving fiscal benefits require backing by studies investigating whether and to what extent tax breaks are effective and what is the additionality effect of such policies when it comes to SME investment. Given the above, tax incentives may be primarily used by countries with nascent PE/VC markets in order to spearhead investment and create the necessary conditions for investment to flow without fiscal intervention. Evaluation studies analysing such interventions allow policymakers to draw valuable conclusions about the design and effectiveness of such incentives.

Proportionality in the regulatory regime applying to funds and fund managers is another way for regulators to incentivise VC investors to establish operations and commit more funding in ASEAN countries. Examples of proportionality include simplified registration regimes for small VC fund managers, proportional to risks posed by their business model and size, and other measures that can allow them to reduce their administrative costs whilst improving their operating environment and performance.

Importantly, the right balance needs to be struck between lowering the regulatory burden of small funds whilst safeguarding market integrity and investor protection. This was the case in Singapore, where MAS' simplified regime includes reduced capital requirements for fund managers yet maintains strict anti-money laundering and fitness and propriety checks, which match those of any other fund.

Human capital and the availability of talent is another crucial factor for a thriving PE/VC market and policymakers are encouraged to foster capabilities and know-how in sectors with increased investor appetite, such as digital technologies (including FinTech). This is also the case in Southeast Asia, where the technology sector typically receives the most interest from investors, and where SMEs have strong potential to disrupt entire industries with new business models driven by digital technologies.

AMS have showcased strength in the digital and technology sectors, and a stronger emphasis on digital skills and information technologies could further promote the expansion of such sectors. This, in turn, would likely translate into a larger pipeline of potential deals for PE/VC investors. Example of policy initiatives that could help to kick-start a local entrepreneurial environment around high-tech services and products is the Technopreneurship Programme in Singapore. This programme was launched in 1999 and aims to encourage high-technology entrepreneurship, with an attached fund of SGD 1 billion (Sachin Chaturvedi, n.d.^[94]).

In Southeast Asia's more nascent markets, one can observe that smaller PE/VC players may demonstrate more limited experience. This is likely to correct over time – corporate understanding and transaction experience tends to naturally develop as the market matures.

Policymakers can help to strengthen financial education, in this case through schemes to enhance the know-how of entrepreneurs in young firms that have growth potential but untested business models or track records (Atkinson, 2017^[51]). Financial education can help to prepare SMEs, by equipping them with the skills and practice required to approach and communicate effectively with PE/VC investors. Such schemes can include the development of know-how to market projects, understand the modalities and process of equity participation, prepare business plans and financial records, negotiate terms, and structure private participation and financing, in a way that also serves their best interest.

5. Specialised SME exchanges

Structure and characteristics

Modalities

In this method of financing, an SME issues shares on a public market in return for capital from investors. Details of the Initial Public Offering (IPO) are disclosed to potential investors in the form of a prospectus. Intermediaries, most notably investment banks, are often involved, performing due diligence, underwriting, marketing of the transaction, book building, pricing, and finding potential investors. Once listed, the company is required to disclose information, and comply with the rules and regulation of the exchange, under which trading of shares takes place (OECD, 2018^[95]).

SME trading platforms can take the form of a separate board within an established exchange market or of a separate market. The latter approach is more commonly adopted in more developed platforms, such as the Alternative Investment Market (AIM) on the London Stock Exchange, or TSX-V in Canada.

Traditionally, SME vehicles serve as a “junior market” or possible point of entry to the main market, whereby entrants move to the main market once they meet the necessary requirements (OECD, 2015^[3]). In Thailand, for instance, fifteen firms graduated from the junior market (MAI) to the main market over the 2007-15 period, marking it as a case in point of a successful “preparatory venue” (Schellhase and Woodsome, 2017^[96]).

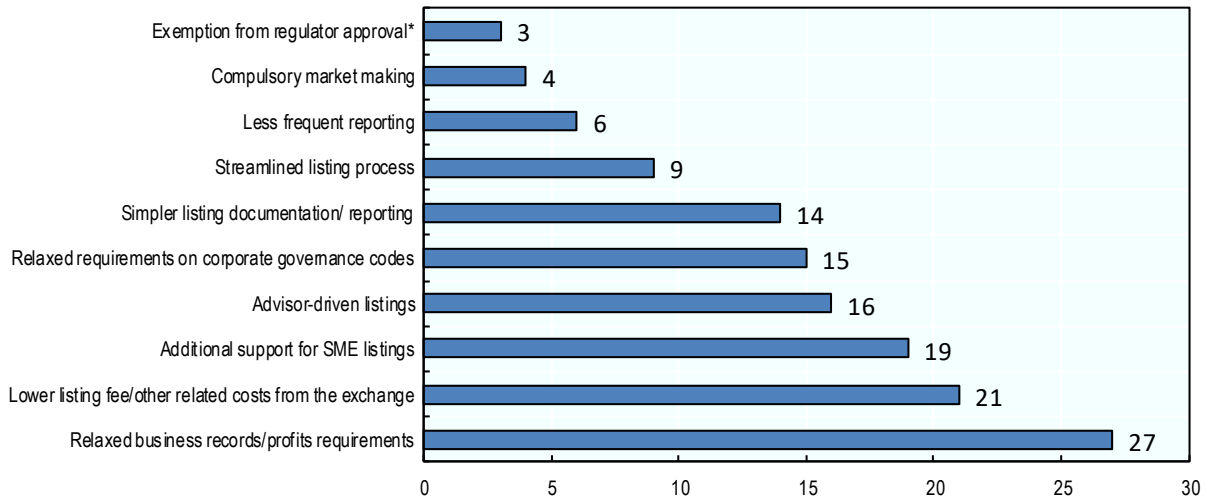
It should be noted that companies on these alternative markets are not necessarily SMEs, and conversely that some SMEs are listed on the main market. Nonetheless, activities on these markets provide a reasonable estimate of SMEs’ recourse to public equity (WFE, 2017^[97]).

Compared to the main market, specialised platforms for SMEs tend to offer less stringent listing requirements. Figure 5.1 provides an overview of how these platforms differ from the main market in terms of their listing requirements. Of the 34 platforms around the world for which data are available, 27 have more relaxed business record and/or profits requirements.

A majority of platforms provide lower listing fees (or other related costs) and/or offer additional support that is not available on the main exchange. Almost half of the surveyed exchanges require simpler listing documentation or reporting, looser requirements on corporate governance codes or focus on advisory services. Other ways of facilitating the listing of smaller firms, such as reducing the frequency of reporting or streamlining the listing process, are more uncommon (see Figure 5.1).

Figure 5.1. Most common differentiated listing requirements for SMEs

All regions



Source: World Federation of Exchanges, OECD calculations.

Profile of firms and enabling factors

Listings on public stock exchanges constitute another means of attracting external sources of finance and are especially relevant for larger SMEs. Specialised exchanges can be particularly useful for fast-growing and innovative SMEs. This subcategory of companies often progresses through the business life cycle, from startups through to the expansion phases. For this group of SMEs, exchanges serve as a source of capital in the later stages. They also serve as “exit vehicles” for successful SMEs at the end of the cycle.

For example, an entrepreneur with an idea for a new product would first obtain funding from “family and friends” before going through several rounds of venture financing. At the end of the cycle, all the parties involved realise gains through an IPO.

Many junior stock markets (also known as second-tier stock markets) are modelled on NASDAQ in the United States and AIM in the United Kingdom. They act both as screening devices until firms are eligible for the main market, and as providers of opportunities for venture capitalists wishing to divest (exit) (Granier, Revest and Sapio, 2019^[98]).

While accessing finance from external investors represents the prime reason for SMEs to become listed, other factors often play a role, too, according to a recent large-scale survey. Improved creditworthiness and the possibility of gaining access to other sources of finance, such as straight debt, are stated by almost one half and one fourth of surveyed SMEs, respectively. In addition, non-monetary factors such as brand recognition and more visibility are also commonly stated (World Federation of Exchanges & Milken Institute, 2017^[99]).

Becoming listed may increase the prestige and profile of the firm for employees, investors, suppliers and other stakeholders. Enhancing SME access to capital markets also aims to reduce dependence on bank finance and increase the diversity of financing sources. Crucially, it allows existing shareholders to exit their investment, which is especially important for early stage external investors such as business angels and venture capital investments that value liquidity and exit options (WFE, 2017^[97]).

A consultation process targeting market practitioners conducted by the European Commission puts a spotlight on the main barriers on both the demand and supply side of the market. The low number of

companies wanting to tap public equity was perceived as a very important or important factor to explain the low level of activities on European SME markets by a majority of respondents. The high compliance costs were singled out as the main reason for the reluctance of SMEs to become listed. In addition, many SMEs lack awareness about the potential public equity markets of a source of finance and knowledge about the process.

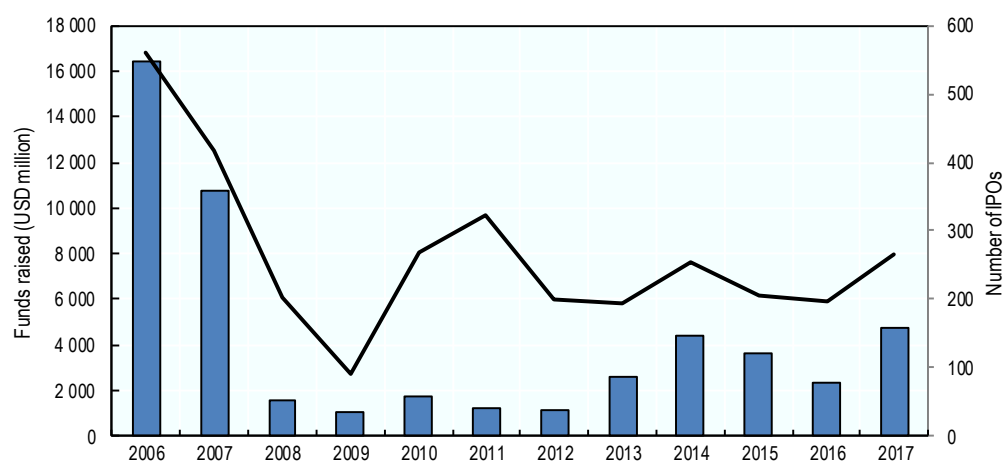
On the supply side, investors face monitoring costs that may appear disproportionate to the level of their investment, as well as with (very) limited liquidity. These two factors were identified as prime reasons explaining the lack of appetite from investors (both retail and institutional) by the same consultation exercise (European Commission, 2018_[100]).

A recent survey among listed SMEs, investors and market intermediaries across the globe confirms many of these hurdles (Nassr and Wehinger, 2015_[101]). Compliance with listing requirements, although often less onerous than for large firms, is seen as time-consuming and expensive, while the lack of scale and liquidity of secondary markets are mentioned by all surveyed parties (World Federation of Exchanges & Milken Institute, 2017_[99]). Unwillingness to comply with transparency requirements and reluctance to give away partial ownership and control also play a role.

Global trends

Following the financial crisis, IPO activities and the number of listed firms were on the decline in both Europe and the United States (Nassr and Wehinger, 2015_[101]). Figure 5.2, for instance, highlights the strong decline in both the amount raised and number of IPOs on junior stock exchanges in the European Union in a long-term perspective. While activities have picked up since 2012, they remained well below pre-crisis levels in 2017.

Figure 5.2. Number of IPOs and funds raised (EUR million) on EU junior exchanges



Source: European Commission.

At the same time, there has been a shift in public equity issuance from OECD countries to non-OECD countries over the same period, with many exchanges in emerging markets establishing an SME board (Nassr and Wehinger, 2015_[101]). China, a major contributor to the number of listed companies outside of OECD countries, introduced Chinext on the Shenzhen Stock Exchange, a platform for high-tech SMEs, in 2009. In June 2015, 465 companies were listed, while the pre-existing SME board, mainly catering to industrial small and midcaps, also strongly expanded between 2009 and 2015 (Harwood and Konidaris, 2015_[102]).

The table below provides a non-exhaustive overview of specialised vehicles for SMEs on stock exchanges, which typically require less onerous information and due diligence. In several cases, there is more than one SME market in a country, and a few SME markets span more than one country. The table illustrates a wide variation in the average market capitalisation of listed SMEs across countries, from USD 10 million in Greece to more than USD 1 billion at the ChiNext vehicle of the Shenzhen stock exchange.

Table 5.1. SME markets on stock exchanges, 2018

	Exchange	Name of the Market	Domestic market cap (USD millions)	% change 2017/2018	Number of listed companies	% change 2017/2018
BEL, FRA, NLD, PRT, GRB	Euronext	Euronext Growth	11 696	-0.23	206	0.05
CAN	TMX Group	TSX Venture	33 312	-0.19	1974	0.00
CHN	Hong Kong Exchanges and Clearing	Growth Enterprise Market	23 774	-0.34	389	0.20
DEN, EST, FIN, LVA, SWE	Nasdaq Nordic Exchanges	First North	17 826	0.05	348	0.34
GRC	Athens Stock Exchange	ATHEX Alternative Market (EN.A)	123	-0.02	12	0.00
IRL	Irish Stock Exchange	Enterprise Securities Market	5 992	-0.10	24	0.09
JPN	Japan Exchange Group	JASDAQ	75 693	-0.25	726	-0.03
JPN	Japan Exchange Group	Mothers	45 449	-0.03	276	0.11
KOR	Korea Exchange	Kosdaq	204 701	-0.23	1279	0.05
LUX	Luxembourg Stock Exchange	Euro MTF	1 735	-0.32	125	0.00
MYS	Bursa Malaysia	ACE Market	2 825	-0.21	119	0.03
MYS	Bursa Malaysia	LEAP Market	223	3.24	13	5.50
NZL	NZX Limited	NZAX	188	-0.37	13	-0.19
NZL	NZX Limited	NXT	46	-0.42	2	-0.33
NOR	Oslo Stock Exchange	Oslo Axess	631	-0.66	17	-0.29
POL	Warsaw Stock Exchange	NEWCONNECT	1 969	-0.29	387	-0.05
RUS	Moscow Exchange	Innovations and Investments Market	5 197	-0.13	10	0.00
ZAF	Johannesburg Stock Exchange	Alternative Exchange	1 427	-0.15	46	0.18
ESP	BME Spanish Exchanges	MAB Expansion	13 403	0.16	105	0.19
THA	The Stock Exchange of Thailand	Market for Alternative Investment (mai)	7 368	-0.27	159	0.06
TUR	Borsa Istanbul	BIST Emerging Companies	189	-0.83	17	0.00
TUR	Borsa Istanbul	Watchlist	153	-0.49	27	-0.13
GBR	LSE Group	AIM	124 109	..	1036	-0.02

Note: This table excludes exchanges that are not member of the World Federation of Exchanges.

Source: OECD, Financing SMEs and Entrepreneurs 2020 (forthcoming), (World Federation of Exchanges, 2018_[103]).

SME segments remain quite small in most countries, representing only a very small fraction of the capitalisation of the overall stock exchange, with the exception of Ireland, Korea and Japan. For 14 out of

24 stock exchanges, the market capitalisation of SME listings stood at less than 1% of overall capitalisation in 2016 (World Federation of Exchanges & Milken Institute, 2017^[99]).

Policies to support the development of SME markets

Two main factors have pushed policymakers around the world to encourage listings and junior stock market activity for SMEs. The first is that expanding access to capital markets can have positive spill-over effects on the wider economy, especially in light of innovative SMEs' contribution to employment. The second reason is that few SMEs would become listed in the absence of government involvement because due diligence and other costs are high in proportion to the small ticket size of SME investments. Policy support may enable SME boards on stock exchanges to reach critical mass to attract enough interest from firms and investors and guarantee a sufficient liquidity (Schellhase, 2017^[104]).

Many jurisdictions have introduced proportionate legislation designed for midcaps and small firms, especially by adapting prospectus requirements. A crucial caveat is that these adapted requirements should not erode investor protection, and listed firms are typically still required to provide ample and high-quality information (Nassr and Wehinger, 2016^[49]).

In addition, exchanges increasingly engage in market outreach to potential businesses and dedicated support to increase the attractiveness of being listed (WFE, 2018^[105]). The European Union, for example, has been particularly active in promoting SMEs' access to capital markets, as well as in promoting cross-border investments (see Box 5.1).

Moreover, recent research on Southeast Asia has shown that the domestic financial development (e.g. the development of domestic capital markets) that has taken place in emerging economies since the global financial crisis has benefited smaller businesses more than larger businesses. The study also shows that domestic markets have played a strong role in the region and have complemented international markets (Abraham, Cortina and Schmukler, 2019^[106]). Crucially, domestic capital markets often open access to relatively smaller firms (Abraham, Cortina and Schmukler, 2019^[106]).

Box 5.1. SME access to capital markets in the context of the European Union's capital markets union (CMU)

Junior stock markets in continental Europe were originally modelled on NASDAQ as part of the Euro New Markets alliance in the late 1980s (Granier, Revest and Sapio, 2019^[98]). They were conceived mostly as means of exit for venture capitalists wishing to “cash out”. Following the dot-com bubble in the early 2000s, most of these markets were closed down. Since then, markets have re-opened under different names, and in the context of a strong push from the European Commission (as part of its capital markets union agenda), these markets have expanded and listing requirements have become more accommodating for SMEs in order to enhance their access to capital (Granier, Revest and Sapio, 2019^[98]). Recent developments in the EU since the Markets in Financial Instruments Directive – MiFID I (2004) and II (2014) – include the Prospectus Regulation (2017), which introduced less stringent regulation for instruments issued by SMEs (European Parliament, 2019^[107]). The results of a public consultation, published in May 2018, pointed towards three directions for future legislative action on this issue (European Parliament, 2019^[107]):

- “reduce the administrative burden and the high compliance costs faced by SME growth market issuers while ensuring a high level of market integrity and investor protection”
- “foster the liquidity of publicly listed SME shares to make these markets more attractive for investors, issuers and intermediaries”
- “facilitate the registration of multilateral trading facilities as SME growth markets”

A political agreement between member states and the Parliament was reached in April 2019 on future technical amendments to the Market Abuse Regulation and to the Prospectus Regulation. The text remained to be adopted by the Council and the European Parliament as of August 2019 (European Commission, 2019[108])

In some countries, the new market and the government provide services aimed at nurturing young enterprises that are already listed or will be listed on the market. This include promoting institutional investment, boosting the visibility of listed firms and raising public awareness of alternative investments (Yoo, 2007^[107]). The provision of business development services and assistance to eligible firms throughout the listing process represents a crucial success factor for SME boards around the world. AIM London was the first exchange to consistently work with Nominated Advisors (Nomads) and this model has been widely adopted.

These advisors are typically granted a license by the exchange or regulator. The possibility to revoke the license is crucial for investor confidence and market credibility. Box 5.2 provides more information on the approach adopted by NewConnect, the SME board on the Warsaw stock exchange. Similar models have been adopted by other stock exchanges, including in emerging markets. An example is AltX, the alternative public equity exchange for small and medium-sized companies in South Africa or by ECM, the SME platform of the Borsa İstanbul (Harwood and Konidaris, 2015^[102]).

Box 5.2. SME board advisory services and outreach: NewConnect

The role of advisors is considered as a key factor to the success of NewConnect the SME board on the Warsaw stock exchange, established in 2007. The advisors are deemed crucial to ensure regulatory compliance by issuers and reduce information asymmetries between investors and issuers. After some mixed experiences in the early years following the establishment of NewConnect, the platform tightened its disclosure obligations and requirements to ensure entry of high-quality and well-prepared firms.

Advisors are currently licensed by the Warsaw Stock Exchange and assessed annually, mainly on the basis of their activity report. They must be able to demonstrate that they have supported companies with the various listing requirements and accompany the SME for a period of three years after becoming listed. In addition, they help develop the market and participate in promotion, education and outreach events. Finally, they can be removed from the registry if they breach rules and regulations, if they are poorly assessed by the accompanied SMEs, or if they have supported too many unsuccessful businesses.

Poland's NewConnect was at one point one of the most aggressive IPO hunters among European exchanges. In 2011 alone, it had 172 new listings, thereby doubling the number of companies listed on the board in a single year. However, this successful outreach campaign and rush to expand created problems in listing quality. In response, the exchange tightened listing requirements, which, in turn, resulted in a decreased flow of IPOs.

Source: (Harwood and Konidaris, 2015^[102]), (Schellhase and Woodsome, 2017^[108]).

The provision of tax incentives provides another avenue to spur the market. These can be directed either to investors, thereby broadening and enlarging the investor base, or directed to SMEs, encouraging them to go public and offsetting the relatively high costs involved in public equity.

India is an example of the former approach, providing a long-term capital gains tax exemption and a short-term capital gains tax reduction from 30% to 15% for investors on its SME board. Cambodia represents a

case in point for the latter approach, halving the corporate income tax from 20% to 10% for SMEs in the first three years following an initial public offering (IPO). Such incentives appear especially potent to kick-start SME vehicles on public exchanges in order to reach sufficient scale and liquidity, and may be phased out as the market reaches maturity and self-sufficiency (Schellhase, 2017^[104]).

Finally, some countries have introduced a tax deductibility of notional interest paid on equity, so as to level the playing field on the tax treatment of debt and equity financing, which likely benefit SME listing activities, among other equity instruments. Belgium, Italy and Turkey, for instance, have introduced notional interest deduction schemes. Views differ regarding the usefulness of these measures, and tax incentives more generally, to develop equity markets for SMEs. It is therefore crucial to assess and evaluate its impact and cost-efficiency and modify the schemes accordingly. (Boschmans and Pissareva, 2018^[42]).

Developments in ASEAN members states

A specialised exchange for SMEs has been put in place in six out of ten ASEAN countries. Table 5.2. shows basic indicators for these exchanges, which vary greatly in size and maturity. While SGX Catalyst in Singapore and the Market for Alternative Investments (mai) in Thailand have managed to reach scale, other SME markets in ASEAN have attracted only a limited number of SMEs so far.

Table 5.2. Alternative listings on ASEAN stock exchanges and SME boards

Country	Exchange	Name of the market/board	Market capitalisation (USD million)			Number of listings		
			2018	2017	% change	2018	2017	% change
Cambodia	Cambodia Stock exchange	Growth Board	..	..	..	..	..	..
Indonesia	Indonesia Stock Exchange (IDX)	Acceleration board	..	..	..	..	..	..
Malaysia	Bursa Malaysia	LEAP Market	223	52	324.34	13	2	550
Philippines	Philippines Stock Exchange	SME Board	..	..	..	4	..	..
Singapore	Singapore Stock Exchange (SGX)	Catalist	7 716	..	..	214	201	6.47
Thailand	The Stock Exchange of Thailand	Market for Alternative Investment (mai)	7 368	10 140	-27.33	159	150	6
Viet Nam	Hanoi Stock Exchange	Unlisted Public Company market	38 649	..	..	250	271	-7.75

Source: World Federation of Exchanges and exchanges with country experts. Indonesia's Acceleration Board was launched in 2019.

Brunei Darussalam

Significant efforts have been underway with regards to the establishment of a securities exchange project in Brunei Darussalam with the support of Ministry of Finance and Economy (MoFE) and the Autoriti Monetari Brunei Darussalam (AMBD). This project is expected to create possible opportunities for public companies to raise capital and expand their businesses.

Cambodia

CSX's *Growth Board* was launched in 2015. It involves a reduced listing eligibility examination fee, a reduced listing fee, and a reduced annual fee, with the general aim of attracting more SMEs. Reliable data

on market capitalisations and listings is difficult to access, but the board is still in its early phases. Awareness of public listings and its advantages seem to be low among Cambodian SMEs.

Indonesia

In Indonesia, a new listing regulation became effective on 22 July 2019. This new listing regulation (Listing Rule No. I-V) is specifically intended to accommodate SME listings through a new board on Indonesia's stock exchange (IDX), called "Acceleration Board".

In 2017, new regulations were put in place to facilitate the raising of funds on capital markets by SMEs. Under IFSA rule N° 53/POJK/2047 and IFSA Rule N° 54/POJK.04/2017, a company with up to IDR 50 billion (c. USD 3.6 million) in assets can raise up to IDR 50 billion (c. USD 3.6 million), applying ETAP financial accounting standards (*Entitas Tanpa Akuntabilitas Publik*). These standards are less demanding than PSAK - *Pernyataan Standar Akuntansi Keuangan*. A company with assets between IDR 50 billion (c. USD 3.6 million) and IDR 250 billion (c. USD 18 million) can raise up to IDR 250 billion (c. USD 18 million), applying full PSAK accounting standards. The latter will have a Good Corporate Governance transition of 6 months, against 12 months for the former.

In addition, IDX created IDX Incubator, in collaboration with selected state-owned enterprises, such as Bank Mandiri, which leases the office space, and Telekomunikasi Indonesia, which provides the internet infrastructure. Twenty-five companies were accepted in the first round of the programme, mostly from digital and technology-related fields.

Priority targets are companies that have reached the stage of prototype development. Business ideas with a strong social impact, such as new approaches to microfinance, are also sought after. One of the goals of the programme is that at least one of the supported companies go public on the national stock exchange.

The programme provides office space, mentorship, training in accounting and corporate law, as well as opportunities to meet with investors. It runs for six months, after which participants are introduced to potential investors. If the current programme in Jakarta proves successful, IDX aims to launch similar incubators in other major cities such as Bandung, Medan, and Surabaya.

In 2018, IDX hosted 23 participants, active in the following sectors, with sectors of activity breaking down as follows: Fintech (7), e-commerce (5), lifestyle (3), Internet of Things (IoT) (3), news and media (2), Software as a Service (SaaS) (1). At a later stage, IDX may consider making this programme evolve into a sort of accelerator targeting established growth-oriented SMEs. Indeed, these are typically closer to the IPO stage than newly-created companies.

Lao PDR

The Laos Securities Exchange (LSX) was established in 2011. There is currently no information on policies around public equity for SMEs in the country.

Malaysia

In Malaysia, SMEs can be listed on the Leading Entrepreneur Accelerator Platform Market (LEAP Market) of Bursa Malaysia, which was launched in July 2017. Access to the LEAP market is restricted to sophisticated investors, i.e. entities with total net assets exceeding MYR 10 million, or individuals whose net personal assets exceed MYR 3 million (c. USD 728 846) or whose gross annual income exceed MYR 300 000 (c. USD 72 885). SME Corp Malaysia and Bursa Malaysia work jointly to identify SMEs which may benefit from listing. As of December 2018, 13 companies were listed on the LEAP market.

Myanmar

The Yangon Stock Exchange, founded in 2016, has managed to attract a limited number of firms. There is currently no information on policies around public equity for SMEs in the country.

The Philippines

The Philippines Stock Exchange (PSE) launched an SME Board in 2001, which has attracted a limited number of SMEs so far. Only four companies were listed as of December 2018, despite a series of initiatives led by the Exchange.

In order to encourage them to list on the SME Board, in 2015, PSE and the state-owned Development Bank of the Philippines (DBP) organised a listing forum for SMEs entitled “*Beyond Capital Raising, A Step Toward Global Competitiveness*”.

Topics included initial public offering requirements and processes, IPO experience of a listed company, advocacy for SME development and an introduction to public equity. Speakers included experts from PSE, DBP, the Securities and Exchange Commission, and industry experts. Around one hundred SMEs attended the forum.

In 2017, PSE pursued its efforts to develop the SME Board by partnering with organisations like the Philippine Chamber of Commerce and Industry, the Philippine Franchise Association, and GoNegosyo, to better identify companies that qualify for listing on the SME Board. In parallel, PSE engaged in a "hand-holding" program for SMEs to help them with the procedures and requirements for public listing.

Singapore

While its market capitalisation is slightly lower than that of the MAI, at SGD 10 534 million (c. USD 7 716 million), Singapore's Catalist totals a higher number of listed companies (214). While resident companies accounted for SGD 7 903 million of market capitalisation, overseas companies (excluding China) accounted for SGD 2 205 million and China for SGD 426 million. Overall, overseas companies including China account for 25% of market capitalisation on SGX Catalist.

Thailand

The oldest SME Board, the Market for Alternative Investments (MAI) of the Stock Exchange of Thailand (SET), has also been the most successful so far. As of December 2018, it counted 159 companies listed, for a total market capitalisation of THB 240 816 million (c. USD 7 800 million).

This results notably from very active support to SMEs from the moment they are interested in listing but also after the listing has taken place. MAI's new listing department supports SMEs wishing to be listed. Once listing has occurred, SMEs are supported by the Listed Company Development department, which encourages sustainable growth of the firms. Firms are also encouraged to raise funds using appropriate financial instruments and the Department aims at fostering collaboration between MAI listed companies through MAIA – the MAI listed companies association.

The Board's success also results from SET's active involvement in educational activities for entrepreneurs. Throughout the year, entrepreneurs can attend the STARTUP Evening Class@SET. Over 1 300 entrepreneurs have attended this class so far. Furthermore, Innovative Startup@University is an educational training program carried out in cooperation with the National Science Technology and Innovation Policy Office, National Innovation Agency, and a network of universities, which aims at strengthening the foundation of the startup business ecosystem by providing educational opportunities to over 560 university faculty members from across the country.

SET has also disseminated knowledge via Money Channel, including the information included in the handbook “SET Your Startup Business Guide: Getting to know the Startup Business” available in both printed and digital formats.

Finally, SET also encouraged listed companies with corporate venture capital to invest in startup businesses through a dedicated network, comprising a forum for sharing information and discussing regulations and their amendments. These networking opportunities intend to open up opportunities for startups to gain access to listed companies and create alliances for future growth.

Viet Nam

Viet Nam has two stock exchanges: the Hanoi Stock Exchange (HNX) and Ho Chi Minh Stock Exchange (HOSE). As of the end of February 2016, Ho Chi Minh Stock Exchange had 311 listed companies with a market capitalisation of USD 50 billion. Hanoi Stock Exchange had 380 listed companies with a market capitalisation of USD 6.7 billion. Ho Chi Minh Stock Exchange and Hanoi Stock Exchange opened for trading in 2000 and 2005, respectively (OECD, 2018^[109]).

The State Securities Commission (SSC) under the Ministry of Finance is planning to merge the two stock exchanges into one. HOSE will be the stock exchange for large companies, while HNX is for SMEs. Another market for securities of unlisted public companies, namely the Unlisted Public Company Market (UPCoM), operated under HNX and opened in 2009, to regulate the over-the-counter shares and convertible bonds of unlisted public companies. This market is also not a dedicated SME market but an equity finance venue that SMEs can access. The UPCoM requires no listing fees (ADB/OECD, 2014^[110]). Newly public enterprises enter UPCoM to prepare for being officially listed on the two official markets, HNX and HOSE. Via UPCoM, the SSC aims to facilitate the transparency of company information and to help young public enterprises improve their company profile before being listed on HNX and/or HOSE. In 2017, HNX releases a categorisation of UPCoM enterprises by the size of capital. UPCoM Large refers to enterprises with capital of more than VND 1 000 billion, UPCoM Medium is for enterprises with capital of between VND 300 and 1 000 billion, and UPCoM Small is for enterprises with capital of between VND 10 and 300 billion. In August 2019, total UPCoM firms reach 850, with 39.6 billion shares worth USD 17 billion being put up for sale (Vietnamnews, 2019^[111]).

The UPCoM is a market recently established by the Ministry of Finance (MOF), the State Securities Commission (SSC) and the Hanoi Stock Exchange (HNX) to regulate “over the counter” shares and convertible bonds of unlisted public companies. The objective of the UPCoM is to establish a formal market for the trading of shares of listed companies and to narrow the informal “over-the-counter” market. The Government also aims at minimising the risks for investors related to frauds in information and payment, and at facilitating the trading of shares of unlisted companies.

Recently, a number of regulatory reforms have been introduced by the Government in support of the development and growth of the UPCoM, for example:

- Circular No.180/2015/TT-BTC providing guidelines for trading registration on UPCoM;
- Circular No.155/2015/TT-BTC guiding the information disclosure on the stock market;
- Decision No. 51/2014 / QD-TTg on some issues on divestiture, sale of shares and registering transactions and listing on the securities market of State owned enterprises;
- Circular No. 115/2016 / TT-BTC amending Circular 196/2011 / TT-BTC guiding the first sale of shares and management of proceeds from equitisation.

The new regulations help to accelerate the growth of the UPCoM, doubling of the number of the companies listed on it in two years. Especially, Circular No.115/2016/TT-BTC has given a boost to the development of the UPCoM because it requires SOEs to list shares on the market within 20 days after their IPOs.

Admission of a public company's shares or convertible bonds for trading on UPCoM is mandatory for all public companies. By law, shares of public companies must be registered with the Viet Nam Securities Depository (VSD). "Listing" on UPCoM provides the advantage of being on a central, transparent trading platform. It also means that certain trading rules and restrictions apply, including a requirement that all trades be channelled through UPCoM (except for public offers or takeovers) and a trading price band.

By the end of 2017, 769 companies were registered for trading on the UPCoM (as compared with 256 as of December 2015), with a total value of nearly VND 959 000 billion. The market includes companies operating in multiple sectors, e.g. industry, financial service, real estate, commerce and services. Eleven equitized SOEs have been registered for trading on the UPCoM. The size of company listed UPCoM is wide in range, with some companies having capital of thousands of billions VND (like Viet Nam Airlines Corporation, Hai Phong Thermal Joint Stock Company, Viet Nam Steel Corporation...) while some have capital of just a few billion VND.

In order to improve transparency, strengthen market surveillance, protect investors' interests, the HNX issued the new UPCoM Market Organization and Management Regulation attached to Decision No. 455 / QĐ- SGDHN on 20/06/2017. According to the Decision:

- Companies registered for trading on the UPCoM shall meet requirements on information disclosure and corporate governance applicable to public companies in line with relevant laws and rules of the HNX.
- Major shareholders, founding shareholders, internal persons of organisations registered for trading on the UPCoM must comply with requirements on information disclosure set by the HNX and relevant laws.

Policy implications for ASEAN member states

While only a relatively limited number of companies has the potential to become listed, a well-developed public equity market for small- and midcaps is a crucial component of the SME finance and entrepreneurial ecosystem. In particular, public listings enable existing shareholders to exit the firm in a straightforward manner. This is important for early stage equity investors such as private equity firms and business angel (syndicates) that typically want to invest for a limited period of time, after which they prefer to get a return on their investment and re-invest in other ventures. Indeed, the lack of exit options for business angel and venture capital investors was described as a major impediment to the development of these markets.

Worldwide evidence strongly suggests that listing, due diligence and prospectus requirements are often deemed excessive for all but the largest SMEs with very significant funding requirements. This is the reason why many countries have set up specialised vehicles to cater to smaller enterprises. Nonetheless, the data presented in the preceding sections illustrate that it is difficult to find a good balance between providing sufficient transparency to all market participants, ensuring adequate investor protection and at the same time not overburdening SMEs in need of equity (Boschmans and Pissareva, 2018^[42]).

The very limited activities in many ASEAN member states suggest that a better balance could be achieved. Countries may wish to consider close scrutiny of the listing requirements of their SME board (or introduce a specialised vehicle if it is not already present), especially to gauge whether the costs to comply are not too high, and the length and the complexity of procedures cannot be reduced without compromising investor protection and market integrity.

Experience from stock markets also illustrates the importance of assisting SMEs throughout the listing process. The model of AIM London, whereby all prospective companies work closely together with a nominated advisor from an approved register, proves to be a key success factor (London Stock Exchange, 2006^[112]). A similar approach could be more widely adopted in ASEAN member states.

Moreover, many SMEs with the potential to become listed, likely lack the (financial) skills and knowledge to do so, or may not be aware of its potential. Training sessions and seminars to a limited and selected number SMEs with the potential to become listed would likely also spur additional activities. These could be embedded in a wider support package to “high-potential ventures,” for example through accelerators or business incubators.

The number of listed SMEs in ASEAN countries could potentially be increased through additional outreach efforts, for example by collaborating with business associations or chambers of commerce to inform firms about the benefits and the process. Given the relatively small number of firms that are liable make use of public equity, governments from the region could also screen potential SMEs qualified for a listing, and focus outreach efforts on them.

Tax incentives represent another relatively common avenue to stimulate public equity markets for smaller companies. Tax incentives for investors typically take one of the following three forms (Schellhase, 2017^[104]):

- Back-end exemptions on stamp duties and/or capital gains tax;
- Tax offsets based on the value invested directly into SME equities;
- Tax offsets based on the value invested into SME investment vehicles.

In addition, tax incentives for going public (i.e. benefitting SMEs rather than investors) could be employed as well. Different models could be considered in ASEAN countries, especially in markets where the SME segment is non-existent or particularly underdeveloped. In some cases, incentives could be temporary, and reduced or even abolished once the market gains maturity. An important consideration is that these tax incentives should not be so generous that they attract companies that are ill-equipped to raise capital, and the procedures should not be overly burdensome to its beneficiaries. Proper monitoring and evaluation practices should be applied to guarantee that these incentives are effective in reaching their intended objective, cost-efficient and user-friendly.

Thailand provides a good example of a country that provided support reduced corporate income taxes for listed firms, with higher reductions for SMEs than for large firms, over the 2001-09 period. The purpose of this reduction was to kick-start the market. The data, which shows an influx of listed companies after the introduction of the tax break, suggests it served its purpose. The incentives were gradually phased out as the market reached maturity and could justify a track record of successful SME listings (Schellhase, 2017^[104]). Other countries could find the Thai experience useful to emulate.

Finally, international evidence points to the importance of a well-developed ecosystem that underpins public equity markets. Intermediaries such as brokers, financial advisors, investment banks, specialised legal professionals, underwriters and so on provide supporting services that are vital to the market. An analysis conducted for public equity markets in Europe identified the decline of such an ecosystem as a major contributor to the drop of SME listings. In particular, equity brokers specialised in smallcaps have been become more scarce since the early 2000s. This often raises the costs of an IPO for smaller businesses, as they have to rely on the services of larger market players (European Commission, 2018). Governments in Southeast Asia could facilitate the development of such an ecosystem by connecting high-potential companies with such intermediaries and through economic incentives and requirements. SME banks in the region may for example be incentivised and/or supported to provide specialised services and information to clients with the potential to become listed (Nassr and Wehinger, 2015).

6. Debt crowdfunding / P2P lending

Debt crowdfunding / P2P lending for SMEs: structure and characteristics

Debt crowdfunding/ P2P lending for SMEs: structure and characteristics

Lending-based crowdfunding for SMEs, also commonly referred to as peer-to-peer lending or P2P lending, refers to a fundraising model where many persons lend sums of money to a company and in return receive the company's legally-binding commitment to repay the loan at pre-determined time intervals and interest rates (Monetary Authority of Singapore, 2016^[113]). It constitutes one of two financial return crowdfunding models, the second one being equity-based crowdfunding (see Chapter 7).

Lending-based crowdfunding, or P2P lending, is conducted through an online platform facilitated by FinTech. Funders can be retail savers or institutional investors wishing to invest in SME risk.

P2P lending does not necessarily need to be a competing model to bank credit. Instead, it can be complementary to conventional banking, as banks develop their own platforms of cooperate with established platform operators by funding them, depending on the model.

Benefits of debt crowdfunding/ P2P lending

Intermediation between savers and borrowers facilitated by FinTech presents a number of benefits to all participants. P2P lending has the potential to reduce the gap in SME financing that cannot be fulfilled by banks. It eases access to debt financing for borrowers who are unbanked; have limited credit history or no credit rating; and limited collateral to post against a bank loan. P2P lending competes with banks also in terms of speed, as loans are processed faster through online platforms given the use of advanced technology at all stages of the credit allocation process (from KYC checks and application processing to loan disbursement).

Debt crowdfunding supports community participation in the development of startups and small businesses and provides an excellent platform for SMEs to create a community of early adopters of their products or services, and allows the company to indirectly market its product/service to a large number of individuals/retail investors.

At the same time, it offers higher returns to lenders of funds who may not be able to hold SME risk through other financial products, particularly so for retail investors. P2P lending platforms in their majority offer low transaction fees to both investors and borrowers given their lower cost base compared to conventional credit institutions. Lower transaction costs increase the feasibility of very small loans/ microloans.

New methods and technologies employed by online platforms for the assessment of the borrowers' creditworthiness is another disruptive innovation when compared to bank lending. The use of big data and other alternative data sources for credit scoring has the potential to reduce information asymmetries and provide more effective credit scoring. The cost of information acquisition is also decreasing and the handling/analysis of such information is enabled by innovative technologies.

Barriers to the wider use of debt crowdfunding/ P2P lending

Although it has the potential to reduce financing gaps, P2P lending carries the risk of the imposition of interest rates and other costs that may be disproportionate to the risk undertaken by funded SMEs, depending on the model of the online platform and its credit assessment methodologies.

Regulatory arbitrage exploited by platforms structuring their operations as banks (OECD internal CMF report, 2018). Unregulated platforms in particular carry risks of inadequate funding base, funds misuse, while they may market exaggerated return figures with a view to take advantage of borrowers and investors alike. The rise and fall of P2P platforms in China underlines the importance of regulating this industry.

As with other alternative financing instruments, the absence of secondary markets where crowdfunding investments can be traded is one of the major impediments for investors who do not want their investment tied up for the long-term. The creation of liquidity for such instruments is therefore essential for investor exits, and good exit prospects are recognised in many alternative financing mechanisms as a pre-condition for investment (see, for example, the chapter on Private Equity/ Venture Capital investment).

When it comes to the assessment of creditworthiness of borrowers, the use of big data and other alternative data sources and analytical tools such as loan screening through algorithms may be difficult to audit to ensure that they allow for fair treatment to borrowers. Such risks are exacerbated when information is sought by the platform operators on social networks or with the use of big data. There is limited evidence to date about the effectiveness of such models when compared to conventional credit risk analysis methods employed by banks (OECD internal CMF report, 2018).

Debt collection in P2P lending is not always ensured in P2P lending or, when it is, does not benefit from mature institutionalised methods and practices. The risk management capabilities of P2P lending platforms are in many cases untested, while the lending model and credit of P2P lending has not been tested in a downturn credit cycle (OECD internal CMF report, 2018). Investors are exposed to greater risks, as online platforms are not covered by the financial safety net that applies to banks, and the capital invested by investors is not guaranteed either.

Rapid digitalisation and adoption of FinTech solutions in the financial sector, such as P2P lending, pose increasing operational risks linked to the underlying technology. Cyber risk vulnerabilities are a large part of such operational risks, and concerns have been raised about the potential systemic implications of cyber incidents on the financial system in a number of countries, including Singapore (MAS, 2018^[114]). Such vulnerabilities are more pronounced in small businesses who have a reduced capacity to prepare for, and address, cyber security risks.

Debt crowdfunding, P2P lending activity in the ASEAN region

FinTech is still in its incipient stage in most AMS, but it is rapidly expanding with market activity in most FinTech segments recording triple digit growth rates in recent years. FinTech companies are increasingly securing funding from local and international sources, and a vibrant ecosystem of platform companies with roots in telecom; payments; e-commerce; social media markets. Such FinTechs rely to a large extent on mobile devices and smartphones as a transaction platform and obtain a reach that traditional brick and mortar banks could not achieve. Payments and mobile wallets are the first step to bringing financial services to parts of the population that are unbanked or underserved by banks.

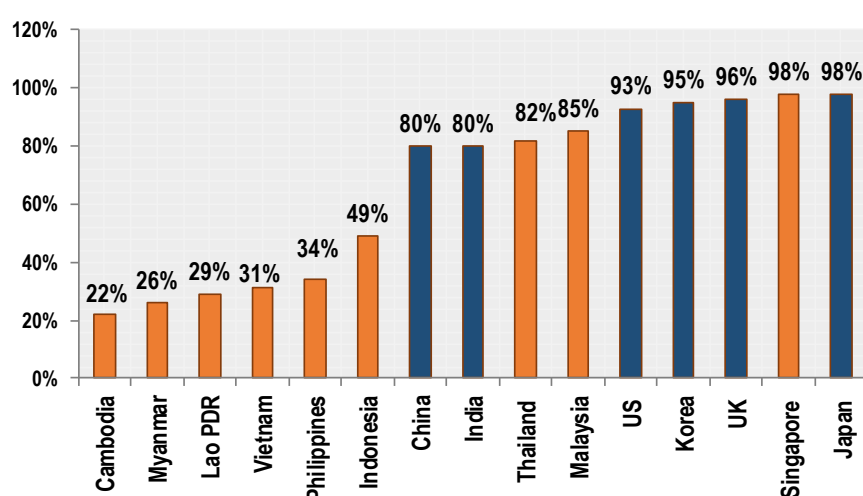
Indeed, AMS have low banking penetration compared to OECD and other G20 economies, formal banking services provision is still relatively limited, and a large part of the population remains underbanked (Figure 6.1). The problem of unbanked population is more acute in rural areas, and cost and distance are two of the main reasons for which AMS adults do not have a financial institution account (World Bank Group,

2017_[115]). Indicatively, it is estimated that in ASEAN excluding Singapore, 70% of wage payments and government transfers are still received in the form of cash (United Overseas Bank Limited, 2018_[116]).

With a few exceptions, such as Singapore, AMS have limited formal banking credit availabilities for SMEs. Other alternative financing instruments, such as the ones analysed in this report, are not mature enough to meet the growing demands of ASEAN SMEs. Credit availability is therefore constrained for the SME sector, particularly for those SMEs who are part of the informal economy, offering a large opportunity to P2P lenders to narrow the financing gap of the unbanked population by leveraging technological advances and the use of mobile phones by the unbanked.

Figure 6.1. Banked population in ASEAN vs. major G20 economies

As a percentage of total population over 15 years of age

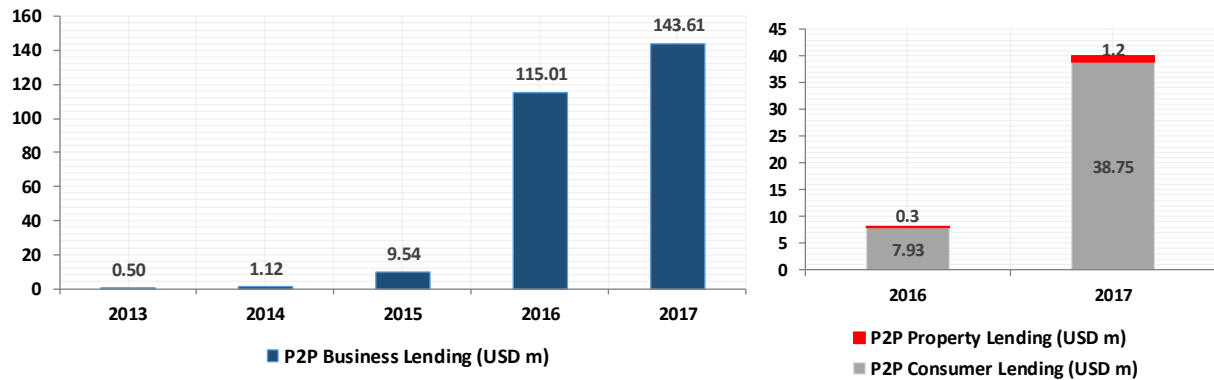


Source: World Bank.

With the exception of some AMS like Singapore and Malaysia, the P2P lending market is still nascent in ASEAN, representing only a tenth of the ASEAN region's FinTech market as of 2017 (BBVA, 2017_[117]). However, although the P2P business lending market is at early stages, its usage is growing very fast and is expected to constitute one of the leading FinTech applications for SMEs. The favourable economic growth prospects of the region, coupled with increasing access to the internet by ASEAN country inhabitants and the increased use of mobile payments, are enabling conditions for the wider use of P2P lending by small businesses in the region. The growth opportunity explains the move by large e-commerce and digital platform operators, such as Grab, into the small business lending space.

Figure 6.2. P2PLending in ASEAN, 2013-17

P2P Business lending (LHS), P2P Property and Consumer lending (RHS), in USD million

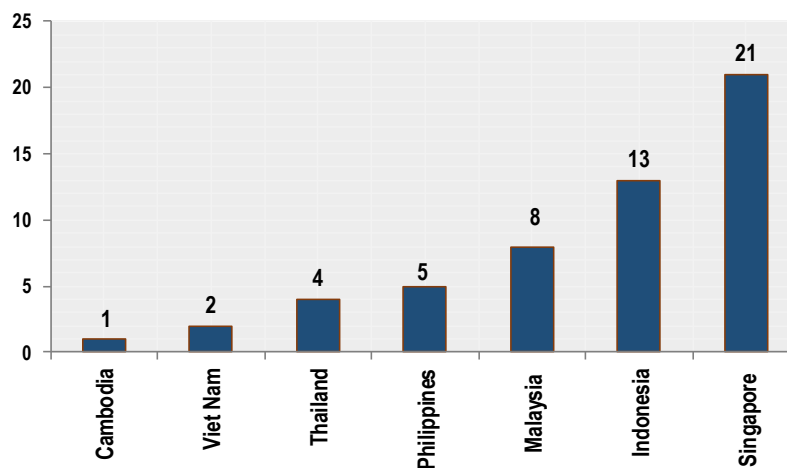


Note: Includes business lending to SMEs by individuals or institutional funders.

Source: (CCAF, 2018^[118]).

Figure 6.3. Number of P2P Lending Platforms active in AMS

As of October 2017.



Source: Tracxn.

FinTech companies, combining innovative financial services business models with digital technologies, have followed a pattern of continuous growth in the ASEAN region, underpinned by increasing digital readiness of many AMS, and by increased adoption of technology by Southeast Asians (Table 6.1). Demand for FinTech solutions is increasing given the rapid increase of mobile usage and the rising rates of internet penetration, an increasingly urban, literate and young population, and a population that remains to a large extent underserved by conventional banks (Figure 6.1). Increased investment by PE/VC funds is also contributing to this trend, supported by the economic potential of the ASEAN region and a young population ready to embrace new technologies.

Table 6.1. Digital readiness of ASEAN countries

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Viet Nam
Individual Internet users (per 100 people)	25.4	78.8	55.5	81.0	47.5	46.5
Fixed broadband subscribers (per 100 people)	1.9	8.7	5.5	25.4	10.7	9.9
Mobile subscriptions (per 100 people)	149.1	141.2	109.2	146.9	172.6	128.0
Active mobile-broadband subscriptions (per 100 inhabitants)	67.3	91.7	46.3	144.6	94.7	46.6
Smartphone penetration	24%	35%	15%	85%	38%	36%
Network Readiness Index (Rank out of 139 countries)	73	31	77	1	62	79
Number of branches (per 100,000 people)	17.8	10.7	8.8	9.3	12.6	3.8
Number of ATMs (per 100,000 people)	53.3	51.1	25.3	60.0	113.5	24.0

Source: (United Overseas Bank Limited, 2018^[116]).

Brunei Darussalam

On 12 April 2019, the *Autoriti Monetari* Brunei Darussalam introduced a comprehensive regulatory framework for P2P financing operators through the issuance of the Notice on Peer-to-Peer Financing Platform Operators (*Autoriti Monetari Brunei Darussalam, 2019^[119]*). The framework is in line with Brunei Darussalam's Financial Sector Blueprint 2016-2025, which intends to develop the financial sector of the country.

Platforms operators wishing to obtain a Capital Markets Services License (CMSL) have to be first incorporated or registered under the Companies Act Cap.39 and then apply for a CMSL allowing it to carry out the regulated activities of dealing and arranging deals in investments and investment advice.

The Notice sets out various requirements on the platform operators such as reporting and disclosure requirements, minimum financial requirements, outsourcing arrangement, transfer of funds, managing conflict of interest and advertising restrictions. The Notice also imposes continuing obligations on the platform operators as well as their managements and requires the securities offered to the investors through the platform to be rated.

Additionally, an eligible issuer can raise up to BND 500 000 within a 12-month period and up to a maximum of BND 1 million in total. Such issuer will be able to tap on investments from both sophisticated and retail investors, subject to the investment limits as specified in the said Notice.

Cambodia

Cambodia's FinTech scene is more nascent than other markets in ASEAN, as relatively little FinTech development and investment has occurred in the country to date. At the same time, FinTech development in payment and remittances is growing at a rapid pace (*National Bank of Cambodia, 2018^[120]*). As the country benefits from enabling conditions that can allow the development of this market in the future (for example, access to the internet in Cambodia is one of the cheapest in ASEAN), it is expected that other FinTech sectors, including P2P lending, will follow suit.

In 2017, the National Bank of Cambodia, with the support of the Asian Development Bank, hosted the first FinTech forum in Phnom Penh to explore opportunities and challenges of FinTech and to provide a platform

for FinTech players to exchange ideas and collaborate, therefore enhancing public understanding (National Bank of Cambodia, 2018_[120]).

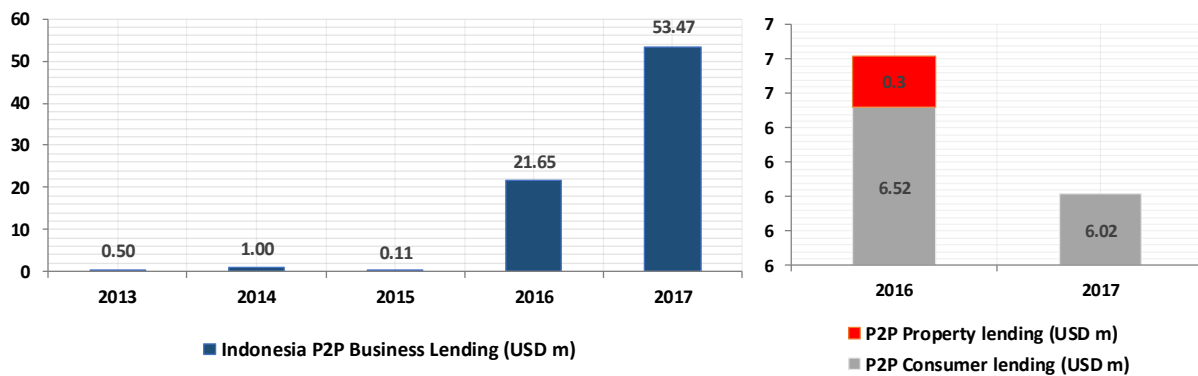
FinTech development in Cambodia is increasingly important when considering the relatively high level of informality of the Cambodian economy and the role that technology can play in helping to bring people in remote areas with low income into the formal sector. Getting credit or other banking services through FinTech platforms can allow these parts of the economy to become more visible, and therefore more bankable.

Indonesia

P2P lending is growing rapidly in Indonesia. The overall market for online alternative finance in Indonesia continued to grow in 2017, when over USD 80 million was raised in 2017, recording a year-on-year growth rate of 127%. In the period 2013-17, a total of USD 122.18 million in overall market volume has been recorded in the country through 24 FinTech operators. P2P lending for SMEs accounted for the lion's share, raising USD 53.47 million in that period (or 66.74% of the total amount raised by FinTechs).

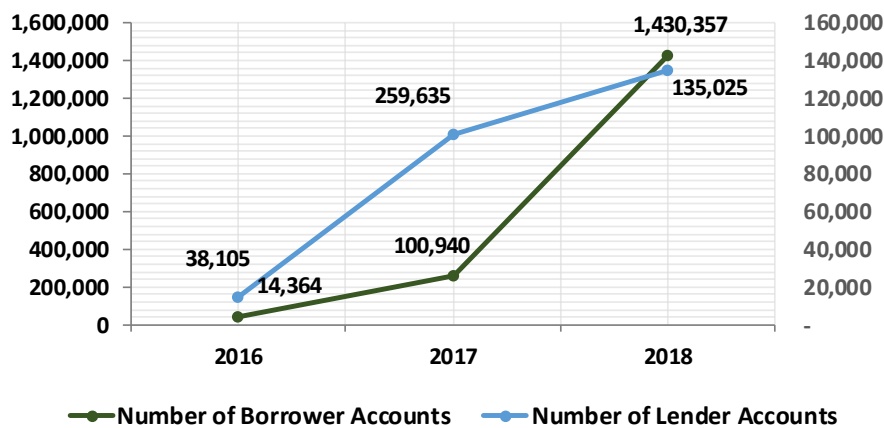
Figure 6.4. P2P Business Lending in Indonesia, 2013-17

P2P Business lending (LHS), P2P Property and Consumer lending (RHS), in USD million



Note: Includes business lending to SMEs by individuals or institutional funders.
 Source: (CCAF, 2018_[118]).

Figure 6.5. Number of lender and borrower accounts in P2P lending in Indonesia



Source: (KPMG, 2018_[121]).

P2P lending is regulated by the Indonesian Finance Authority OJK through Regulation No. 77/POJK.01/2016 concerning Information Technology-Based Lending Services (LPMUBTI) (OJK, 2016_[122]) (OJK, 2017_[123]). The regulation is designed to support the growth of P2P lending platforms as a financing alternative for SMEs who cannot access conventional financial services industries, including banks, capital market, financing companies, and venture capital firms. The OJK regulation is also aiming to protect consumer interests, but it also provides opportunities for local FinTech providers to grow and expand, and contribute to national economy.

Fintech P2P Lending providers are classified as other financial services institutions and supervised under the non-banking financial industry. Providers are required, among others, to open escrow accounts and virtual accounts at banks so as not to store or retain money independently from banks. This allows the transactions to be transparent and regulated. Lenders and borrowers will then have virtual accounts within these platforms. The exception to this is if the P2P lending platform caters to unbanked borrowers in remote areas. In this case, the money will be disbursed to them through agents in the form of group lending. In the interest of maintaining national financial system stability, the maximum amount of loans that providers can grant to a single borrower is limited to IDR 2 billion.

Bank of Indonesia has established regulation on FinTech regulatory sandboxes to test FinTech projects before they are made available to the entire market, particularly in the payments sector (Board of Governor Members Regulation No.19/14/PADG/2017 concerning Regulatory Sandbox for Financial Technology) (Bank of Indonesia, 2017_[124]). The Indonesian Finance Authority OJK is planning to issue similar regulation in order to be able to have the authority to conduct trials of FinTech companies in the P2P lending and crowdfunding markets (CCAF, 2018_[118]).

Lao PDR

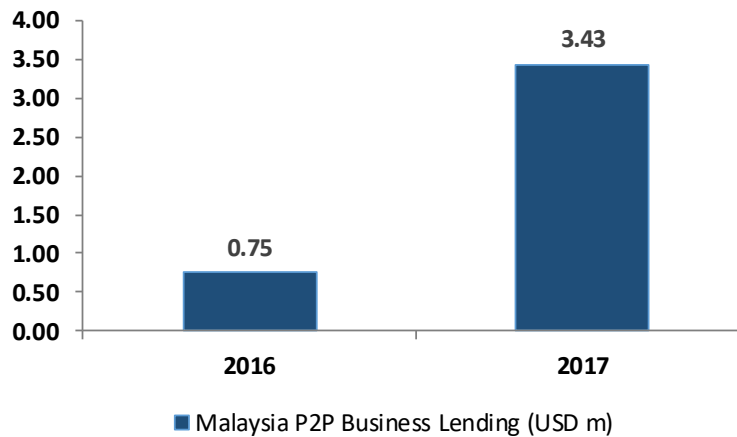
There is currently no information on policies around P2P or data about such activity in the country.

Malaysia

Malaysia was one of the first countries to regulate P2P lending and provide licenses to platforms for such activity, issued by the Securities Commission Malaysia. The total online alternative finance market volume in Malaysia follows a consistent and steady rate of growth in the past year, with a total of USD 15.18 m raised in 2017, and recording a year-on-year growth rate of 127% in the period 2013-17 (CCAF, 2018_[118]). P2P lending for businesses raised a total of USD 3.43 million in 2017 (Figure 4.6). In comparison, P2P consumer lending of USD 0.75 m in 2017. Over 1,200 successful campaigns have been completed successfully in the country, both for equity and debt-based financing, raising around USD 31 million in total funding up until December 2017.

Figure 6.6. P2P Business Lending in Indonesia, 2013-17

P2P Business lending (LHS), P2P Property and Consumer lending (RHS), in USD million



Note: Includes business lending to SMEs by individuals or institutional funders.

Source: (CCAF, 2018^[118]).

The Securities Commission Malaysia was the first regulator in ASEAN to regulate P2P financing in 2016 (Securities Commission Malaysia, 2019^[125]) with the issuance of Guidelines on Regulation of Markets under Section 34 of CMSA and the revised Guidelines on Recognized Markets (Equity Crowdfunding/Peer-to-Peer Financing). Six platform operators were licensed in 2016, when the regulation was introduced: B2B FinPAL, Ethis Kapital, FundedByMe Malaysia, ManagePay Services, Modalku Ventures and Peplender (Securities Commission Malaysia, 2016^[126]).

Under the Malaysian regulatory framework for P2P lending, the Securities Commission directly regulates the platform operator, and the latter bears the responsibility of carrying out the assessment of issuers on the platform. The platform operator is under an obligation to ensure that any disclosure made by the issuer to the investors on its platform is fair and accurate, and a specific obligation is also imposed on the issuer to ensure that disclosures made to the investors on the platform are not misleading.

The platform operator in carrying out its assessment of an issuer is required to comply with the requirements imposed by the Securities Commission, including taking reasonable steps to conduct background checks on the issuer with a view to ensure the fit and properness of the issuer, its directors, senior management and controller. Furthermore, the platform operator must also verify the business proposition of the issuer (Securities Commission Malaysia, 2019^[125]). A fundraising limit is set at RM 3 million within any 12-month period, and while no restrictions exist on the amount of investment for sophisticated investors, investment from angel and retail investors shall not exceed RM 500 000 and RM 50 000 within any 12-month period, respectively.

In the context of its Islamic Fund and Wealth Management Blueprint, the Securities Commission Malaysia awarded six P2P licences to platforms, one of which was the world's first licence for Shariah-compliant P2P lending (see Box 6.1).

The Government of Malaysia provides direct and indirect support to the P2P lending sector. In 2019, the government decided to allocate RM50 million to set up a Co-Investment Fund (CIF) to invest alongside private investors via new alternative financing platforms involving P2P lending and equity crowdfunding (Ministry of Finance Malaysia, 2019^[127]).

In 2018, the United Nations Capital Development Fund (UNCDF), Bank Negara Malaysia, and Malaysia Digital Economy Corporation (MDEC) launched the Digital Finance Innovation Hub to further support the financial inclusion of Malaysia's middle and low-income. The Hub aims to foster collaboration across the

public and private sector and between established institutions and new entrants, and is expected to contribute to positioning Malaysia as a test-bed for FinTech solutions, whilst strengthening its position as a financial inclusion leader (Bank Negara Malaysia, n.d.^[128]).

The Securities Commission Malaysia has signed a series of innovation cooperation agreements – or ‘FinTech bridges’ – with several regulators in major financial centres (e.g. the Hong Kong Securities and Futures Commission (SFC), the Dubai Financial Services Authority (DFSA), the Monetary Authority of Singapore (MAS) and the Australian Securities and Investments Commission (ASIC)) aiming to spur greater cooperation in facilitating and regulating innovations emerging within the digital finance industry (Securities Commission Malaysia, 2017^[129]). Such ‘FinTech bridges’ facilitate greater information sharing on emerging trends and regulatory developments, facilitate referrals of innovative businesses seeking to operate in each other’s jurisdictions and the exploration of potential joint innovation projects, and help shape the regulatory approach and encourage the growth of digital finance within the country.

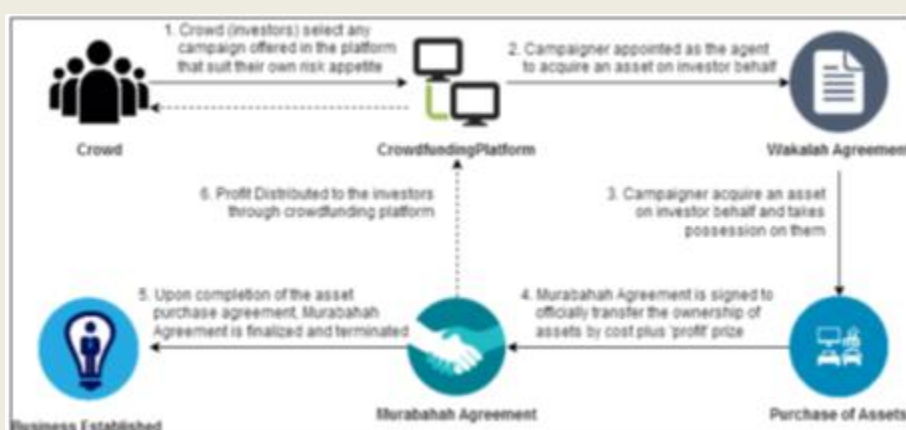
Box 6.1. Islamic crowdfunding in Malaysia

In the Islamic financial system, the Securities Commission Malaysia awarded six P2P licences in the context of its Islamic Fund and Wealth Management Blueprint. One of these licenses was awarded to the world’s first licence for Shariah-compliant P2P lending (EthisKapital.com), focused on funding small businesses and real-estate development projects.

According to KapitalBoost.com, the estimated total Islamic crowdfunding in 2015 reached USD 30 million. The growth prospects for Islamic P2P crowdfunding are considered to be vast, given the growing demand for crowdfunding financing and the increasing emergence of innovative Islamic finance products and services.

Islamic crowdfunding companies screen projects and give risk ratings as well as the expected return for each investment activity, but no interest is involved to comply with Shariah requirements. Based on the principle of *Muḍārabah*, all capital is unguaranteed, and in the case of default, all the materials in the business will be liquidated and returned to the investor. This way, there will be real profit-and-loss sharing within the business since all of the parties bear the risk (Saiti, B. Musito, M. Yusel, 2019^[130]).

Figure 6.7. Schematic representation of Islamic crowdfunding process



Source: (Saiti, B. Musito, M. Yusel, 2019^[130]).

Myanmar

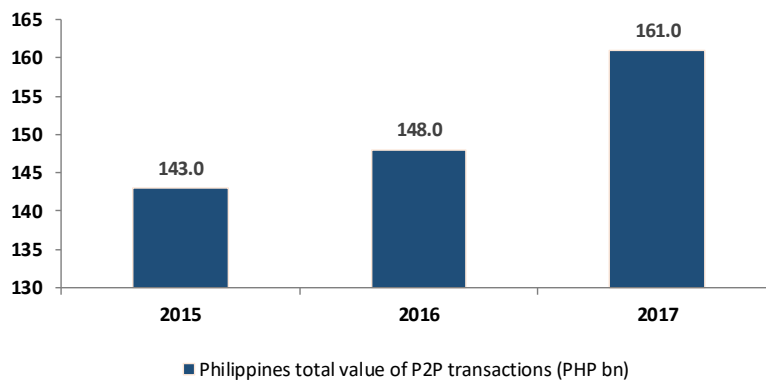
There is currently no information on policies on P2P or data about such activity in the country.

The Philippines

The P2P lending market in the Philippines is small but has been picking up in the past few years, gaining popularity among SMEs and investors.

Figure 6.8. Total P2P Lending in the Philippines, 2013-17

In PHP billion



Source: Statista.

The Central Bank of Philippines monitors FinTech developments and has developed a balanced regulatory approach anchored on three pillars: (i) risk-based and proportionate regulation; (ii) active multi-stakeholder collaboration; and (iii) consumer protection. The Bank is employing a flexible ‘test and learn’ approach to financial innovations through the establishment and operation of a regulatory sandbox, providing the opportunity to innovators to test their products/services in a controlled environment (Bangko Sentral ng Pilipinas, 2018^[131]). This approach enables the Bank of Philippines to strike the right balance between innovation and safety while providing economic benefits to the banking public.

Singapore

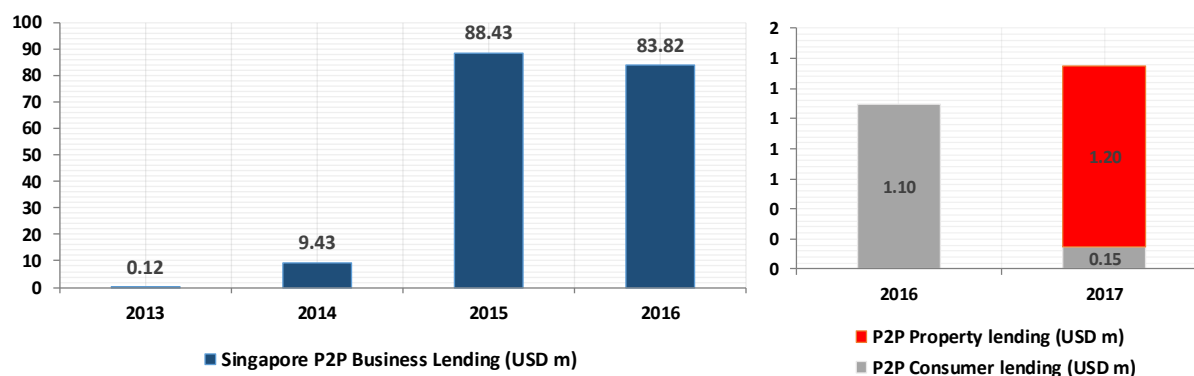
Singapore is a leading market for P2P lending in ASEAN, benefiting from a mature FinTech ecosystem and a well-developed financing system. P2P lending is a regulated activity in Singapore and many of the Singapore-based platforms also have activity in other AMS. Singapore is also the leader in online alternative financing in ASEAN, accounting for more than half of the region’s total market volume in the sector. The total online alternative finance activity in Singapore for 2017 stood at USD 190 m, a 16% increase year-on-year (CCAF, 2018^[118]). P2P lending for businesses in the same period declined slightly by 5%, while equity-based crowdfunding increased by the same percentage.

According to the Singapore Fintech Association, there were over 60 startups operating in the combined FinTech lending and crowdfunding space as of 2017 (SFA, 2019^[132]). Twenty of them are licensed securities-based crowdfunding platforms as of June 2019, including both debt-based (P2P Lending) and equity-based platform operators, and SGD 68 million were raised through P2P platforms.

A number of Singapore-based P2P platforms operate in other AMS, as is the case of the Funding Societies, one of the largest P2P lending companies in the region, with operations in Singapore, Malaysia.

Indicatively, Funding Societies had extended SGD 95.4 million loans through 1 606 campaigns and had itself raised USD 7.5 million funding as of December 2017. Other large P2P players include MoolahSense (backed by East Ventures and Pix Vine Capital, with over 12,000 registered investors) and Capital Match.

Figure 6.9. P2P/Marketplace Business Lending in Singapore, 2013-17



Note: Includes business lending to SMEs by individuals or institutional funders.

Source: (CCAF, 2018^[118]).

Fundraising from the public through lending-based crowdfunding, or P2P lending, is regulated by MAS under the Securities and Futures Act (Cap. 289) (the “SFA”) and the Financial Advisers Act (Cap. 110) (the “FAA”) (Monetary Authority of Singapore, 2016^[113]). Given that an invitation to lend money to an entity is deemed to be an offer of debentures, which is a type of security, the entity borrowing money is required to register a prospectus with MAS, unless it falls within one of the prospectus exemptions provided for in the regulation (e.g. small offerings, private placements, offering to institutional investors or offering to accredited investors) (Monetary Authority of Singapore, 2016^[113]).

The operator of the P2P platform facilitating the offering of the funding/debentures or providing advice relating to the securities offering may be considered as carrying on the business of the regulated activity of ‘dealing in capital markets products’ or ‘advising on corporate finance’ respectively. The platform operator is therefore required to hold a capital markets services (CMS) licence under the SFA.

In addition to the Securities and Futures Act, the Moneylenders Act 2010 and the Moneylenders Rules 2009 also apply to P2P lending in Singapore. The Act requires money lenders to hold a license and aims to safeguard consumer protection of small business borrowers by imposing limitations on the operations of licensed companies (Singapore Government, n.d.^[133]).

The provision of exemptions for small-sized offerings by P2P platforms along the lines of small-sized offerings eases the burden of platform operators who can rely on the existing framework for their activity for funding transactions of up to SGD 5m. In this case, the exemption from the requirement to provide a prospectus to investors would apply to the entity making an offer of debentures, and not the platform operator itself. In order to safeguard investors, MAS requires platform operators to document and disclose the key risks of the investments linked to their platforms and obtain investors’ acknowledgement that they have read and understood these risks. At the same time, MAS reduced the financial requirements for platform operators who wish to raise funds solely from accredited and institutional investors. Such operators are able to enjoy the reduced financial requirements, as long as they do not handle or hold customer monies, assets, carry customers’ positions, and do not act as principals against their customers.

Singapore’s government has also provided direct support to the alternative finance market intermediated by FinTechs, notably through the commitment of SGD 225 million of direct support for the development of the Fintech industry in 2015. Direct support is also offered by the government of Singapore through various

forms of grants for SMEs business development and investment, but also for innovation and FinTech activities (MAS, 2019^[134]).

In terms of indirect support, the Monetary Authority of Singapore has established a FinTech Regulatory Sandbox, which enables financial institutions and FinTech players to experiment with innovative financial products or services in a live environment but within a well-defined space and duration (MAS, n.d.^[135]). Depending on the project, MAS provides flexibility in terms of regulatory framework applying to the sandbox entity, and relaxes specific legal and regulatory requirements prescribed by MAS, and which the sandbox entity will otherwise be subject to, for the duration of the sandbox.

MAS also organises events to promote collaboration between incumbent and FinTech players in the country. For example, the Singapore FinTech Festival, organised by MAS in cooperation with the Association of Banks in Singapore, is the world's largest FinTech festival and global platform for the FinTech community to connect, collaborate, and co-create with one another (MAS, 2019^[136]). MAS has also established the Fintech Innovation Lab 'Looking Glass @ MAS' (MAS, 2016^[137]).

A Marketplace Lending Committee has also been established, consisting of online lenders licensed by MAS. The Committee is tasked with the design and promotion of best practices, industry guidelines and codes of conduct in a collaborative and open manner, so as to encourage transparency between market participants.

Singapore is also active in ASEAN-wide initiatives aiming to develop FinTech in the region, and is sharing its experience and expertise with AMS in order to accelerate the development of FinTech in the wider region. MAS is cooperating with the International Finance Corporation and the ASEAN Bankers Association with a view to set up the ASEAN Financial Innovation Network (AFIN) which will act as a platform for collaborative innovation for financial institutions and FinTech firms (<https://apixplatform.com/marketplace/aboutapix>). MAS has also established partnerships with central banks in the region (Bank of Thailand and State bank of Viet Nam) on FinTech innovation initiatives (CCAF, 2018^[118]).

Thailand

Thailand has a nascent P2P lending market, with most of the activity being recorded in the P2P consumer lending segment. A total of USD 0.2 million was raised in P2P consumer lending for the first three quarters of 2019 (Statista).

In 2019, following a public consultation on a proposed regulation for P2P lending, the Bank of Thailand issued Notification 4/2562 re: The Determination of Rules, Procedures, and Conditions for Peer-to-Peer Lending Businesses and Platforms. The regulation became effective on 30 April 2019 and sets the rules related to P2P lending in the country. The regulation defines a P2P platform provider as a person who provides an electronic system or network for P2P lending, and a lender as a natural or juristic person who offers a loan through an electronic system or network (excluding crowdfunding providers) and allows individuals to obtain loans from other individuals without the involvement of a financial institution.

Platform operators wishing to be a P2P lending provider are required to obtain a license from the Bank of Thailand and attend a Regulatory Sandbox Test. Nationality requirements and paid-up capital also apply to platform operators. Borrowers may not borrow more than 1.5 - 5 times their monthly income and not more than THB 50 million for business operations purposes. Institutional investors, private equity trusts or venture capital businesses under the Notification of the Capital Market Supervisory Board can provide loans without limitations, while other retail lenders can provide loans that do not exceed THB 500 000 per year.

The regulation also sets a maximum ceiling for interest rates, setting the maximum interest rate for a loan agreement through a P2P lending transaction at 15%, in accordance with the Civil and Commercial Codes.

First, the Ministry of Finance's notification prescribing that peer-to-peer lending platform operators. The notification stipulates that Bank of Thailand is authorized as a regulator who formulate any related policies, rules, and regulations as well as oversee the operation of such operators. To ensure that the operators are ready to provide the full-scale service to the general public, Bank of Thailand may urge the operators to test their system in the regulatory sandbox.

In addition, the amendment of Credit Information Business Act prescribes that P2P lending and debt-based crowdfunding companies only act as a matching platform between creditors and borrowers. As a result, they themselves are not lenders and cannot directly access the National Credit Bureau's database. Under the amended draft, these fintech companies are required to apply for NCB membership and submit their data to such database, and they can access such database in return.

Viet Nam

Viet Nam has limited activity in P2P lending, with all the activity recorded in the consumer lending sector. USD 0.1 million in P2P consumer lending for the first three quarters of 2019 (Statista).

In 2016, the government of Viet Nam approved the Scheme on assistance policies on national innovative startups ecosystem to 2025, in the context of which it established the SBV Fintech Steering Committee in order to improve the startups ecosystem, including the fine-tuning of the legal framework with a view to creating favourable conditions for the development of FinTech companies in Viet Nam.

As part of the Committee's activities, the Fintech Challenge Viet Nam (FCV) contest has been organized, with a view to spur innovation in financial and banking services and promote greater financial inclusion in Viet Nam (Nước, 2017^[138]). The program focused on five core FinTech fields that are critical for financial inclusion, including: (i) electronic Know Your Customer (e-KYC), (ii) Open Application Programming Interfaces (Open APIs), (iii) Peer-to-peer (P2P) Lending, (iv) e-Payments, and (v) Blockchain technology.

Box 6.2. Gender gap in P2P lending

Financial inclusion for women has been embraced by policymakers as an important development priority. However, according to the evidence, females have lower risk preferences and higher creditworthiness, the gender gap in access to finance still remains prevalent in the traditional credit market due to various factors such as employment opportunities, legal obstacles, cultural norms, and limited access to the guarantee mechanism, among others. With the advance of digital technology, online peer-to-peer (P2P) lending has emerged as an alternative to traditional lending institutions around the world. Bypassing banks, both lenders and borrowers are anonymous. Borrowers can post loan requests without providing collateral while the investors make lending decisions according to the information disclosed by the borrowers. This might help to moderate females' concern about potential discrimination.

Using data from a leading peer-to-peer lending platform operated in China, research has shown that lending to female borrowers is associated with better loan performance, including a lower probability of default, a higher expected profit, and a lower expected loss than for their male peers. However, despite the higher creditworthiness, we do not find any measurable gender impact on funding success rate, meaning that female borrowers have to compensate lenders by providing higher profitability to achieve a similar funding probability. This evidence indicates the existence of a gender gap that discriminate against female borrowers.

To moderate biased lending, platforms could analyse the loan performance of different groups of borrowers, for instance male versus female, and incorporate such information into their credit rating system. At the same time, these platforms could educate lenders on how to judge the creditworthiness

of borrowers by using unbiased information, alongside the official sector. Since the history of P2P lending is still very short, most investors on the platform are new and not sophisticated enough to evaluate the risks of loan listings properly. They may not be able to interpret the borrowers' signals of quality correctly. Addressing the lack of financial literacy is of particular importance for the fintech market where there are no financial intermediaries and most decisions are decentralised. In addition to providing financing tools, Fintech companies like P2P lending platforms could be encouraged to improve the average financial literacy of the public, alongside the official sector.

Source: (Chen, Huang and Ye, 2019^[139]).

High level policy implications and considerations for policymakers

For ASEAN countries, the development of P2P lending is a great step towards greater financial inclusion. Fintech innovations can help drive financial inclusion as access and usage of financial services continue to be limited in many AMS. The formal banking system may have limited reach in some of the countries, especially when it comes to rural areas, and it is widely admitted that SMEs in the region face constraints in their access to credit by conventional banks. P2P lending has the potential to bridge such financing gaps, without necessarily replacing the banking sector. Instead, online platforms can cooperate and allow the established banks to reach parts of the population that remained outside their reach until now.

It is a longstanding issue that ASEAN SMEs tend to be underserved by banks and that an important part of the economic activity remains in the unofficial sector. FinTech platforms can provide convenient, affordable, fair and safe access to credit and other financial services to people in remote areas with low income and can bring people who are part of the informal economy into the formal sector.

Given the critical role of SMEs in the economic growth of the region, there is a role for governments and regulators to provide support to FinTech-related initiatives, and (a) build the infrastructure (institutional or otherwise) and the regulatory framework that will enable these platforms to thrive in a safe environment, and (b) ensure that the services provided ensure fairness and safety for the financial consumers.

When it comes to infrastructure, the broadband capacity and spectrum allocation can be enhanced to reach rural areas. Technological skills can be enhanced, with a focus on ICT skills, and entrepreneurs can be linked between each other and with the industry/investors in hubs and accelerators.

In addition, a number of AMS have established FinTech regulatory sandboxes to encourage FinTech companies to experiment and test prototypes of their projects in a safe environment, before services and products can be launched to a wider market. Regulatory sandboxes have been established in Brunei Darussalam, Indonesia, Malaysia, Singapore and Thailand.

Direct investment can be considered by governments in order to catalyse greater investment in the development of FinTech innovative services, but needs to be carefully designed so as not to discourage private investors.

Unregulated platforms carry numerous risks of funds misuse, fraud, misleading marketing of returns and loss of funds. In order to foster P2P lending and other FinTech credit, clear and appropriate regulatory frameworks need to be in place, which will level the playing field between banks and FinTechs performing the same activities without stifling innovation. Appropriate consumer and investor protection safeguards need to be in place so as to protect investors in emerging platforms, particularly when retail investors are allowed to participate in the online funding of small businesses. The US Securities and Exchange Commission's (SEC) established regulatory principles on crowdfunding are a good example of solid regulatory framework that allows for proportionality while protecting investors. Its principle cover four main points; crowdfund limit, investor's financial background, intermediaries' role, investment eligibility.

Policy and regulation is a key enabler in this particular market, as government led-initiatives can combine and coordinate the efforts of different FinTechs in banking, credit provision, payment systems, telecom companies, e-commerce and BigTech and can provide the underlying conditions for a coherent and vibrant ecosystem that will promote both innovation and usage levels by individuals and companies. Investment in technological and legal/institutional infrastructure and appropriate regulatory frameworks is even more important in financial services which need to address consumer and SME needs while promoting financing inclusion, trust in the markets, financial stability and security.

7. Equity crowdfunding

Structure and characteristics

Modalities

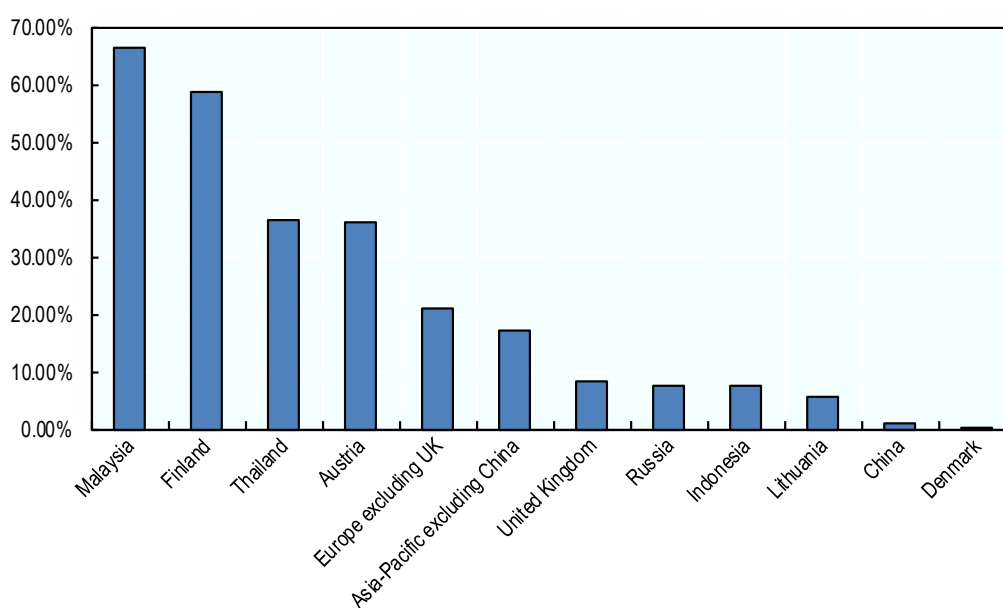
Crowdfunding is a method used to raise external finance from a large audience, rather than a small group of specialised investors (e.g. banks, business angels, venture capitalists). Typically, each individual investor provides a small portion of the overall funding and this instrument allows SMEs to seek financing directly from investors without an intermediary (peer-to-peer).

Online alternative finance includes various instruments, including different forms of crowdfunding. By far the most common type across all major markets worldwide relates to the provision of debt financing (see Chapter 6), while “non-investment based” activities (i.e. without a monetary reward) are very modest in comparison.

Equity crowdfunding (ECF) falls in the middle of the spectrum in terms of usage; investment volumes lie significantly below debt-based crowdfunding, but are more common than non-investment based activities. The importance of ECF among total online alternative finance varies greatly across countries (see Figure 7.1). In Asia, excluding China, ECF accounts for a relatively large share (close to 20%) of total online alternative finance volumes (see Figure 7.1).

Figure 7.1. Share of ECF in total online alternative finance, selected regions and countries

As a percentage



Note: All data are from 2017.

Source: Cambridge Centre for Alternative Finance.

In the case of equity crowdfunding, investors receive dividends from the investees' profits and/or the possibility to sell the equity at a higher price. Before the campaign goes online, both the firm and the platform have to agree on the valuation of the firm and on the amount of equity to be raised.

Existing regulations usually require platforms to submit an appropriate amount of information to be shared, to allow investors to make informed decisions. Nevertheless, accounting standards for interested firms are not as strict as for public companies. The United States Securities and Exchange Commission (SEC) represents a case in point of a jurisdiction that requires platforms to disclose extensive information. This includes financial statements of the issuer (audited by a certified and independent accountant for larger scale issuances), certain information from the issuer's federal income tax returns, information about officers, directors, and owners of 20 percent or more of the issuer, a description of the issuer's business and the use of proceeds from the offering (Nitani, 2019^[140]).

Profile of firms

Equity crowdfunding can complement or substitute seed financing for entrepreneurial ventures and startups that have difficulties in raising capital from traditional sources, like bank loans, venture capital, business angels or public programmes, because they are too innovative, too complex or too risky (Helmer, 2011^[141]).

Different types of online alternative finance cater to different types of SMEs. Equity crowdfunding is mostly relevant for firms at the seed or early stage of their life cycle, and for businesses that are perceived as relatively risky (USAID/ASEAN, 2017^[142]). Given that it is not feasible in practical terms, and that signing non-disclosure agreements with a large group of potential investors would be difficult to make legally binding, equity crowdfunding appears to be less appropriate for businesses with sensitive business and financial information and where information and financial details are hard or impossible to be shared to a large audience (Collins and Pierrakis, 2012^[143]).

Traditionally, equity crowdfunding has been limited to businesses with limited funding needs. Increasingly and especially in relatively developed markets, larger amounts of money can be raised thanks to these platforms as they become more widespread among retail investors and – crucially – among “sophisticated” investors and even institutional investors.

In the United Kingdom, for instance, 49% of all equity crowdfunding volumes in 2017 originated from institutional investors, up from 8% in 2015. One-third of all UK business angels co-invest through these platforms alongside “traditional” retail investors (Zhang et al., 2018^[144]). This allows for larger fundraising opportunities.

In addition, investments by larger, sophisticated investors, often function as a signalling device for other investors, again raising the overall amount of funding that can be raised through equity platforms (Hornuf and Schwienbacher, 2018^[145]).¹

While ECF fundraisers are active in a wide range of sectors, from healthcare to high tech, they tend to operate business-to-consumer (B2C) activities, rather than business-to-business (B2B). Part of the reason many SMEs set up an equity crowdfunding campaign is to reach out and market products and services to a wide audience, which is typically more relevant for B2C activities.

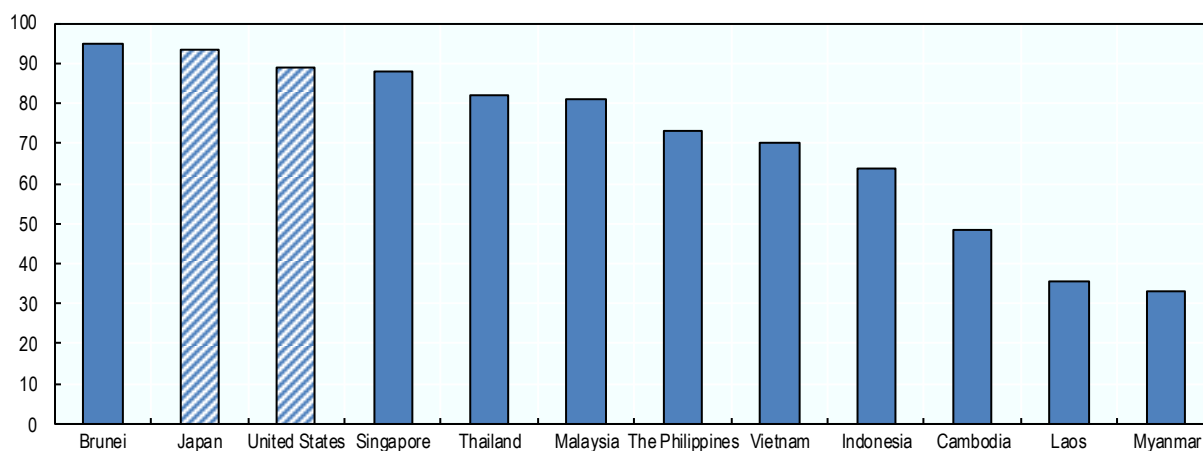
ECF can also be combined relatively easily with crowdsourcing, i.e. the improvement of products and services and test new ideas through feedback from internet users, which is again less appropriate for B2C activities (OECD, 2018^[146]). Crowdfunding generally benefits new ventures built on R&D outputs, where the interaction with customers may allow the entrepreneur to validate the untested product or service (OECD, 2015^[3]).

Similar to other equity instruments, the returns on ECF investments are often mixed, with a minority of investments generating very high rewards, and a large proportion yielding negative results (Signori and Vismara, 2016^[147]).

Enabling factors

Reliable and widespread internet penetration is a critical prerequisite for a thriving equity crowdfunding market. Data indicate considerable scope for improvement in this area among ASEAN members, especially among the lower-middle income countries (see Figure 7.2). A positive relationship also exists between the use of social media and crowdfunding activities (World Bank, 2013^[148]).

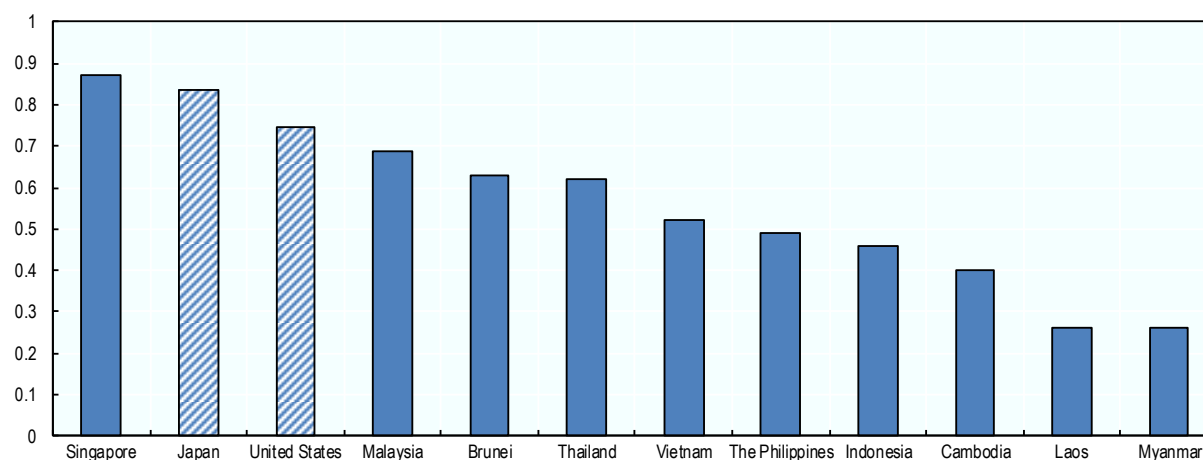
Figure 7.2. Internet penetration in ASEAN countries, Japan and the United States, 2019



Source: Internetworldstats.com.

Countries where businesses, as well as citizens and the government, adopt digital technologies have a better chance of developing their equity crowdfunding market. Again, a composite index shows a wide diversion among ASEAN countries, compared to leading economies such as Japan or the United States (World Bank, 2016^[149]).

Figure 7.3. Digital adoption index in ASEAN economies, Japan and the United States

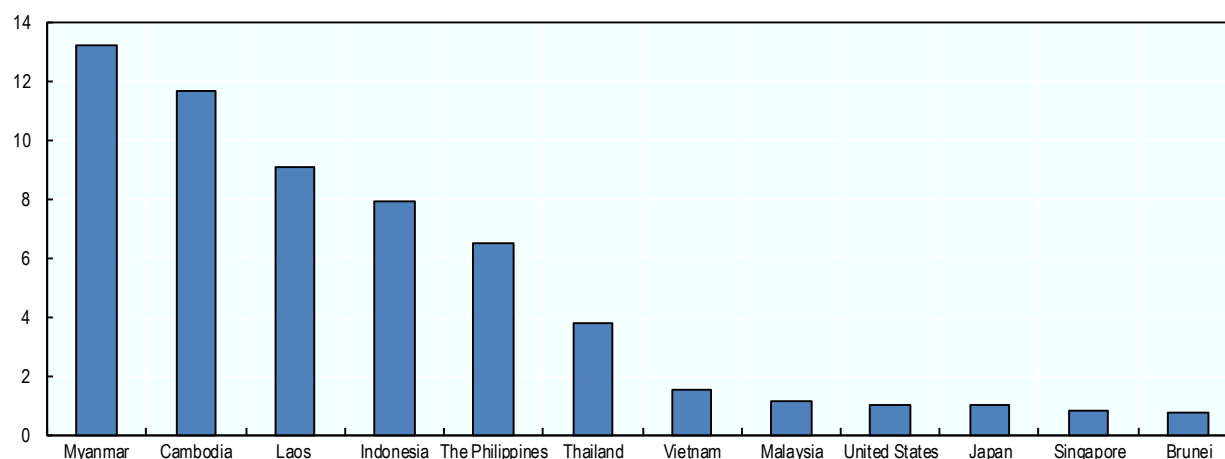


Note: Higher scores indicate more adoption of digital technologies.

Source: (World Bank, 2016^[149]).

The cost of high-speed internet using fixed broadband also varies significantly across the region and represents a pronounced barrier to the wider take-up of equity crowdfunding of SMEs (as well as the adoption of digital technologies more broadly). For smaller businesses especially, these costs may be prohibitively high in some ASEAN countries (IMF, 2019_[150]).

Figure 7.4. Fixed broadband prices as a % of GNI in ASEAN countries, Japan and the United States

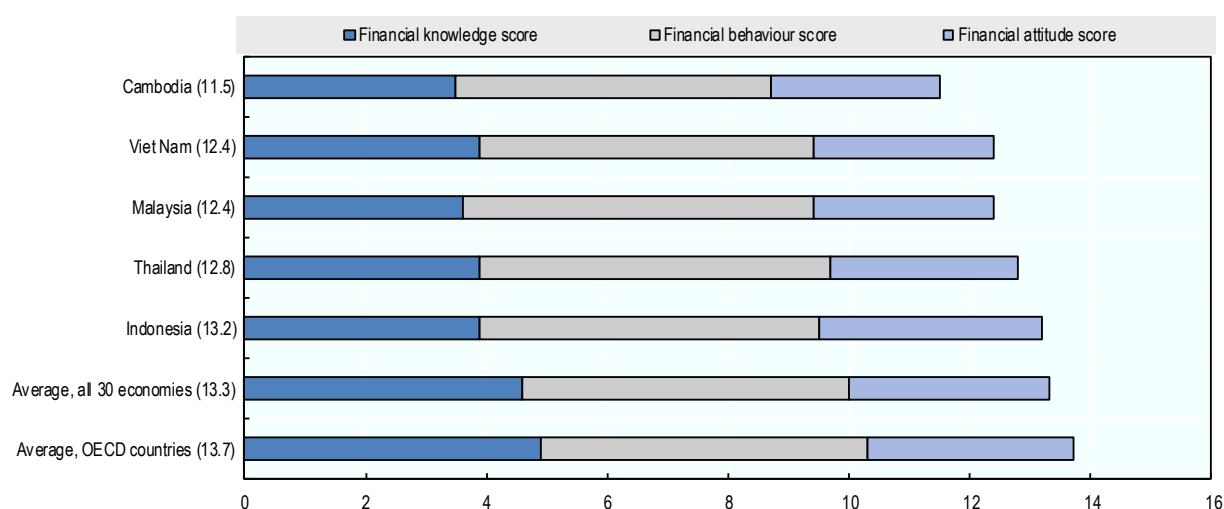


Source: (ITU, 2018_[151]).

Another important enabling factor relates to financial literacy, both of SMEs and startups in need of finance and of potential investors (United Nations ESCAP EBAC, 2016_[152]). Making use of equity crowdfunding opportunities requires knowledge of its existence and potential benefits. In addition, small businesses must be able to share reliable business and financial innovation, comply with due diligence requirements, and set up something akin to a marketing campaign. Generally, the potential investor base is probably smaller in countries with lower levels of financial literacy (United Nations ESCAP EBAC, 2016_[152]).

Financial literacy (measured among the general population through representative samples) is relatively low among selected ASEAN countries (see Figure 7.5), both when comparing with OECD countries and with non-OECD countries from other regions (OECD, 2018_[153]).

Figure 7.5. Financial literacy scores among selected ASEAN countries, 2016



Source: (OECD, 2018_[153])

The regulatory and supervisory environment plays a crucial role. Broadly speaking, this environment should support the expansion of equity crowdfunding, as well as other types of finance, without compromising financial stability and investor protection (G20/OECD, 2015^[154]). Given the elevated risk profile of many equity crowdfunding campaigns and the presence of retail investors, regulation that ensures sufficient protection is of particular relevance.

In addition, investors typically do not meet face-to-face with the companies they are investing in, and are very reliant on the information that is provided through the platform. As equity crowdfunding platforms often make more money from the companies that seek finance, rather than from the investors, they have an incentive to accept proposals of dubious quality and/or to not fully disclose the risks and potential downsides of projects. Hence, adequate regulatory and supervisory oversight is crucial for the long-term viability of the market. Licensing represents a commonly adopted approach to control the quality of ECF platforms (Lin, 2017^[155]).

At the same time, regulation should be balanced and not so burdensome as to disincentivise the development of crowdfunding platforms or companies in need of finance. Whereas China mainly restricts investments to “sophisticated” and institutional investors following a backlash, other jurisdictions such as the United Kingdom allow retail investors to make investments through online platforms while providing adequate investor protection (Lin, 2017^[155]). Other key concerns are the reliability and predictability of the regulatory framework, as well as providing regulatory certainty for actors in the industry. As the following sections of this report illustrate, many countries across the world, including in the ASEAN region, have developed specific regulation in this area.

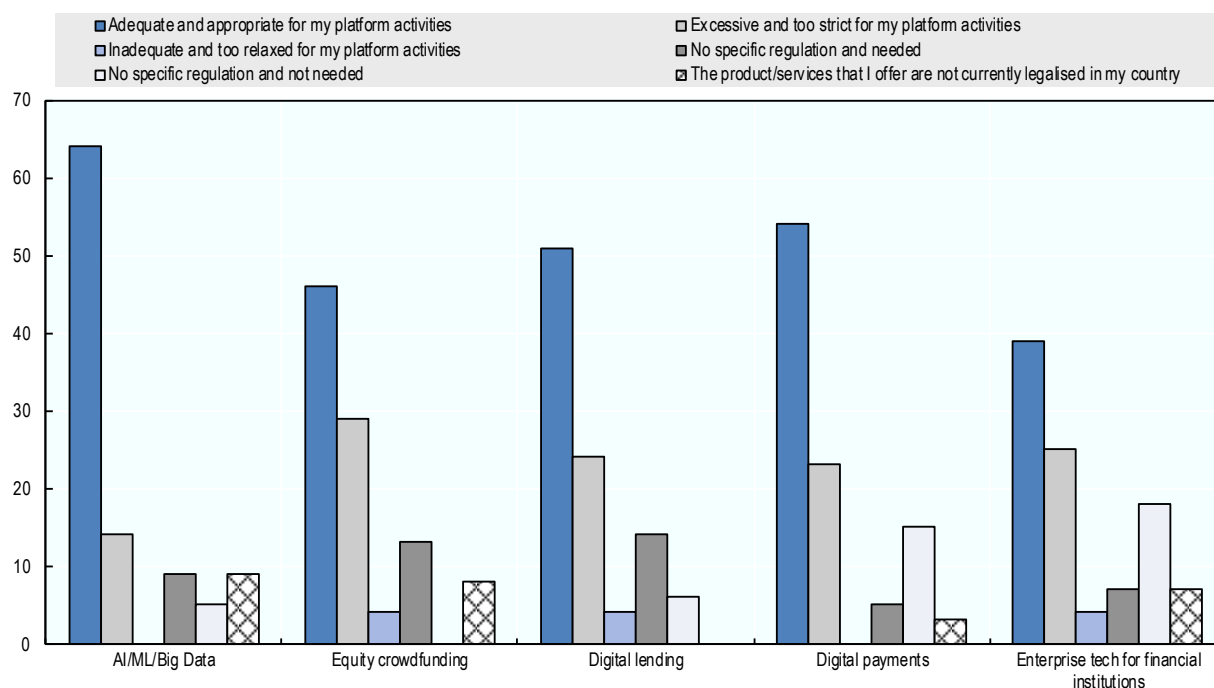
Perceptions of regulation adequacy are associated with higher online alternative finance volumes per capita and higher share of business funding. An analysis of 17 countries suggests that the greater the share of platforms indicating that existing regulatory framework is adequate in their countries of operation, the more likely these countries to exhibit higher levels of alternative finance per capita, as well as a larger share of business funding out of total alternative finance volumes in the same country.

A large-scale survey conducted in 2018 among ASEAN companies active in equity crowdfunding reveals the following:

- 29% of firms consider the current regulatory framework excessive and too strict;
- Another 4% consider it inadequate and too relaxed;
- Another 8% recognise that their services operate outside of the legal framework even though they consider that a regulatory framework is needed.

A large minority of platforms in equity crowdfunding thus consider regulation lacking in one way or the other (CCAF, ADBI, FinTechSpace, 2019^[156]). This share is higher among firms working in equity crowdfunding than for firms working in other areas of online alternative finance.

Figure 7.6. ASEAN FinTech firm perception towards existing regulations



Source: (CCAF, ADBI, FinTechSpace, 2019^[156]).

Finally, a key enabling factor for a robust equity crowdfunding industry is the existence of a solid financial ecosystem and well-developed capital markets. Sufficient exit options are important to attract investors, especially and institutional investors. At the same time, SMEs are more likely to seek equity from the crowd if there are opportunities to raise follow-up finance elsewhere. Empirical evidence points to a correlation between crowdfunding activities and indicators on capital markets (World Bank, 2013^[148]).

Policies to ease the development of equity crowdfunding

In recent years, crowdfunding has been the object of important regulatory attention in some OECD countries. The regulatory efforts have aimed to ease the development of this financing channel, while addressing concerns about transparency and protection of investors. Many countries around the world (including ASEAN countries – see section below) have also taken regulatory steps to ease the development of equity crowdfunding (among other FinTech developments) while at the same time not jeopardising investor protection and financial stability.

A common approach to this aim is to introduce sandboxing, an experimental regulatory perimeter for innovative business ideas to be tested in a controlled environment. The rationale behind such an approach is that innovation must not be hindered by rigid regulations, which are suited to well-established business models. Certain conditions are imposed on the businesses in order to ensure consumer protection, and consumer feedback (concerning both the business idea and its regulation) as an essential component of this kind of approach.

Singapore is a case in point: in 2016, the Monetary Authority of Singapore (MAS) introduced the “FinTech Regulatory Sandbox.” Brunei Darussalam, Indonesia, Malaysia, and Thailand have developed a similar approach. This allows experimentation within the financial industry in a simulated environment with relaxed regulatory requirements. In addition, many jurisdictions around the globe, including from ASEAN countries (see section below), have introduced specific regulation to facilitate equity crowdfunding. Box 7.1 outlines the approach adopted in the Republic of Korea.

Box 7.1. Regulation on equity crowdfunding in the Republic of Korea

The Republic of Korea proves to be an interesting case study on the benefits a relaxation of financial regulation can have on SMEs' access to finance. Korean SMEs were quick to adopt crowdfunding as an alternative source of financing. However, tight regulations hindered the growth of the tool. Korean regulators responded to the uptake by creating a more favourable environment for various types of crowdfunding.

The first wave of reforms came in 2016 with the Capital Markets Act, in which crowdfunding in the form of securities and loans became legal. For securities, crowdfunding was allowed for the commercialisation of ideas put forward by startups, defined as unlisted companies within seven years of their creation. Non-professional individual investors could invest a maximum of KRW 2 million (USD 1 852) per firm.

The maximum amount for crowdfunding per company was also limited to KRW 0.7 billion (USD 0.6 million) per year. This enhanced the ability of SMEs to raise equity. As of March 2017, 14 securities firms were registered as financial intermediaries recognised by the Financial Services Commission in the Korea Securities Depository's CrowdNet website. The total amount of securities raised through crowdfunding increased from KRW 17.4 billion, amounting to 0.8% of venture capital investment in 2016, to KRW 27.8 billion (USD 25.7 million) in 2017. Loans provided through crowdfunding have increased more rapidly, reaching KRW 2.3 trillion (USD 2.1 billion) in 2017.

Despite the support from the Capital Markets Act, there were still administrative burdens and limited scope hindered growth. Amendments to this act made in the first half of 2019 by The Financial Services Commission has made crowdfunding significantly more accessible to all SMEs. The previous restriction limiting crowdfunding to young SMEs, less than seven years old, was removed. Moreover, administrative burdens were reduced, with SMEs no longer having to submit a statement of transactions of listed securities personally traded by their employees. The government also increased the annual fundraising ceiling by a crowdfunding site from KRW 700 million to KRW 1.5 billion.

In the aftermath of this amendment, the amount of crowdfunding in South Korea gained around 37% in the first quarter of the year. The Republic of Korea has many success stories surrounding crowdfunding, including Boolio, a firm which specialises digital asset management, raising over KRW 1 billion in one day. The South Korean case exemplifies how crowdfunding, and the appropriate legislation surrounding the tool, can have a positive impact on access to capital for SMEs.

Source: CrowdNet, Korea Securities Depository (<https://www.crowdnet.or.kr/eng/index.jsp>), OECD Economic Survey, Korea (2018).

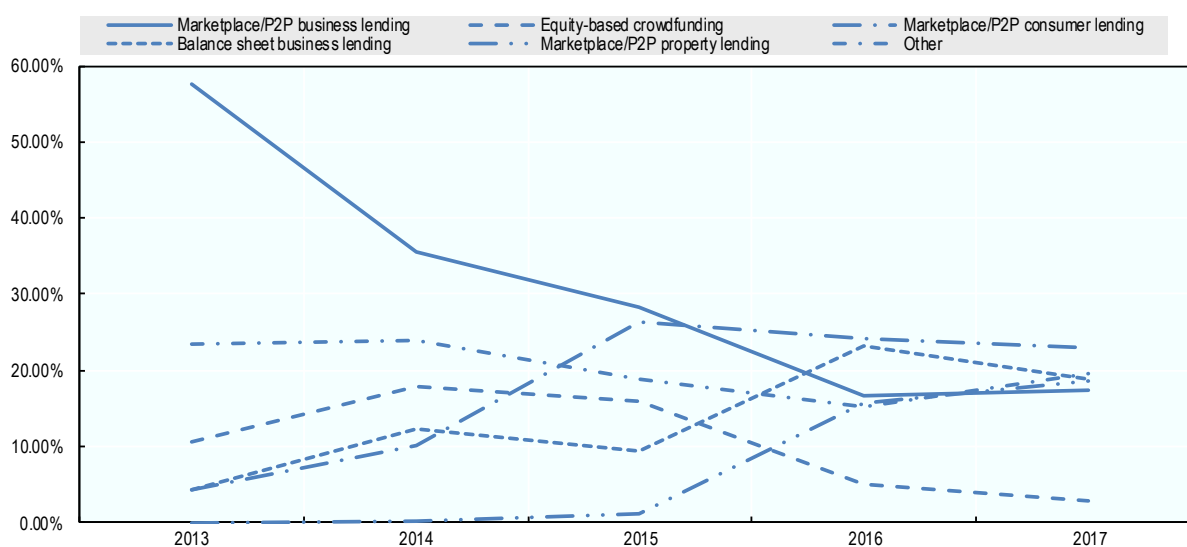
Another avenue to increase the take-up of equity crowdfunding by SMEs is to inform and connect SMEs to FinTech companies, workshops and the creation of FinTech associations. For example, Bpifrance (the French public investment bank) has taken an active role in supporting debt and equity crowdfunding by launching a crowdfunding portal in 2013 (BpiFrance, 2019^[157]). The portal works as a search engine for crowdfunding platforms, which are selected by Bpifrance and comply with existing regulation, in addition to promoting good practices. The site intends to strengthen industry networks and make investment easier for the large public, which can select projects through a simple interface. Bpifrance simply manages the platform and does not intervene in the design/selection of projects or in the fundraising process (G20/OECD, 2018^[11]). Similar approaches could be more widely adopted by ASEAN economies.

Global trends

Equity crowdfunding activities have expanded rapidly in many parts of the world, albeit often from a low base. While global volumes increased strongly in 2015 and remained stable over 2016-17, the share of equity crowdfunding in the Asia-Pacific region decreased significantly over 2014-17 (Figure 7.7). This reflects a decline of equity crowdfunding in the region but also the rising importance of other instruments in the online alternative finance mix.

Figure 7.7. Online alternative market share by model in Asia-Pacific excluding China

As a percentage



Note: Shares were calculated from volumes in USD. “Other” models include real-estate crowdfunding, invoice trading, reward-based crowdfunding, donation-based crowdfunding, debt-based securities, balance sheet consumer lending and revenue sharing/profit sharing crowdfunding.

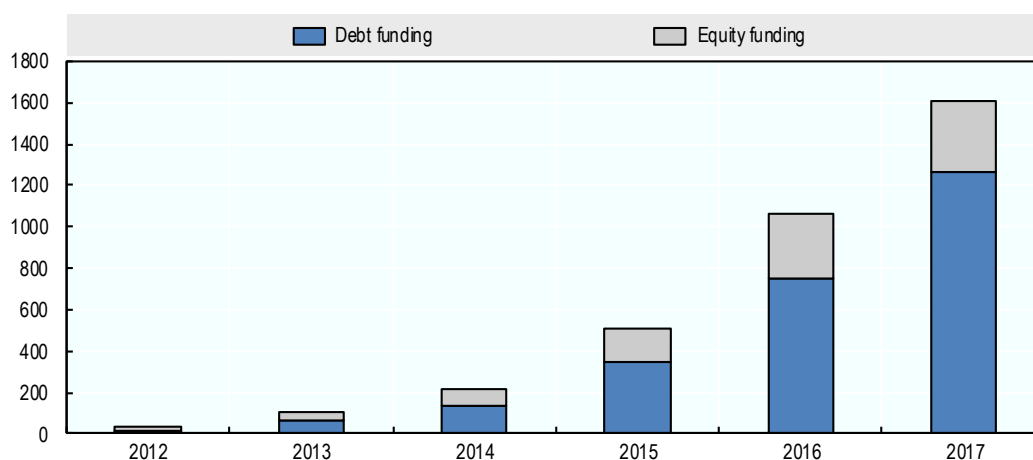
Source: (CCAF, 2018_[118]).

Figure 7.8 shows the online alternative finance volumes in Europe, with a relatively stable share of that increase attributable to equity instruments. In Europe, 2017 saw 105 unique entries on equity crowdfunding platforms from 66 firms coming from 31 countries. In 2017, this instrument represented 20% of the total online alternative finance market, a figure that has remained relatively stable in recent years.

It is important to analyse equity crowdfunding within the wider context of private equity markets in the regions under study. From this perspective, the moderate growth of equity crowdfunding in Europe in 2017 should be seen in the context of a decrease in the number of early-stage VC deals. There is also considerable cross-country variation, depending on legal frameworks in place for the instruments at hand. The adoption of the Crowdfunding Act in Finland in 2015, for instance, removed significant barriers to equity crowdfunding and contributed to Finland’s position as a market leader for this instrument, both in absolute volumes and per capita.

Figure 7.8. Equity and debt funding in total online alternative finance volumes in Europe, 2012-17

In EUR million

Source: (CCAF, 2019_[158]).

Developments in ASEAN member states

Equity crowdfunding is gaining importance as a source of financing around the globe, including in Southeast Asia. It allows high-potential firms, which often face severe financing constraints, to access funds from a broader range of sources, including retail investors. Several ASEAN countries have enacted either specific legislation on equity crowdfunding or general frameworks for crowdfunding in recent years, and implementation is still underway in some other jurisdictions. These new rules often require platforms to be officially registered and all crowdfunding activities to take place on registered platforms. Some jurisdictions, like the Philippines, apply caps on crowdfunding investments from retail investors. Meanwhile, a few ASEAN member states have not enacted any legislation, either because there are no crowdfunding activities in the country or because they are subject to the general securities framework (ASEAN and USAID, 2017_[159]).

Brunei Darussalam

Autoriti Monetari Brunei Darussalam (AMBD) issued a Notice on Equity Based Crowdfunding (ECF) Platform Operators on 10 August 2017 with the objective of providing startups and small businesses with alternatives to raise capital. This Notice introduces new sets of requirements for any persons wishing to operate an ECF platform in Brunei Darussalam which are similar to those requirements covered in the Notice on Peer-to-Peer Financing Platform Operators except that only common shares can be listed and offered to investors through an ECF platform. This is in line with the Brunei Darussalam Financial Sector Blueprint (2016-25). There are currently no platforms operating under these regimes, although the AMBD received expressions of interest from local and regional interested parties.

Cambodia

There is currently no information on policies on ECF or data about such activity in the country.

Indonesia

Indonesia adopted specific ECF regulation in 2018, enacted in 2019 (OJK Regulation No.37/POJK.04/2018 concerning IT Crowdfunding Services via Public Offerings). The regulation is expected to spur the market, but data is scarce as of yet.

Lao PDR

There is currently no information on policies on ECF or data about such activity in the country.

Malaysia

Malaysia was the first ASEAN country to create a framework aimed at facilitating equity crowdfunding, with the objective of allowing MSMEs to raise early-stage financing. In August 2014, the Securities Commission Malaysia issued the Public Consultation Paper N° 2:2014 Proposed Regulatory Framework for Equity Crowdfunding. The paper highlighted the potential for equity crowdfunding to facilitate innovation, productivity and growth, while emphasising that increased competition among suppliers of capital could lower its cost. Twenty responses were received by the Securities Commission Malaysia.

This consultation process resulted in the amendment of the Capital Market Services Act in May 2015. Companies may raise up to MYR 3 million (c. USD 728 630) in any 12-month period and MYR 5 million (c. USD 1 214 350) in total through equity crowdfunding platforms. Retail investors are subject to an investment limit of MYR 5 000 (c. USD 1 214) in one company and a total sum of MYR 50 000 (c. USD 12 414 annually).

As of May 2019, the Securities Commission Malaysia had registered ten crowdfunding operators. Since their inception, a total of MYR 49.48 million (c. USD 12 million) capital was raised through 53 successful campaigns. This amount has steadily increased, reaching MYR 38.36 million (c. USD 9.3 million) of capital which was raised through 40 successful campaigns, with an 89% campaign success rate. In 2017, MYR 22.34 million (c. USD 5.43 million) was raised by 23 issuers in 2017 and MYR 10.4 million (C. USD 2.53 million) was raised by 14 issuers in 2016. This represents a 376% increase between 2016 and 2019.

Table 7.1. Equity raised through crowdfunding operators in Malaysia

Year	Cumulative amount raised in USD million	Change	Number of campaigns	Change
2016	2.5	N/A	14	N/A
2017	5.43	+114.8%	23	+64.29%
2018	9.3	+71.71%	40	+73.91%
2019	12	+28.99%	53	+32.5%

Source: Securities Commission Malaysia.

Myanmar

There is currently no information on policies on ECF or data about such activity in the country.

The Philippines

In 2019, the Philippines Securities and Exchange Commission (SEC) released a new crowdfunding regulation. It aims to regulate crowdfunding platforms at large but contains specific provisions for ECF. According to the regulation, crowdfunding platforms must register with the SEC and all crowdfunding

transactions must take place on a registered platform. Generally, two caps on investments apply to retail investors: annual investment may not surpass PHP 2 million or 5% of income. Crowdfunding platforms were given three months to register with the SEC and make sure that they comply with the new rules (Fintechnews Philippines, 2019^[160]).

Singapore

Twenty licensed securities-based crowdfunding (SCF) platforms were in place in Singapore as of June 2019, including both debt-based and equity-based SCF platform operators. Funds raised through securities-based crowdfunding amounted to SGD 137 million in 2017 (c. USD 100 million), of which SGD 68 million (c. USD 50 million) were raised through lending-based offers and SGD 69 million (c. USD 50 million) through equity-based offers.

In June 2016, the Monetary Authority of Singapore (MAS) announced that it would make it easier for startups and SMEs to access securities-based crowdfunding in two ways.

First, MAS made it easier for SCF platform operators to rely on the existing regulatory framework for small offers, to raise funds from SCF including from retail investors. For such platform operators, MAS simplified the pre-qualifications allowing issuers raising less than SGD 5 million within 12 months to do so without issuing a prospectus. As a safeguard for investors, MAS required SCF platform operators to document and disclose the key risks of SCF investments and obtain investors' acknowledgement that they have read and understood these risks.

Secondly, MAS reduced the financial requirements for SCF platform operators who wanted to raise funds through SCF only from accredited and institutional investors. MAS eased the requirements for these platform operators to be licensed as dealing intermediaries, as long as they did not handle or hold customer monies, assets or positions, and did not act as principals against their customers.

Furthermore, MAS published new guidelines on SCF-related advertising and Frequently Asked Questions (FAQs) on lending-based crowdfunding. These new guidelines clarified that the advertising restrictions in the Securities and Futures Act did not prohibit SCF platform operators from publicising their services and provided guidance on the manner in which such advertisements can be made. The FAQs aimed to help market participants, including SCF platform operators, better understand the regulatory framework underpinning lending-based crowdfunding.

All these measures sought to strike the right balance between improving access to SCF for startups and SMEs and protecting investor interests.

Thailand

Thailand has put in place a framework to regulate equity crowdfunding in order to increase startups' access to capital. This framework results mainly from two regulations in effect since May 2015: the Notification of the Capital Market Supervisory Board)N° TorJor. 7/2558, Re: Regulations on Offer for Sale of Securities through Electronic System or Network)ECF Notification((and the Notification of the Securities and Exchange Commission)N° KorJor. 3/25s58 Re: Exemption from Filing of Registration Statement for Securities Offered through Provider of Electronic System or Network(.

As of February 2019, two equity crowdfunding platforms had been approved and were operational (including one set up by the Stock Exchange of Thailand – SET). Thailand's Securities and Exchange Commission ("SEC") has also issued new regulations on May 2019 that widens the scope of permitted crowdfunding activities, (replacing the regulatory body's previous notification) with a clear distinction between retail investors on the one hand and other investors using equity crowdfunding platforms (such as business angels, venture capitalists and institutional investors).

Box 7.2. The ASEAN innovation network (AFIN)

Singapore is currently the ASEAN Chair for Fintech Development and is willing to leverage this leadership position to encourage the sharing of Fintech innovations at ASEAN level. To reach this aim, Singapore has partnered with the International Finance Corporation and the ASEAN Bankers Association (ABA) to establish the ASEAN Innovation Network (AFIN), which will provide a platform for collaborative innovation for Financial Institutions and Fintech firms, with the objective of fostering the development of alternative finance platforms. In this framework, a partnership was established between the Monetary Authority of Singapore, the Bank of Thailand and State Bank of Viet Nam regarding P2P/Marketplace lending and Equity Crowdfunding.

Viet Nam

There is currently no information on policies on ECF or data about such activity in the country.

Policy implications for ASEAN member states

The above analysis indicates that many ASEAN countries could improve their current regulatory framework to stimulate the wider take-up of equity crowdfunding by SMEs. Survey data from Europe indicate that two types of risks are of greatest concern for European alternative finance platforms for equity crowdfunding platforms: potential collapse of one or more well-known platforms due to malpractice, and fraud involving one or more high-profile campaigns/deals/loans. Both concerns were mentioned by about a third of equity crowdfunding platforms and could be relevant for platforms operating in ASEAN countries as well. These concerns resonate within a burgeoning industry seeking public legitimacy and which remains under close regulatory scrutiny.

The importance of specific legislation is underlined by the experience of countries in the region that are on the forefront in this regard. In some countries such as Malaysia (Equity Crowdfunding Framework) and Indonesia (OJK Regulation No.37/POJK.04/2018 concerning IT Crowdfunding Services via Public Offerings), the adoption of specific regulation has led to a strong expansion of this instrument. In Malaysia, 41% of FinTech firms are involved in capital raising fundraising, for example. This is the highest market share in the country, before digital payments and digital lending. In jurisdictions where no specific legislation has been enacted (such as Lao PDR, Myanmar and Viet Nam), the existing framework for securities is applied, by contrast, and that may explain, to some extent, the underdevelopment of the market.

At the same time, bespoke regulation should not result in overregulation, specifically with respect to licencing requirements. Strict eligibility licencing requirements can stifle financial innovation and lead to a situation where few equity platforms are able to comply. In line with recommendations made in a recent report from the ASEAN Secretariat in collaboration with the United States Agency for International Development (USAID), countries in the region would benefit from the licencing schemes specific to equity crowdfunding platforms (ASEAN and USAID, 2017^[159]). Where the licencing scheme for these platforms is broader (i.e. it covers other platforms and instruments), regulations and requirements that apply to equity platform operators should be made clear. In addition, licencing or registration requirements should contain the following requirements:

- Platform operators should operate in an open and transparent manner.
- Platform operators should have measures in place ensuring that their capacities to run the platform are met, e.g. technical and financial capacities.

- Processes must be in place that require issuers to comply with obligations flowing from equity crowdfunding regulations.
- Platforms must agree to comply with ongoing governance requirements, as per relevant equity crowdfunding regulations. This includes disclosure obligations, obligations to handle trust money in compliance with applicable regulations, and the application of policies aiming to avoid conflicts of interest (ASEAN and USAID, 2017^[159]).

More generally, legislation should be sufficiently flexible to accommodate equity crowdfunding and other innovative ways to finance SMEs, as exemplified by the regulatory sandbox approaches adopted by several ASEAN jurisdictions. Countries that have not developed such an approach could look into international good practices.

Beyond regulation, there may be scope to increase awareness of the existence of equity crowdfunding as a viable source of financing for innovative SMEs and its benefits and downsides. Ideally, these outreach efforts should take place in partnership with relevant stakeholders, in close contact with innovative startups such as accelerators, incubators, chambers of commerce and business associations.

More generally, efforts could be accelerated to increase financial skills and vision of small business owners and SMEs, especially in light of pronounced gaps in this area in many countries. Indonesia, Malaysia and Singapore have developed and action plan for financial education, while the Philippines, Thailand and Viet Nam are in the implementation phase (OECD, 2016^[161]). These plans could be considered in other countries as well, and specific focus within such action plans on innovative SMEs and startups would benefit the equity crowdfunding industry.

Finally, some ASEAN member states could raise efforts to increase access to internet and lower the price of fixed broadband connections, including in rural and/or peripheral regions.

8. Blockchain-based financing: Initial Coin Offerings (ICOs) for SME financing

Initial Coin Offerings: structure and characteristics²

Initial Coin Offerings (ICOs) consist of the creation of digital tokens by young micro-SMEs and startups and their distribution to investors in exchange for fiat currency or, in most cases, mainstream cryptocurrencies, such as Bitcoin or Ether (Figure 8.1). ICOs are also called crowdsales of coins or tokens or security token offerings, which are self-defined as no common classification of token offerings exists to date.

ICOs are enabled by the use of Distributed Ledger Technologies (DLTs), such as the Blockchain, which facilitate the exchange of value without the need for a trusted central authority or intermediary (e.g. government, bank) and allow for efficiency gains driven by such dis-intermediation. Tokens are cryptographically-secured and benefit from the inherent characteristics of DLTs on which they are built such as transparency, security and immutability of the ledger given its distributed nature.

ICOs introduced an alternative new instrument for capital raising of SMEs, with the potential to improve competition in SME financing. In addition to providing capital to those companies that have no alternative, ICOs could put pressure on existing financing sources (e.g. VCs) to compete and provide better terms for the financing of SMEs. Parallels are made between ICOs and conventional crowdfunding finance.

Figure 8.1. Subscribing to an Initial Coin Offering issuance



Source: (OECD, 2019_[162])

² This section is drawing on (OECD, 2019_[162]) and (OECD, 2019_[163]).

Despite being a very recent phenomenon, ICO activity has exploded in the period 2016-2018. The growth in ICO activity can be attributed to the novelty of the mechanism and the speculative hype around cryptocurrencies experienced in the period 2016-17 with the rise of the bitcoin. Ethereum's introduction of the ERC20 standard for token creation allowed for a much easier ICO process which also contributed to such growth. At the same time, the need of early bitcoin investors to divest part of their massive gains within the cryptocurrency environment has also had an impact on the trend. The exuberance around ICOs slowly unwound in 2018, driven by increased regulatory scrutiny and a crash in token valuations, leading to a downward trend in ICO issuance levels.

Token rights

Tokens issued in ICOs can confer a combination of different types of rights to their holders. These include access rights to participate in the platform (in which case tokens are used to pay for fees involved in platform participation), rights to buy the service or product of the issuer (in which case tokens are used to pay for the service), claims on future revenues of the company, rights to contribute to the development of the software, voting rights similar to those assigned to shares, and other governance rights that can range from decision-making about the platform to validation of new participants or transactions in proof-of-stake models (OECD, 2019_[162]).

The types of rights assigned to tokens differ a lot from one ICO to another and are closely linked to the strategy of the company and the intended purpose of the token issuance. For example, if the company relies on the developer community for the creation of applications that run on the platform, the tokens will need to incentivise and reward those participants. In certain proof-of-stake systems, validators of new transactions must own tokens in order to be able to participate in the validation of new transactions.

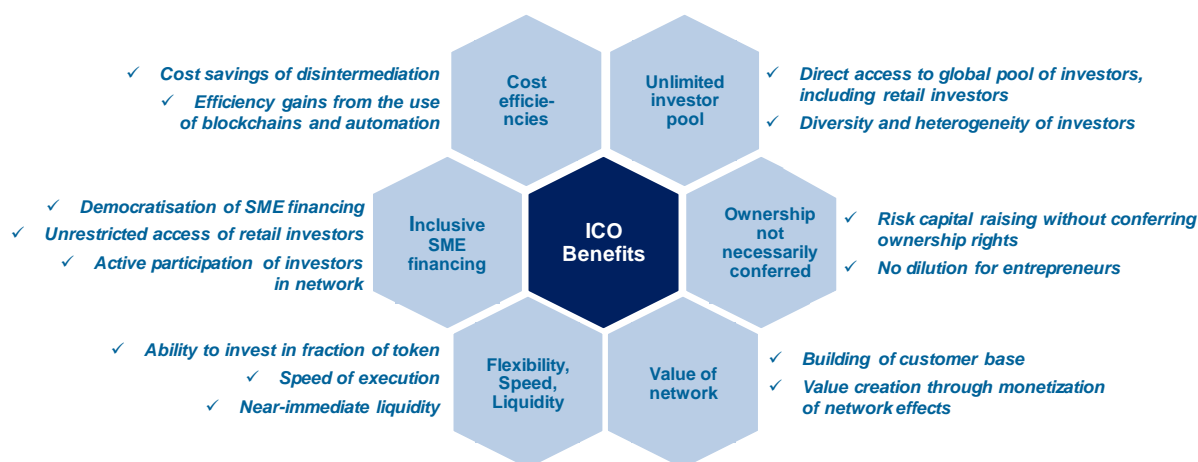
Benefits of ICOs for SMEs

Regulated ICOs can be a more inclusive financing vehicle by allowing small retail investors to participate in the financing of small businesses and startups and can offer numerous benefits to issuers and investors (OECD, 2019_[163]). Depending on the type of rights assigned to ICO tokens, companies can raise risk capital without sharing ownership, addressing one of the main impediments to the use of public equity financing (dilution) (Figure 8.2). SMEs are granted direct access to an unlimited investor pool and the liquidity of tokens issued in ICOs is one of most important benefits of ICOs, especially when compared to conventional startups financing mechanisms such as Venture Capital (VC) funding (OECD, 2019_[163]).

ICOs facilitate the exchange of value without the need for a trusted central authority or intermediary which allows for disintermediation and corresponding efficiency gains to be reaped. It could be argued that the disintermediation that occurs in ICOs could “democratise” SME financing, distributing control among SMEs and participants/token-holders instead of concentrating decision power in the hands of financiers, as is the case with banks in traditional debt financing (OECD, 2019_[163]). At the same time, SMEs diversify their financing options, allowing them to appeal on not just their profit potential but other characteristics of their project, which in turn could encourage banks to look into seeking alternative ways to determine their SME financing methods, too.

Automation and the use of innovative applications enabled by the use of distributed ledger technologies, such as the blockchain, can create further efficiencies gains which, in theory, can be shared by SMEs and investors alike, potentially translating into lower funding costs when compared to public offerings. From a technical perspective, tokens issued in ICOs are cryptographically secured and benefit from characteristics of DLTs, such as immutability, permanence, transparency and security. The use of smart contracts may reduce counterparty risk as the programming of such applications guarantees the automatic execution of a transaction upon triggering of pre-defined conditions.

Figure 8.2. Benefits of ICOs for SMEs

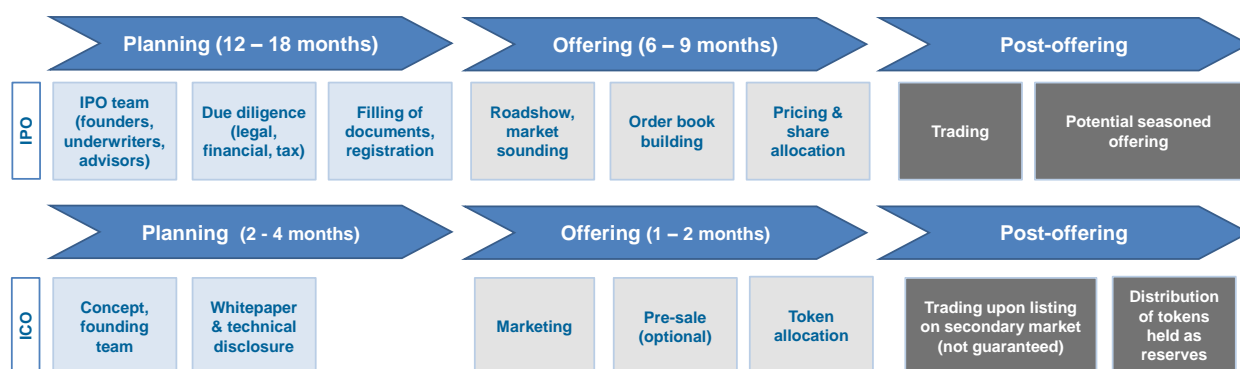


Source: (OECD, 2019^[162])

ICOs are faster to implement when compared to other public offerings, at least in the current state of the market (Figure 8.3). This, however, cannot be exclusively attributed to the benefits of the technology employed, as it is also due to limited disclosure requirements and due diligence performed in many of the current ICOs and which have a detrimental effect on the credibility and viability of the project and on investor protection.

ICOs have the potential to overcome some of the impediments to the financing of early stage SMEs in an innovative way. The unwillingness of entrepreneurs to give away equity ownership or control in their company restrains the use of public equity funding by SMEs (Nassr and Wehinger, 2016^[49]). Depending on how token offerings are structured, companies can raise risk capital without necessarily conferring ownership rights. In other words, the entrepreneur can publicly raise finance without risking dilution.

Figure 8.3. ICO process vs. IPO process timeline



Source: (OECD, 2019^[162]).

The undeniable comparative advantage of an ICO offering compared to venture capital financing from the perspective of both the investor and the entrepreneur is liquidity. Tokens issued in ICOs can be traded in secondary markets with immediate liquidity from the day of listing.

Network effects as source of value

Network effects describe the positive externalities observed in networks when the value of a product/service to a user increases as the number of users increases, and the potential links between participants grow for every new participant joining the network (Hendler and Golbeck, 2008)³. In other words, the benefits a user enjoys from joining a network increase with the total number of users who are part of the network. This value proposition has first been quantified by *Metcalfe's law* (the value of a network is proportional to the square of the number of users of the network) and *Zipf's law* (the value of a network is proportional to $n \log n$, where n is the number of users of the network) (Briscoe et al., 2007). Irrespective of how its value is measured, the existence of network effects is widely acknowledged.

ICOs enable value creation by design: through the formation of platforms based on distributed ledger technologies; the attraction of participants and users (effectively all subscribers/tokenholders) and their possible interactions; and ultimately the inducement of positive network externalities on those platforms (OECD, 2019_[162]). These potential network effects increase the economic value of the platform itself and can have wider economic and social benefits. ICOs have the potential to create economic value that goes beyond the value of the company and the product/service that is developed on the back of funds raised. Network effects created in ICOs by the mere participation of subscribers in the newly-built network is an important value creator and a comparative advantage of ICOs when compared to traditional methods of financing.

Entrepreneurs may decide to seek financing through an ICO instead of VC as a way to attract a consumer-base and build a network around the project instead of seeking a personal financial reward. While there is a fundamental difference between the two financing methods, the easier network effects may partly explain why ICO funding has overtaken VC funding in recent months (OECD, 2019_[162]). Rather than resorting to an ICO in the absence of other alternatives, companies may seek to fund their companies through token issuance with a view to create and monetise value from network effects.

Risks and challenges of ICOs for SMEs

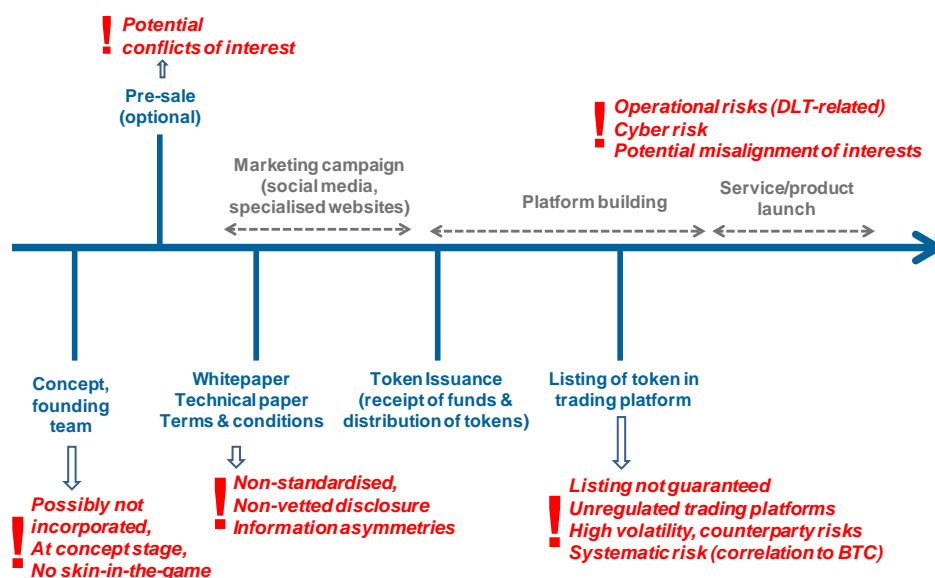
In their current form, ICOs involve a number of challenges both for SMEs and investors subscribing to offerings (Figure 8.4), and risk having repercussions to the wider SME financing market by diverting important resources from productive investments to fraudulent activity and scams.

The economics of ICO issuances, increasingly known as *tokenomics*, involve the financing and economics around the issuing and implementation of a token within an ICO ecosystem, and the way holders of tokens are able to use these to exchange goods and services on the platform (OECD, 2019_[162]). This includes the structuring of the offering, sale models, pricing of tokens and allocation mechanisms.

The structuring of token issuances can give rise to conflicts of interest by the issuer (OECD, 2019_[162]). The ability of entrepreneurs to receive tokens issued through an ICO on the back of a concept that has not been executed and without having taken any personal financial risk in the venture could create such misalignments of interest. For example, in the absence of lock-up period requirements, the lack of any 'skin-in-the-game' from the side of the entrepreneur can be a source of potential conflicts (e.g. pump and dump schemes): once the token sale is over, there is little incentive left for the founding team to actually deliver the project. Private sales of tokens ahead of ICOs ('pre-sales') raise a number of issues, as they tend to favour insiders by offering heavy discounts on the tokens that hold exactly the same risk as the ones purchased by investors during the offering.

³In a typical network, the addition of a new participant (or network node) increases the willingness to pay for network services by all participants and the benefits of the addition of an extra node exceed the private benefits accruing to the particular node.

Figure 8.4. Red flags along the ICO process



Source: (OECD, 2019^[162]).

Companies raising funds through ICOs are exposed to increased volatility that may be partly due to subscribers who are only driven by speculation and have no intention of participating in the newly-created network. Indeed, investors driven by speculative herd behaviour may invest with the intention to sell as soon as the tokens become tradeable (in what is called "flipping"). This further exacerbates the inability of SMEs to exercise their own pricing strategy when tokens may be the only way to consume the product/service.

Valuation and pricing of tokens is challenging, as traditional corporate finance theories may not be easily applicable to token issuances. Most ICO offerings do not fit the standard investment paradigm, *inter alia* because of the ways value is created and attributed between the different participants of a network, the estimation and quantification of network effects, and the duality in the function of the tokens which in most cases have some usage value in addition to investment-specific value. Estimating the appropriate value of tokens is even more difficult given the lack of transparency of most ICOs.

In addition, financial accounting and reporting of companies that have raised financing through a tokensale is currently a challenge for all ICO participants. To date, there is no international standard agreed for the accounting of ICO tokens. The lack of governance structures at the issuer level and the network level create an extra source of risk for both issuers and investors.

As far as trading of tokens is concerned, secondary trading of tokens is neither automatic nor guaranteed after the issuance of tokens in an ICO. The listing and active trading of a token in a crypto-exchange or crypto-trading platform is actually considered as a proxy for the success of the IPO.

The most prominent limitation of ICOs at their current stage and form lies in the regulatory uncertainty and arbitrage exploited by some issuers. The absence of disclosure requirements in ICOs exacerbates information asymmetries already present in early stage SME financing.

Importantly, there is also a lack of a financial consumer and investor protection in ICOs that would allow investors to obtain redress and compensation, in a situation where coverage by bankruptcy laws is not assured, and the risk of fraud is high. ICOs may non-deliberately contribute to (and participate in) money laundering or financing of terrorism by allowing investors to invest funds that have not gone through AML/CFT control checks.

ICOs for inclusive SME financing

Depending on the conditions of issuance, ICOs are changing capital formation and inclusive financing in ways that we have not seen before. ICOs can be a more inclusive financing vehicle by allowing small retail investors to participate in the financing of small businesses and startups (OECD, 2019^[163]). ICOs can provide SMEs with direct access to an unlimited investor pool, offering near-immediate liquidity and the potential to create economic value that goes beyond the value of the company through the creation and monetisation of network effects. Depending on the structure, SME founders can raise early stage funding without giving away ownership, addressing a major impediment to IPOs.

Despite this powerful potential, in the current stage and in their current form, uncertainty in the applicable regulatory framework for ICOs and crypto-asset markets, coupled with limitations in the structuring of ICOs and operational risks related to DLT-based networks, pose significant risks for investors participating in ICOs and issuers alike.

Clarity in the regulatory and supervisory framework applying to ICOs is arguably a stepping stone to the safer use of token issuance for financing purposes. Standardised disclosure requirements are indispensable so as to overcome information asymmetries that are already present in the financing of SME risk. Enhanced investor protection for retail investors, coupled with efforts for the financial education of retail investors, can safeguard their informed participation in such financing.

AML/CFT requirements on all ICO issuances are equally important, especially given the wide range of relevant issues observed in the crypto-assets space. In response to AML/CFT concerns, in October 2018 the FATF adopted changes to its Recommendations and Glossary in order to ensure that the providers of financial services for ICOs are subject to AML/CFT regulations (Financial Action Task Force (FATF), 2018^[164]).

The pitfalls from the design and structure of ICOs, and issues related to authentication, disclosure, governance and misalignment of interests between founders and investors could be addressed as the financing mechanism matures. As market confidence in the underlying DLT technology grows, the potential to create a safer environment for such activity in the future is strong. In addition to regulation, best practices that are increasingly driven by the industry⁴ could also support a robust and safe ICO market.

When ICOs mature and develop in a regulated form, they could offer the potential to complement traditional bank and market-based lending, facilitating a better distribution of risk amongst market participants. A delicate balance will need to be achieved in the development or application of regulatory and supervisory requirements that will not deprive the ICO mechanism of its speed and cost benefits, particularly when it comes to smaller size offerings. Proportional application of regulatory requirements, as is the case in small public equity offerings in certain jurisdictions, could be considered as the way forward.

Given the global nature of ICOs issuing and trading across borders, cooperation at the international level would warrant a coordinated approach that will prevent regulatory arbitrage and allow ICOs to deliver their potential for the financing of blockchain-based SMEs, while also protecting investors.

Which types of SMEs can benefit the most from ICO issuances?

ICOs may not be the right financial instrument for every person or every project, even in a more mature, safe and regulated form. A differentiation needs to be made between blockchain-enabled projects/products/services, and businesses or products/services not built on DLTs. For an SME to benefit from the raising of financing through an ICO, there needs to be a business rationale that requires the use of a DLT solution to address real consumer need, and ICOs are particularly beneficial for products/services founded on the basis of a network.

⁴ For example, see Best Practices of Token Sales issued by the Fintech association of Hong Kong, and the Roadmap for Blockchain standards in Australia to support the application of DLT standards.

Token issuance allows for quicker adoption of the product/service and the creation of a customer-base before the launch of the project. Most importantly, maximising value creation through network effects present in newly-created networks of investors purchasing tokens is one of the major comparative advantages of ICOs when compared to other financing forms. In the absence of a business model that can benefit from such network effects, launching an ICO may not be a viable and sustainable financing solution.

ICOs in the ASEAN region: issuance activity and regulatory framework

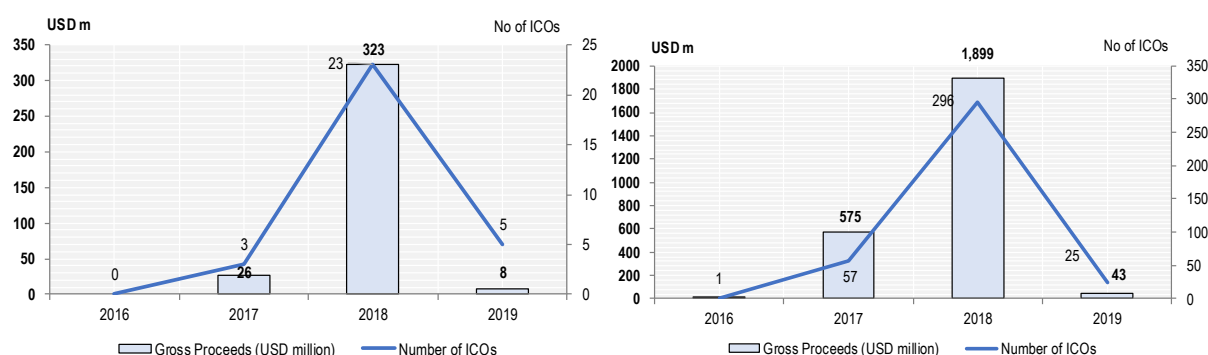
Some ICO activity has been recorded in all ASEAN Member States (AMS) with the exception of Brunei Darussalam and Myanmar. The vast majority of ICO issuance has been observed in Singapore, partly explained by the position of the country as a global financial centre, as well as the timely provision of regulatory guidance on token offerings (Figure 8.5).

Besides regulatory clarity, the development of ICOs in Singapore points to the importance and value of the *ecosystem* for SME financing instruments. The existence of infrastructure, entrepreneurial culture, investor concentration and skilled workforce, coupled with clarity on the regulatory framework, provided fertile soil for this innovative SME financing mechanism to flourish.

The quality of data on ICO offerings and crypto-assets varies and might not always be satisfactory, while market-related figures (prices, trading volumes, and volatility) may be manipulated or may not necessarily fit all types of crypto-assets equally (Financial Stability Board (FSB), 2018^[165]). To that end, the chapter is only reporting data on issuance sourced from public sources and should be treated with caution. Data from the official sector are scarce or completely unavailable.

Figure 8.5. ICO issuance in ASEAN, 2016 - H1 2019

Excluding Singapore (LHS) and all ASEAN Member States (RHS), in USD million and in number of issuances

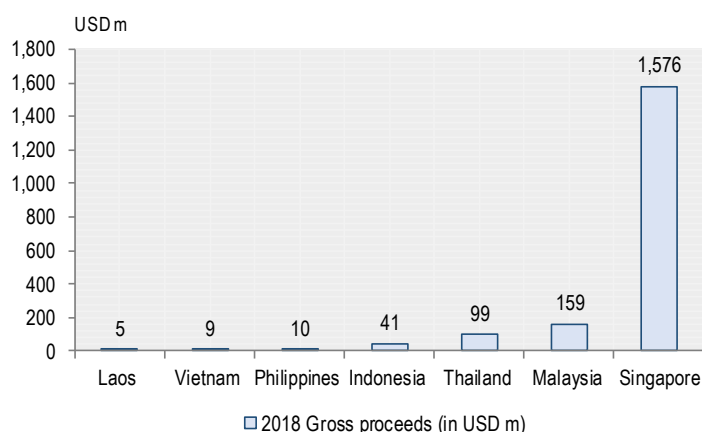


Note: Information for all ASEAN Member States excluding Singapore as the outlier with the largest ICO activity among ASEAN Member States. Includes only ICOs that have been completed, i.e. amount sought successfully raised. For data on Singapore, see Figure 8.6.

Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

ICO issuances have been banned in three of the AMS: Cambodia, Lao PDR and Viet Nam, either through specific bans on ICOs or through bans on any crypto-related activity. For example, in Cambodia, any activity involving crypto-assets is illegal. Two AMS, namely Brunei Darussalam and Myanmar, have issued investor warnings against crypto-currencies and crypto-assets more broadly, without banning ICOs. Thailand, Malaysia, the Philippines and Singapore have provided 'tailor-made' regulatory frameworks explicitly covering ICOs.

Figure 8.6. 2018 gross proceeds from ICOs (in USD m)



Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

Brunei Darussalam

ICOs, depending on the type of digital tokens, may fall within Autoriti Monetori Brunei Darussalam's (AMBD) regulatory regime. For instance, any issuance or offer of digital token which constitutes securities is subject to the regulatory regime under the securities law administered by AMBD, the Securities Markets Order, 2013. With regards to cryptocurrencies, AMBD has issued a press release on 22 December 2017 reminding the public to exercise extreme caution with cryptocurrencies, such as Bitcoin, as cryptocurrencies are not legal tender in Brunei Darussalam and are not regulated by AMBD. On 24 April 2018, AMBD has issued another press release reiterating AMBD's position on cryptocurrencies. Although cryptocurrencies are not legal tender in Brunei Darussalam and are not regulated by AMBD, the activities surrounding them could be regulated if they fall under any of the activities regulated in the relevant legislations under AMBD's purview.

Cambodia

Crypto-asset activity is prohibited in Cambodia. The National Bank of Cambodia has reaffirmed that the purchase or sale and circulation of any form of cryptocurrencies is prohibited in 2017, in the context of the false information around the National Bank's involvement in the issuance of 'K-coin' (National Bank of Cambodia, 2017^[166]).

In 2018, the National Bank of Cambodia, the Securities and Exchange Commission of Cambodia and the General Commissariat of National Police issued a joint statement stating that any unregulated crypto-related activity is illegal and warning investors of risks related to the issuance of cryptoassets (National Bank of Cambodia and Cambodia and General Commissariat of National Police, 2018^[167]). These included the increased volatility and risk of loss; risks of cybercrime and hacking; risks of money laundering and financing of terrorism; and the lack of customer protection mechanisms for users of such assets.

Given such prohibition, only one ICO of a Cambodian-incorporated issuer was recorded in Cambodia in 2017, raising USD 10 million via an unregulated issuance. As mentioned above, unregulated token offerings carry significant risks for participants, given the complete lack of investor and consumer protection safeguards but also taking into account the numerous conflicts of interest that may rise; operational risks; lack of transparency and accountability, among other risks.

Indonesia

Indonesia has a very developed digital landscape, and is currently one of the world's largest e-commerce markets. However, it has not issued guidance on ICOs thus far. On January 2018, Bank Indonesia, the Central Bank of the country, issued a warning against virtual currencies, such as the Bitcoin (Bank Indonesia, 2018^[168]) and warned all market participants not to buy, sell or trade crypto-assets.

In June 2018, the Commodity Futures Trading Supervisory Agency (Badan Pengawas Perdagangan Berjangka Komoditi (BAPPEBTI)) issued a guidance explaining that it considers cryptocurrencies as commodities that may be traded on futures exchanges.

According to publicly sourced information, USD 41 million were successfully raised by ICO issuances in Indonesia⁵ in 2018. These issuances were unregulated and therefore lacked the necessary safeguards for investor protection and market conduct, exposing participants to a number of risks.

Lao PDR

The Bank of Laos issued a warning against crypto-currencies such as the Bitcoin in 2018 (The Laotian Times, 2018^[169]) and proceeded to a full ban in 2019 (Vientiane Times, 2019^[170]).

According to publicly sourced information, USD 5 million were successfully raised by a single unregulated ICO offering in Lao PDR⁶ in 2018.

Malaysia

Malaysian-based companies raised USD 15.8 million in 2017 and USD 159.2 million in 2018.⁷ These issuances came before the regulatory framework for ICOs was put forward by the Securities Commission of Malaysia. Bank Negara Malaysia, the central bank of Malaysia, and Securities Commission Malaysia had already issued cautionary statements stating that digital currencies in general are not recognised as legal tender and that ICOs in particular may be subject to securities laws (Securities Commission Malaysia, 2018^[171]).

In 2019, the Securities Commission Malaysia issued a proposed regulatory framework explicitly covering ICOs (Securities Commission Malaysia, 2019^[125]). This framework seeks to balance the business needs of the industry while ensuring that adequate investor protection measures are in place, taking into account the proposed benefits and risks posed by ICO activities.

The proposed regulation requires issuers to seek authorisation by the Securities Commission for any offering or issuance of tokens, as well as the registration of a disclosure document or whitepaper that needs to comply with prescribed minimum requirements set by the Securities Commission. These include fitness and propriety checks for issuers, managers and board of director members of the issuing company; an assessment of the project that seeks to be financed; safeguards to protect existing shareholders and prospective tokenholders; AML monitoring; as well as an evaluation of the protocol, code and cyber risk management framework of the issuer. Issuers will need to be incorporated in Malaysia with a minimum capital of RM 500 000 and will be required to hold at least 50% of the company's equity with a lock-up period of 18 months.

⁵ Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

⁶ Idem.

⁷ Idem.

ICOs in Malaysia can raise up to a multiple of 10 times the shareholders' funds and subject to a ceiling of RM 100 million. Importantly, ICO issuers will only be allowed to withdraw or use funds raised based on milestones disclosed in the whitepaper. Other obligations relate to regular reporting, marketing restrictions as well as requirements around minimum contents of the whitepaper (Securities Commission Malaysia, 2019^[125]).

Myanmar

At this stage, neither the Central Bank of Myanmar nor any other authority of the country has taken a formal position on ICOs in particular. The Central Bank of Myanmar has, however, issued warning statements against crypto-currencies such as the Bitcoin (Lwin, 2019^[172]).

The Philippines

In 2018, USD 9.6 million was raised through ICOs in the Philippines⁸. These issuances were unregulated, and in the same year, the Enforcement and Investment Protection Department of the Securities and Exchange Commission (SEC) of the Philippines came forward with a cease and desist order against four companies issuing ICOs (Securities and Exchange Commission of the Philippines, 2018^[173]). The order explained that the tokens were considered to be securities but were offered for subscription without the necessary authorisation by the Commission, i.e. no registration document was filed or approved by the Commission.

The Philippines is the largest remittance destination in ASEAN, and financial remittances are a vital economic lifeline for the country. Based on estimates by the World Bank, USD 65 billion of remittances were sent to AMS, out of which USD 33 billion to the Philippines. The high cost of international remittances could be one of the reasons the country has experienced crypto-asset activity despite the lack of framework in the early days of adoption, as digital form of money, whether on distributed ledgers or in other forms of FinTech, can offer lower transaction costs and quicker transaction times. According to the World Bank estimates, the global average cost of remittance in Q2 2018 stood at 7.0%, which is more than double the 3.0% goal set under the UN Sustainable Development Goals (SDG) (World Bank, 2018^[174]).

Later in 2018, the SEC published for consultation a proposed regulatory framework specifically covering ICOs (Securities and Exchange Commission of the Philippines, 2018^[175]). The proposed framework applies to ICOs offering security tokens by entities incorporating in the Philippines or subscribed by residents of the country.

The new regulation requires an initial filing to the SEC at least 90 days before any pre-sale period, which will allow the SEC to determine whether the token qualifies as a security. In such case, the issuer is required to follow all regulatory requirements applicable to security issuances and to register the securities, unless there is an exemption. The proceeds of the offering must be kept in an escrow account of a third party. Foreign issuers wishing to offer tokens in the Philippines must establish a branch office in the Philippines.

The Philippines introduced new rules of self-regulation to govern cryptocurrencies through the Cagayan Economic Zone Authority (CEZA), which approved the Digital Asset Token Offering (DATO) regulations in February 2019. Under the new framework, CEZA is the principal regulating authority and the Asia Blockchain and Crypto Association (ABACA) is designated as a self-regulatory organisation to help implement and enforce the new rules (ABACA, 2019^[176]).

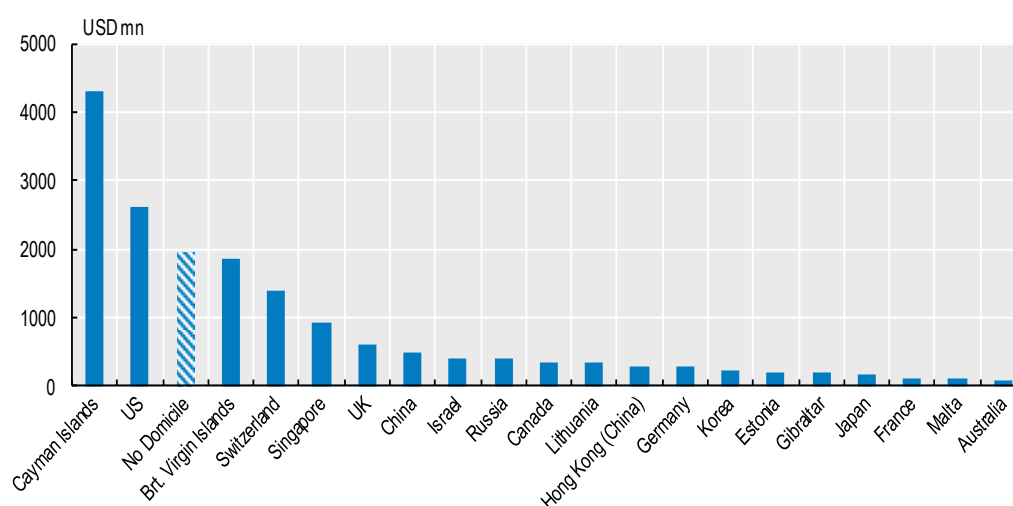
⁸ Idem.

Singapore

Singapore has been among the top five markets for ICO issuance globally, as measured by the amount of funds raised through token issuances (Figure 8.7). This is not surprising given the established position of Singapore as one of the leading global financial centre in Asia and a pole of investor interest, benefiting from a stable financial system and robust market infrastructure.

The regulatory guidance that the Monetary Authority has provided to issuers and investors early on in the evolution of the ICO market has also assisted the development of this market. It could also be argued that the regulatory response of countries in the region has also indirectly benefited the flourishing ICO market in Singapore. More specifically, the ban imposed by China's PBOC and the Financial Services Commission of Korea on ICOs may have displaced some prospective issuers to nearby markets such as the one in Singapore (Bloomberg, 2017_[177]), (Bloomberg, 2017_[178]).

Figure 8.7. Global ICO issuance by domiciliation, 2014 - H1 2018



Source: OECD Equity Market Review Asia 2018, based on data by Tokendata.io.

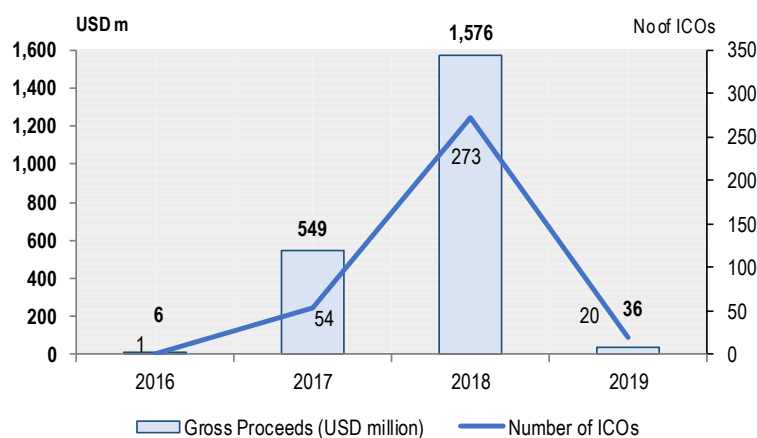
Singapore has been the most active AMS in terms of ICO financing, with USD 0.5 billion raised in ICOs in 2017 and over USD 1.5 billion raised by 273 token offerings in 2018, when the peak in ICO issuance was observed.

Notable examples of transactions which showcase the interest by investors to participate in such offerings include Bluzelle, which raised USD20 million with 24hours in February of 2018, and TenX which raised USD 43 million in seven minutes.

The first half of 2019 recorded subdued demand for ICO issuances, in line with the global trend of reduced appetite for ICOs, driven by the crash in valuation of major cryptocurrencies and by increased regulatory scrutiny.

Figure 8.8. ICO issuance in Singapore, 2016 - H1 2019

In USD million (LHS) and in Number of issuances (RHS)



Note: Includes only ICOs that have been completed, i.e. amount sought successfully raised.

Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

In 2017, the Monetary Authority of Singapore (MAS) issued a clarification on its regulatory position around the offering of digital tokens in Singapore (Monetary Authority of Singapore, 2017^[179]), followed by a detailed guide to digital token offerings (Monetary Authority of Singapore, 2018^[180]) issued in 2018.

According to the guidance, digital tokens may represent ownership or a security interest over an issuer's assets or property and MAS will examine the structure and characteristics of, including the rights attached to, a digital token in determining if the digital token is a type of capital markets product under the Securities and Futures Act (SFA). Digital tokens may also represent a debt owed by an issuer and be considered a debenture under the SFA, or a securities-based derivatives contract in case any derivatives are included.

Where digital tokens fall within the definition of securities in the SFA, issuers of such tokens would be required to lodge and register a prospectus with MAS prior to the offer of such tokens, unless exempted. Similarly, the issuer and any intermediaries participating in the offering will be subject to licensing requirements under the SFA, as holders of capital markets services licenses and/or a financial advisor's license.

Issuers or intermediaries of such tokens would also be subject to licensing requirements and AML/CFT checks under the SFA and the Financial Advisers Act, unless exempted. In addition, platforms facilitating secondary trading of such tokens would also have to be approved or recognised by MAS as an approved exchange or recognised market operator respectively under the SFA.

Securities offerings are exempt from the prospectus registration requirement under the SFA, when the offer of securities is small (the total amount raised by the person from such offers within any period of 12 months does not exceed SGD 5 million (or its equivalent in a foreign currency); if the offer made to no more than 50 persons within any period of 12 months; or when the offer is made to accredited and institutional investors (Government of Singapore, 2006^[76]). These exemptions would also apply to any ICO issuance that falls under the definition of securities in the SFA.

On the back of the clarification issued in 2017, the Commercial Affairs Department and the Monetary Authority of Singapore (MAS) issued a joint consumer guidance note to provide advice and information around potential risks associated with digital tokens and crypto-asset-related investment schemes (Commercial Affairs Department and the Monetary Authority of Singapore, 2017^[181]). CAD and MAS highlighted that in situations where sellers of digital tokens fail to highlight the risks, consumers should be

cautious and seek additional information on the underlying project, business or assets. The non-exhaustive list of consumer and investor risks highlighted by CAD and MAS in this guidance include increased risks of fraud when investing in schemes operating online or outside Singapore, risks relating to issuers without a proven track record, insufficient secondary market liquidity, the speculative nature of such investments, and the risks of money laundering and terrorist financing.

In response to the increasing AML/CFT risks associated with crypto-asset financial activities, the Financial Action Task Force has adopted changes to its Recommendations and Glossary that clarify and include in their scope of application financial activities involving ‘virtual assets’ and ‘virtual asset service providers’, such as exchanges, certain types of wallet providers, and providers of financial services for ICOs (FATF, 2018_[182]). These changes make clear that jurisdictions should ensure that virtual asset service providers are subject to AML/CFT regulations, for example conducting customer due diligence including ongoing monitoring, record-keeping, and reporting of suspicious transactions. In addition, such providers should be licensed or registered and subject to monitoring to ensure compliance. In 2019, the FATF elaborated further on how these requirements should be applied in relation to virtual assets, issuing guidance for a risk-based approach to virtual assets and service providers (FATF, 2019_[183]).

Thailand

Financial markets in Thailand demonstrated an interest in blockchain technology early on, with banks looking into integrating DLTs in their operations. In 2017, the Bank of Ayudhya launched a pilot blockchain programme with IBM. According to news reports, the Stock Exchange of Thailand announced plans to launch a blockchain-based market, which gathered interest from 600 businesses wishing to participate (Bangkok Post, 2017_[184]).

According to publicly sourced information, USD 99 million has been successfully raised through ICO issuances in Thailand⁹. All activity recorded was concentrated in the year 2018 and the above figure includes only issuances that managed to achieve their funding target.

In May 2018, SEC Thailand presented a holistic regulatory framework applicable to Digital Assets covering both crypto-currencies and digital tokens, as well as digital asset exchanges, brokers and dealers for secondary markets, and portal service providers (Emergency Decree on the Digital Asset Businesses B.E. 2561 A.D. 2018), while at the same time proposing new types of taxable income derived from possession of digital tokens or capital gains related to such assets (Emergency Decree on the Amendment of the Revenue Code No. 19 B.E. 2561 A.D. 2018) (Linklaters (Thailand) Ltd, 2018_[185]).

The regulation on Digital Asset Businesses defined digital tokens as electronic data units created on an electronic system or network for the purpose of specifying the *right* of a person to participate in an investment in any project or business (investment token); the *right* of a person to acquire specific goods, specific service or any specific other *right* under an agreement between the issuer and the holder (utility token); or any other electronic data units of right as specified in the notification of the SEC (other tokens).

Under the Thai framework for digital tokens, ICO issuance is a regulated activity and issuers are required to obtain an approval by SEC Thailand by submitting a filing data form (registration statement), a draft prospectus and a draft whitepaper before launching an offering. ICO issuance has to be launched using an ICO portal that has been pre-approved by SEC Thailand. Issuers are required to specify the rights attached to the tokens and disclose the source code. Periodic reporting is also required pertaining to the progress of the project in regular intervals. All digital asset business operators are covered by the same regulation, and these must obtain a license from the Ministry of Finance of Thailand, issued following a recommendation by SEC Thailand.

⁹ Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

SEC Thailand has also provided a list of cryptocurrencies eligible for ICO investment or value comparison as base trading pair against other digital assets traded on digital asset exchanges. The latest list, as of February 2019, includes the Bitcoin (BTC), Ethereum (ETH), Ripple (XRP) and Stellar (XLM) (SEC Thailand, 2019_[186]).

The regulation imposes a limit of THB 300,000 per retail investor and per round of offering. Interestingly, while running KYC and AML/CFT tests, issuers have to also test investors for their suitability to invest in such projects through a knowledge test. In addition, said regulation has provisions safeguarding investors against unfair practices, requires disclosure and imposes fines or imprisonment penalties in case of violation of the regulation. A withholding tax of 15% on dividends or other benefits derived from holding or transferring digital assets is imposed on the amount of profits or capital gains.

Viet Nam

The State Bank of Viet Nam officially banned the use of virtual currencies as a mode of payment in 2017 (Ngân Hàng Nhà, 2017_[187]). In 2018, the Prime Minister of Viet Nam signed a directive that restricts activities relating to Bitcoin and other virtual currencies, after which the State Bank of Viet Nam banned the import of cryptocurrency mining machines, with a view to reduce the overall use of cryptocurrencies. The State Securities Commission has also issued a ban on any cryptocurrency activity for public companies, securities firms, fund managers and securities investment funds.

According to publicly sourced information, USD 9.0 million were successfully raised by ICO issuances in Viet Nam in 2018 and another USD 7.7 million in H1 2019¹⁰. These token offerings were unregulated and thus presented a number of important risks for subscribers.

ICOs for SME financing: High level policy implications for AMS

Depending on the conditions of issuance, ICOs can offer an innovative and inclusive way to raise capital for young and innovative SMEs enabled by DLTs and the blockchain (OECD, 2019_[163]). Under specific caveats, regulated forms of ICOs have a great potential to become an alternative financing mechanism for SMEs with DLT-related projects, which could simultaneously improve competition in the SME financing space (OECD, 2019_[162]). In addition, ICOs can provide SMEs with direct access to an unlimited investor pool, offering near-immediate liquidity and the potential to create economic value that goes beyond the value of the company through the creation and monetisation of network effects (OECD, 2019_[163]).

Unregulated ICO activity and token offerings under uncertain and ambiguous regulatory frameworks, coupled with limitations in the structuring of ICOs and operational risks related to DLT-based networks, expose investors subscribing to ICOs to significant risks given primarily the absence of consumer protection safeguards (see Section 1.1.3 above). Such risks involve market manipulation, pump and dump schemes, AML/CFT risks, limited recourse and consumer protection rights, cyber risks and hacking, as well as operational risks related to the use of DLTs.

Clarity in the regulatory and supervisory framework applicable to ICOs is the stepping stone towards their safer use for financing purposes (OECD, 2019_[162]). This can be achieved by examining if and how the existing regulatory and supervisory framework can apply to digital assets and token offerings in particular, and advise market participants accordingly; or through specific, tailor-made regulation issued for the purposes of ICOs. The proposed regulation intends to mitigate incidences of fraud while protecting consumers/investors and market integrity.

¹⁰ H1 data representing data for the first half of the year. Source: OECD calculations, based on publicly available information from icobench.com; icorating.com; ico.tokens-economy.com.

Three AMS, namely Malaysia, the Philippines, Singapore and Thailand, have chosen to provide specific, tailor-made regulation for ICOs. The Securities Commission Malaysia, the Securities and Exchange Commission of Thailand, the Monetary Authority of Singapore, and the Securities and Exchange Commission of the Philippines actively promoted a safer and supervised use of ICOs by proposing holistic, 'tailor-made' regulation applicable to token offerings issued in their respective jurisdictions. In that way, issuers had appropriate clarity around the requirements related to such offerings, and subscribers benefited from investor and consumer protection frameworks that safeguarded their rights when participating in token offerings. Therefore, the use of ICOs as alternative financing mechanism was encouraged in a safe regulated form, responding to the funding needs of innovative SMEs, while protecting investors and maintaining the necessary ingredients of fair and orderly markets.

What is important to highlight in the case of Malaysia, Singapore and Thailand is that a tailor-made approach is not necessarily preferable to the evaluation of the existing regulatory perimeter and the clarification of the existing rules and regulations that apply to ICO and digital assets. What is important is the provision of clarity around the regulatory and supervisory framework applicable to token issuances, which is equally satisfied by applying existing rules, where this is possible, or by providing new specific rules for ICOs.

Importantly, in AMS where ICO activity remained unregulated, the ambiguity around the legal and regulatory framework applying to ICOs did not prevent issuers from offering tokens through such structures. Indeed, there has been evidence of unregulated ICO activity in AMS that did not provide clarity around ICO regulation, equally exposing participants to a number of important risks. Cambodia is a good example of a jurisdiction where the relevant authorities (the National Bank of Cambodia, the Securities and Exchange Commission of Cambodia and the General Commissariat of National Police) issued a joint statement to clearly inform the public that any unregulated crypto-related activity is illegal. In addition, given the inherent global nature of ICO issuances, investors have participated in ICOs of foreign jurisdictions despite bans or investor warnings issued by the home authorities, exposing themselves to significant risks in the absence of any consumer protection safeguards.

Risk of regulatory arbitrage has indeed been identified by research and the disproportionate distribution of ICO offerings in a small number of jurisdictions may be evidence of such regulatory arbitrage being exploited by issuers (OECD, 2019^[162]). To note that issuers do not need to have physical presence in the country of issuance to pursue a token offering in jurisdictions where ICOs are unregulated. Taxation is another motivation behind such regulatory arbitrage. Risk of regulatory arbitrage also arises when regulatory action is not somehow coordinated at the regional and global level. Coordination around the cross-border marketing and issuance/distribution of tokens at an ASEAN-wide level could assist the AMS in becoming more integrated and connected.

In terms of specific content of the regulation proposed by Malaysia, the Philippines, Singapore and Thailand, it is interesting to note the application of proportionality in the requirements applying to some ICOs, similar to the ones that certain OECD and some AMS jurisdictions apply to small-sized public equity offerings or placements to a limited number of investors or to accredited investors only. These consist mainly of exemptions from full prospectus requirements based on limitations in the offering value or in the number of investors allowed (e.g. similar to the threshold applying in the US equity markets under the JOBS Act).

A proportionate approach with regard to token offering rules, regulation and supervision could encourage the use of such financing instruments by SMEs. Similar to public equity markets, proportionate, adapted legislation designed for small companies, rather than a simple relaxation of certain listing and reporting requirements for SMEs, has the potential to alleviate cost and other impediments for small issuers, while preserving investor protection and confidence in such instruments (Nassr and Wehinger, 2016^[49]). Proportionality in listing rules and requirements allows for more affordable transaction and regulatory costs of small capital formation. Nevertheless, the right balance between administrative cost or regulatory burden

and transparency of information needs to be struck such that any proportionality or flexibility provided to SMEs does not result in weaker investor protection or compromised integrity of market participants, weak corporate governance, or insufficient transparency while the administrative burden is somehow alleviated on small issuers and small offers.

Any ICO regulatory framework should provide enhanced investor protection for retail investors in particular, coupled with financial education initiatives, so as to safeguard their informed participation in such financing. Policy tools, such as the policy guidance provided by the G20/OECD Task Force on Financial Consumer Protection on Financial Consumer Protection Approaches in the Digital Age, can be useful in ensuring that adequate consumer protection safeguards are in place in jurisdictions with active ICO markets (OECD, 2018^[188]).

9. Trade finance

Structure and characteristics

Modalities

Access to trade finance represents a key enabling factor for SMEs to become engaged in international activity through direct exporting and participation in global value chains (GVCs).

Most importers do not pay “cash in advance” but prefer to pay only when merchandises are received. Exporters, however, traditionally wish to be paid upon shipment (WTO, 2018^[189]). Trade finance includes all of the instruments that aim to bridge this payment gap and reduce the risks involved in “cashless” international transactions. These instruments mostly take the form of short-term credit, guarantees and insurance (WTO, 2018^[189]).

In their *Trade Finance Principles*, the Wolfsberg Group, the International Chamber of Commerce (ICC) and the Bankers Association for Finance and Trade (BAFT) list the following traditional forms of trade finance (The Wolfsberg Group, ICC, BAFT, 2019^[190]):

- Documentary credits (also known as letters of credit);
- Documentary bills for collection;
- Demand guarantees;
- Standby letters of credit;
- Open account trade;
- Trade loans.

The World Trade Organization (WTO) estimates that between 80% and 90% of world trade relies on trade finance instruments (WTO, 2018^[189]). Trade finance can provide support in the following areas (ITC, 2009):

- Payment facilitation (e.g. letters of credit, SWIFT);
- Financing options (for exporters, importers and associated banks);
- Risk mitigation (e.g. through insurance and guarantees for exporters);
- Providing relevant parties with information about transactions and financial flows.

Greater integration of SMEs in global markets can boost innovation, enhance managerial expertise and increase productivity in these firms (OECD, 2018^[191]). Evidence shows that SMEs participate in trade mostly through indirect contribution to exports and less through exporting directly and face significant hurdles to become active internationally and integrate in GVCs (OECD, 2018^[192]).

.Access to suitable finance instruments, such as letters of credit or export credit insurance represents a key barrier for SMEs. Globally, over half of trade finance requests by SMEs are rejected, against 7% for large enterprises, with SME trade finance gaps generally more pronounced in developing countries (WTO, 2016^[193]).

Even in countries with mature financial industries, SMEs face specific hurdles in accessing the right instruments, in part due to their relative lack of credit history, guarantees and collateral compared to larger firms (WTO, 2018^[189]). Because of these difficulties, many SMEs also use non-trade specific instruments to support their international transactions (VividEconomics, Forthcoming^[194]). In addition, regulatory obstacles and high administrative costs affect SMEs disproportionately, reducing their access to tailored trade finance instruments.

Recent trends

Several institutions like the Asian Development Bank (ADB) survey banks on trade finance trends. Nevertheless, there is a general lack of data on trade finance flows and no centralised source for survey data, with many data sets available on a proprietary basis. Moreover, definitions of trade finance assets differ between surveys, hindering comparability.

According to a recent estimate, the global trade finance gap stands at USD 1.5 trillion (ADB, 2019^[195]). Gaps are especially pronounced for smaller enterprises and companies operating in emerging markets where infrastructure is often lacking (Di Caprio, Kim and Beck, 2017^[196]). Moreover, despite low default rates, trade credit is less available in countries with low credit ratings, and the trade finance gap appears to have increased over time (ADB, 2019^[195]). Yet as global trade patterns evolve, trade opportunities are expanding for many emerging economies, which makes access to trade finance an even more pressing issue. In fact, part of the sluggish growth in trade observed in recent years may be attributable to mounting problems accessing trade finance instruments, according to the WTO (WTO, 2018^[189]). A number of factors may be holding the trade finance market back.

Among other impediments, banks cite the difficulty of obtaining reliable know-your-customer (KYC) information, Basel regulatory requirements, insufficient collateral from companies, lack of dollar liquidity and capital constraints (WTO, 2018^[189]). In a recent survey, 34% of banks cited compliance constraints as the main reason why rejection rates are high, with 71% citing this factor as the main or second main reason (BNY Mellon, 2019^[197]). An ADB survey shows that 76% of banks cite AML/KYC (anti-money laundering/know-your-customer) requirements as barriers to trade finance (ADB, 2019^[198]).

Emerging markets may be hit harder by the latter constraint. Indeed, internationally active banks are liable to be more selective with their clients as a result of compliance constraints, with the risk of these institutions exiting emerging markets. In turn, smaller local and regional financial institutions may not have the capacity to supply trade finance instruments without the support of global banks. This phenomenon seems to be affecting Asia in particular (BNY Mellon, 2019^[197]). Most respondents in the BNY Mellon survey believe that the best solution to this problem is the setting up of centralised KYC databases (BNY Mellon, 2019^[197]).

High administrative costs related to paper-based processes also disproportionately burden SMEs and could be hindering the trade finance market. On the supply side, the high fixed costs of trade finance instruments make it unattractive to serve small ticket operations. As a consequence, the cost of documentary compliance for trade across borders are very significant, both in terms of time and money, which disproportionately impacts smaller enterprises with limited trading volumes (World Bank, 2019^[199]). It has been estimated that the cost of processing trade documents can amount up to one-fifth of the transportation cost of goods (World Economic Forum, 2018^[200]).

Against this backdrop, digitalisation offers opportunities and has the potential to revolutionise the market. Fintech companies, non-banks and alternative financiers have the potential to reduce costs and increase market capacities, providing SMEs with more options to mitigate risks as they engage in cross-border transactions (ITC, 2019^[201]). Distributed ledgers are an example of a technology with potential benefits for the industry, as they could reduce transaction costs while increasing trust and transparency in value chains (Ganne, 2018^[202]).

Innovation in border procedures could also help lower other barriers to SME internationalisation. The complexity and cost of regulatory compliance at the border increases the time and money that are necessary to complete international transactions, which also generates working capital gaps. The automation and streamlining of procedures can help to ease these burdens, especially for SMEs (OECD, 2018_[192]).

A number of new initiatives and instruments have been transforming the trade finance market in recent years. For example, bank payment obligations (BPO) are a relatively new instrument, endorsed by the International Chamber of Commerce (ICC) and SWIFT, which stands as a middle ground between traditional letters of credit and an open account trade. It eliminates paper work and human intervention, but its reach has been limited (Ganesh et al., 2018_[203]). In 2018, only 13% of the ICC Global Survey respondents reported that their bank use it (International Chamber of Commerce, 2018_[204]).

Other instruments such as supply chain finance (SCF) and reverse factoring have been developed, benefitting both the buyer and the supplier firm, optimising working capital and lowering costs and risk in the supply chain (OECD, 2015_[3]).¹¹

More recently, an increasing number of blockchain-based platforms have been put in place. They propose various models to support trade operations, from digitalisation of documentary trade to facilitating open account trade (Ganesh et al., 2018_[203]). Voltron, Marco Polo, WeTrade, Finacle Trade Connect, Easy Trade Connect and eTrade Connect are all examples of recently established platforms that have been supported by diverse bank consortia.

At the same time, the trade finance industry is sometimes perceived as more reluctant than other financial sectors to adopt innovative solutions. This is partly due to the size of the trade value chain, which makes transformation slower and standardisation more difficult (BNY Mellon, 2019_[197]). This may warrant some sort of policy intervention to ensure the potential of digitalisation fully materialises and the risks well managed.

Policies to foster the development of trade finance for SMEs

The discrepancy between the historically low risks of trade finance and the limited access that SMEs currently have provides a strong rationale for policy intervention (Auboin, Dicaprio and ADBI, 2017_[205]). Policymakers have access to a range of instruments to address market failures and information asymmetries in this area.

Traditionally, policy makers considered that ensuring sufficient competition in the industry generally prevented disruptions in the supply of trade finance, and the trade finance market was of little interest to governments (BIS, 2014_[206]). However, the effect of the global financial crisis put trade finance in the spotlight, and it became clear that the contraction in global trade was partly due to unmet demand for these instruments (BIS, 2014_[206]). Furthermore, the crisis shed light on the way in which trade finance can transmit stress from financial markets to the real economy (BIS, 2014_[206]).

At the national level, and especially in high-income countries, public export credit agencies often provide trade finance instruments to SMEs. The purpose and scope of such agencies have been subject to scrutiny in recent years. In particular, concerns have arisen that these arrangements may lead to unfair competition and a skewed fair level playing field, and should therefore adhere to some common rules (OECD, 2018_[207]). Nonetheless, these agencies, along with central bank facilities, can play a strong role when there are

¹¹After an order is made from the buyer, the supplier sends the order and invoices the buyer. The buyer approves these invoices and vows to pay the financial institution for these at invoice maturity. Then, the supplier is offered early payment at a discount rate from the financial institution, while the buyer pays the financial institution on agreed due date. Reverse factoring allows risky SMEs to profit from the buyers' low credit risk profile.

disruptions in the trade finance market. To do so, they must be fast to react, given the short-term maturity of trade finance assets (BIS, 2014_[206]). Often, these programmes are part of a comprehensive package of measures to support SMEs to become active in foreign markets. Box 9.1 provides more information about the Canadian experience in this area.

At the global level, multilateral development banks (MDBs) are well-established providers of trade finance products, and are particularly active in emerging economies in Asia, Africa and Latin America. Many programmes that were launched or stepped up in the aftermath of the global financial crisis are still in operation today. Well-known programmes include the European Bank for Reconstruction and Development's Trade Facilitation Programme (TFP), the International Finance Corporation's Global Trade Finance Program, the Islamic Development Bank's Trade Finance Facilitation Program (TFFP) and the Asian Development Bank's Trade Finance Program (TFP) (WTO, 2018_[189]). Over the last decade, MDB trade finance programmes accounted for more than USD 168 billion, with USD 30 billion in 2017 alone (International Chamber of Commerce, 2018_[204]).

Public provision of trade finance can also play a role in adopting and standardising new trade finance instruments such as supply chain finance (SCF) and reverse factoring. The Mexican programme "Cadenas productivas", for instance, delivers cash against receivables via a secure online platform. The Reserve Bank of India recently implemented a similar Trade Receivables Discounting System (WTO, 2016_[193]). However, digital tools remain relatively scarce in the policy toolbox at the multilateral level, and multilateral development banks' initiatives in the area of digital tools are still at an early stage (International Chamber of Commerce, 2018_[204]).

Box 9.1. Canada's Export Diversification Strategy

In the context of mounting trade tensions, many governments have increased financial support to enable SMEs to become active in foreign markets. An example is Canada's Export Diversification Strategy, announced in 2018. A total of CAD 1.1 billion will be invested over a period of six years to reach the objective to expand total exports by 50% or more by 2025. As part of the strategy, the Government of Canada will invest an additional CAD 100 million over six years in CanExport, the five-year, CAD 50 million program launched by the Government in January 2016 to provide direct financial assistance to eligible Canadians, and related funding programs to support businesses looking to reach new overseas markets. In addition, other non-financial support has been established and or expanded, such as awareness raising programmes and export capacity building activities for SMEs with potential to become active in foreign markets or to scale up activities. A key component of the strategy is to enhance trade services for exporters and ensure that Canadian businesses have enough resources to execute their export plans.

Source: (Government of Canada, 2019_[208]).

In addition, regulation can play an important role in creating the enabling conditions for SMEs to access trade finance instruments. This is particularly the case for new digital instruments, but it is also the case for traditional trade finance assets, which can be affected significantly by financial regulation and compliance issues.

A case in point is the recent know-your-customer (KYC) reforms, which require companies to verify the identity and suitability of their clients and suppliers abroad in order to tackle money laundering. This process of screening financial information strongly affects SMEs' potential to become part of GVCs, as they typically have less credit information and a less established track record (Asian Development Bank, 2017_[209]). In addition, financial institutions are reluctant to spend significant resources on due diligence requirements for small ticket operations, again at the detriment of small enterprises.

Survey evidence has indicated that around 30% of rejected trade finance requests were due to KYC concerns by financial institutions. Anecdotal evidence suggests that the profitability of these operations may have been at the root of rejections, and banks were not prone to cover the costs of conducting KYC for small ticket operations (Di Caprio, Kim and Beck, 2017^[196]).

There is some evidence that financial regulation in the aftermath of the crisis had negative effects on the supply of trade finance. A particular point of interest is the treatment of trade finance assets under Basel III rules, including the calculation of risk weights, leverage ratios and liquidity coverage ratios (BIS, 2014^[206]). The Basel Committee later amended particular treatments of trade finance assets, but policy makers should take into account the impact of financial regulation on the trade finance market and how it impacts SMEs' potential to be active in foreign markets.

In recent years, international organisations and governments have been fully engaged in assessing the implications of technology-driven changes in the financial landscape. Policy responses are being developed in many jurisdictions and governments are making substantial efforts to support the development of Fintech, aiming at encouraging innovation while assuring that risks resulting from these innovations are adequately mitigated and investor/consumer protection ensured (OECD, 2018^[210]).

These efforts hold promise to ease SMEs' access to a broad range of finance instruments, including for international trade. In Asia, more than 60% of surveyed SMEs indicated they refrain from participating in international trade because of trade finance gaps, and there is increasing interest to deploy Fintech solutions within the regulatory framework. In Thailand, for instance, 22 banks have formed the Blockchain Community Initiative, a consortium established under the auspices of the Bank of Thailand's regulatory sandbox. Its main ambition is to use distributed ledger technology to reduce the time it takes to issue letters of guarantee (ADB, 2019^[211]).

Trade operations pose additional challenges to regulators and policymakers, which slows the adaptation of new technologies in this realm. For instance, business and bank associations have raised the concern that current legislation does not always recognise electronic documentation for trade finance instruments, thus hindering the full development of Fintech in this area (BAFT, Shearman & Sterling LLP and R3, 2018^[212]).

In addition, data collection efforts should continue so that the market can be monitored accurately. This is particularly the case for newer trade finance instruments, such as supply chain finance (SCF), which may be imperfectly captured by current market statistics (BIS, 2014^[206]). While harmonised statistical reporting seems unlikely in light of divergences in definitions, even between banks, standardisation efforts can be supported and financial institutions can be encouraged to disclose more data about trade finance flows (BIS, 2014^[206]).

Developments in ASEAN member states

Generally, ASEAN member states face a significant trade finance gap, due to the lack of credit information, more stringent financial regulations since the financial crisis, and the recent effects of the US-China trade tensions (UK-ASEAN Business Council, 2019^[213]). For instance, letters of credit are factored into the leverage ratio differently since Basel III regulations were put in place, which has penalised trade finance, particularly in developing countries and ASEAN (UK-ASEAN Business Council, 2019^[213]). This has also provided an opportunity for non-bank providers of trade finance, amid new technological developments linked to the digitisation of trade (Tradetech).

Several trade finance markets in ASEAN member states are expanding significantly. However, strong disparities exist. The following subsections analyse trade finance markets in individual member states, with a focus on insured export credit exposures where internationally comparable data are accessible.

Brunei Darussalam

While no data are available for SMEs specifically, Table 9.1 provides some information on the development of the import trade financing market in Brunei Darussalam. Trade financing amounts have increased from BND 432 million in 2016 to BND 571 million in Q2 2018. This 32.18% increase mainly results from a sharp increase from 2016 to 2017 (25.46%, from BND 432 million to BND 542 million).

Table 9.1. Import trade financing in Brunei Darussalam

In BND million

Import Financing	2016	2017	Q2 2018
On balance sheet	269	283	315
Trust receipts	251	278	307
Other import financing	18	5	8
Off balance sheet	162	258	256
Letter of credit	133	106	76
Shipping guarantee	17	7	11
Acceptances	13	144	169
Total	432	542	571

Source: Written exchanges with country experts.

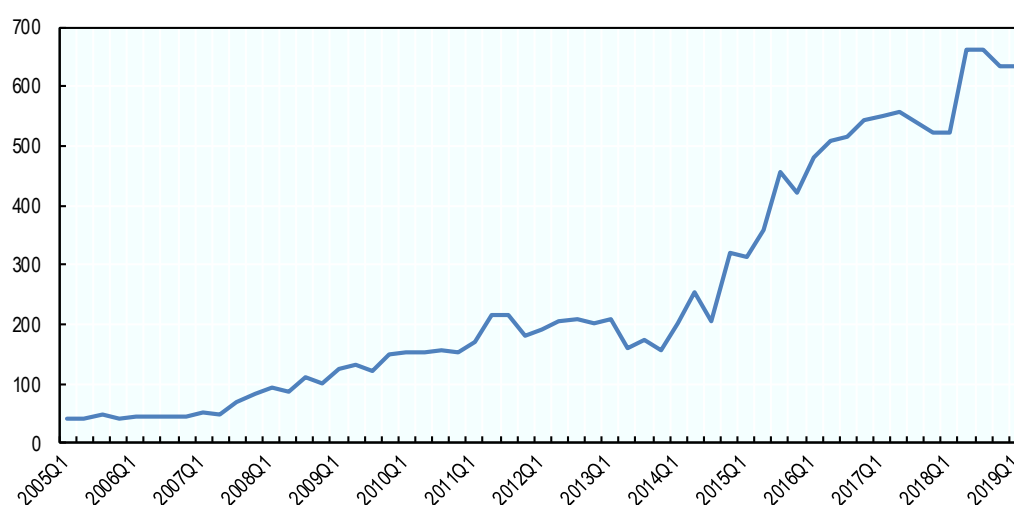
This expansion notwithstanding, the trade finance market in Brunei Darussalam is nascent compared to other markets in the region. Export credit and export insurance volumes remain low and have decreased since 2016. As of the last quarter of 2018, these exposures amounted to 2.11% of the GDP, approximately half of the median share for ASEAN member states (4.16%) (BIS-IMF-OECD-WB, 2019^[214]).

Cambodia

In Cambodia, trade finance amounted to USD 2.8 billion or 17% of total loans to the private sector as of March 2018. This is a 9% increase from 2016. Financing commitment and guarantees represented 95% of this amount. Outstanding export credits and export insurance totalled USD 635 million at the end of 2019, with a strong increase in the past years (see Figure 9.1.). Nonetheless, the market remains relatively small as a share of GDP (2.58%).

Figure 9.1. Outstanding insured export credit exposures in Cambodia, 2005-2018

Quarterly, in USD million



Note (from JEDH): Data refer to Berne Union members' direct insurance or lending, i.e. amount reinsured by others are not deducted and amounts reinsured by members for others are not added. Amounts guaranteed by an international financial institution are allocated to that institution, not the country of residence of the borrower or guarantor. Data are stock data, i.e. total outstanding amounts at the end of each quarter (31 March, 30 June, 30 September, and 31 December). Total data include medium/long-term (MLT) exposures and short-term (ST) exposures.

Source: (BIS-IMF-OECD-WB, 2019^[214]).

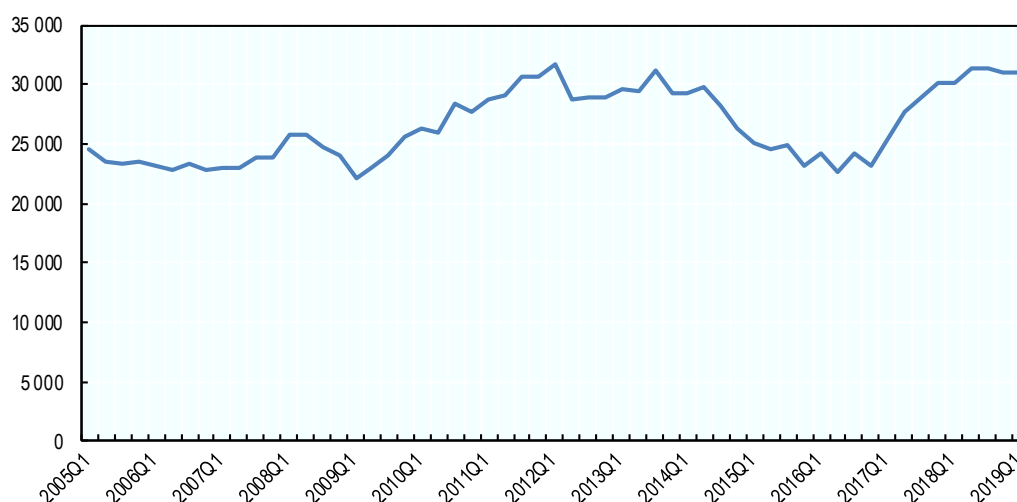
Indonesia

Eximbank, a financial institution owned by the government, offers financial instruments to SMEs wishing to export (e.g. export working capital financing). It also provides a variety of insurance products that mitigate risks for exporters, and is a crucial public support actor for internationally active SMEs in the country (OECD/ASEAN, 2019^[215]).

Insured export credit exposures in Indonesia stood at USD 30 997 million in 2019 and amounted to 2.97% of the GDP in 2018, with volumes remaining relatively stable since 2005 (see Figure 9.2).

Figure 9.2. Outstanding insured export credit exposures in Indonesia, 2005-18

Quarterly, in USD million



Note (from JEDH): Data refer to Berne Union members' direct insurance or lending, i.e. amount reinsured by others are not deducted and amounts reinsured by members for others are not added. Amounts guaranteed by an international financial institution are allocated to that institution, not the country of residence of the borrower or guarantor. Data are stock data, i.e. total outstanding amounts at the end of each quarter (31 March, 30 June, 30 September, and 31 December). Total data include medium/long-term (MLT) exposures and short-term (ST) exposures.

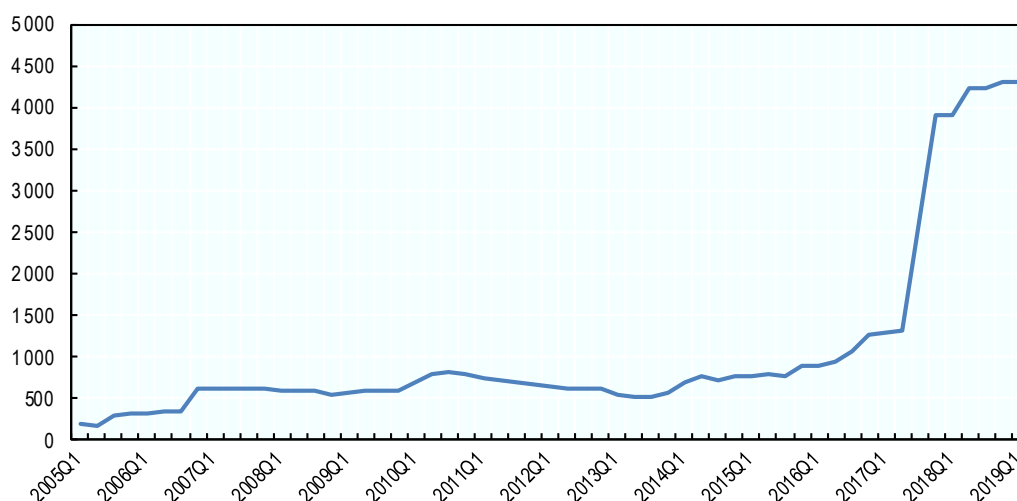
Source: (BIS-IMF-OECD-WB, 2019^[214]).

Lao PDR

Export credit and export insurance activities experienced a significant surge in Lao PDR in 2017-18, with a 205% growth rate over this period. Representing 23.73% of the GDP, these activities represented the highest share of GDP among ASEAN member states in 2018.

Figure 9.3. Outstanding insured export credit exposures in Lao PDR, 2005-18

Quarterly, in USD million



Note (from JEDH): Data refer to Berne Union members' direct insurance or lending, i.e. amount reinsured by others are not deducted and amounts reinsured by members for others are not added. Amounts guaranteed by an international financial institution are allocated to that institution, not the country of residence of the borrower or guarantor. Data are stock data, i.e. total outstanding amounts at the end of each quarter (31 March, 30 June, 30 September, and 31 December). Total data include medium/long-term (MLT) exposures and short-term (ST) exposures.

Source: (BIS-IMF-OECD-WB, 2019^[214]).

Malaysia

The export-import bank of Malaysia (MEXIM) is an entirely government-owned export credit agency. It focuses on trade finance instruments in strategic sectors such as capital goods, infrastructure projects or high value added manufactured products. Its products cover political (e.g. Political Risk Insurance) and commercial risks (Risk Insurance) (OECD/ASEAN, 2019^[215]).

In 2019, HSBC Malaysia launched the Supply Chain Finance Platform (HSCF), enabling the exchange of invoices and supplier on-boarding. It is expected to increase cost-effectiveness and should benefit SMEs in particular (Digital News Asia, 2019^[216]).

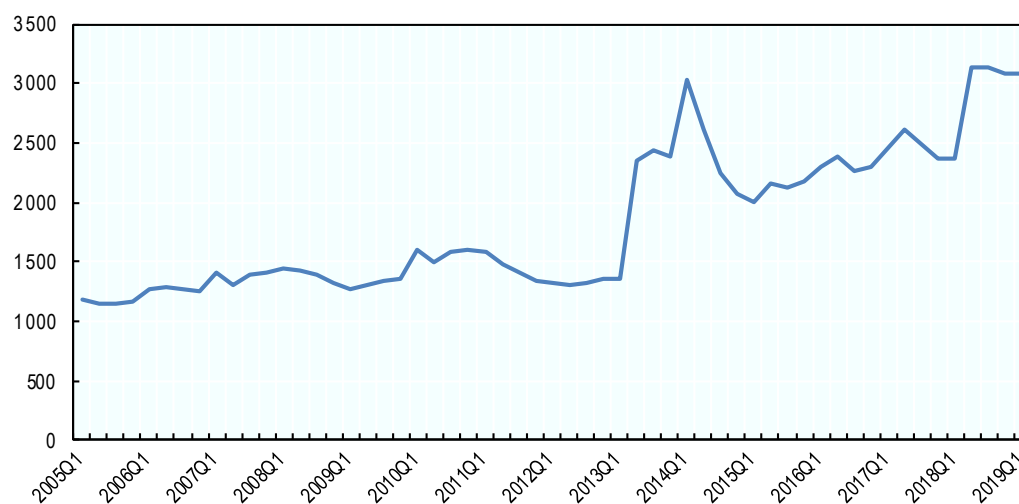
Outstanding export credit exposures stood at USD 8 516 million in 2019 and represented 4.33% of the GDP, above the median for ASEAN member states (BIS-IMF-OECD-WB, 2019^[214]).

Myanmar

The trade finance sector in Myanmar is opening up, and since 2018, all branches of foreign banks are authorised to provide financing to local SMEs and entrepreneurs. The trade finance market was long hindered by the prohibition on foreign banks to lend to domestic business, while domestic banks had high collateral requirements. The lack of credit information represents a barrier towards further development of the market. A credit bureau has been set up but was not yet operational as of 2018. Export credit and export insurance volumes stood at USD 3 087 million in 2019 and accounted for 4.33% of GDP in 2018 (BIS-IMF-OECD-WB, 2019^[214]).

Figure 9.4. Outstanding insured export credit exposures in Myanmar, 2005-18

Quarterly, in USD million



Note (from JEDH): Data refer to Berne Union members' direct insurance or lending, i.e. amount reinsured by others are not deducted and amounts reinsured by members for others are not added. Amounts guaranteed by an international financial institution are allocated to that institution, not the country of residence of the borrower or guarantor. Data are stock data, i.e. total outstanding amounts at the end of each quarter (31 March, 30 June, 30 September, and 31 December). Total data include medium/long-term (MLT) exposures and short-term (ST) exposures.

Source: (BIS-IMF-OECD-WB, 2019^[214]).

The Philippines

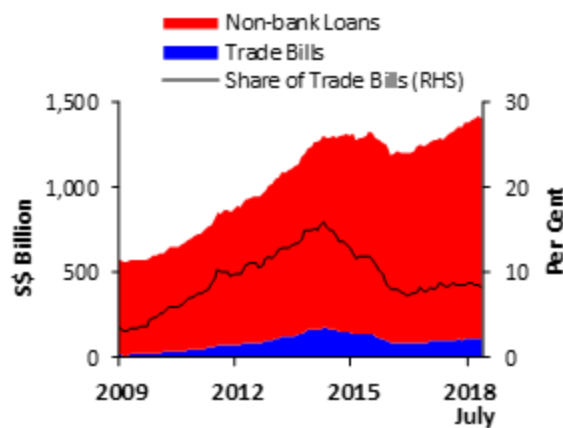
PhilEXIM (Philippine Export-Import Credit Agency) provides supports domestic companies, mostly SMEs, with guarantees, export credit insurance and loans. Priority sectors include infrastructure, agro-modernisation and power generation (OECD/ASEAN, 2019^[215]).

In 2018, outstanding export credits and export insurance represented 2.57% of GDP or USD 8 516 million. Volumes have remained relatively stable in past years (BIS-IMF-OECD-WB, 2019^[214]).

Singapore

The banking system has significantly increased the provision of trade finance over the past 15 years to cater to increasing demand. As of July 2018, trade bills accounted for about 8.4% of total non-bank loans. The trends in trade bill volumes generally mirrors the volumes of trade flows in the region.

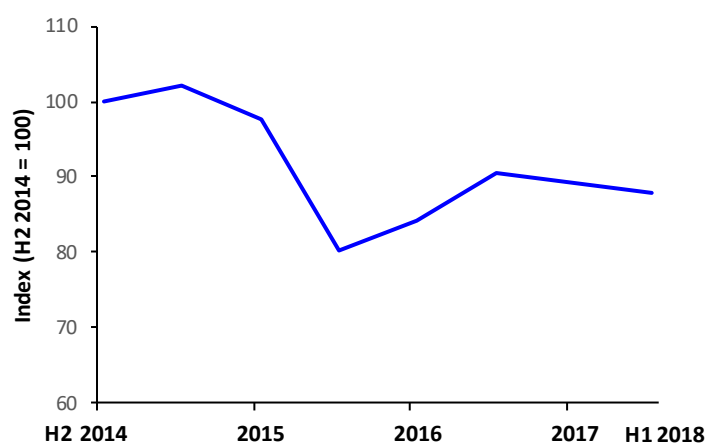
Figure 9.5. Volume of trade bills in Singapore's banking system



Source: Monetary Authority of Singapore

The usage of trade finance products by SMEs is in line with the broad trends in trade bill volumes for all corporates. Trade finance volumes to SMEs declined between 2014 and 2016, but have since increased slightly due to increased trade activity. As of H1 2018, trade finance facilities represented slightly more than 10% of total outstanding credit facilities that are granted to SMEs.

Figure 9.6. Volume of outstanding trade finance: credit facilities for SMEs



Source: Monetary Authority of Singapore

Singapore is a Fintech hub in ASEAN, due to its stable and accommodative legal framework and to the ease of doing business. Singapore was an early adopter of Tradetech applications (e.g. Tradeteq, Traydstream). The private equity environment in Singapore is also encouraging the emergence of innovative Tradetech firms (E27, 2018^[217]). Such projects are supported by MAS's (Monetary Authority of Singapore) *Financial Sector Technology and Innovation Scheme* (UOB/EY, 2017^[218]).

Thailand

In a country where exports represent 70% of the GDP (Deutsche Bank Corporate Bank, 2019^[219]), the Export Import Bank of Thailand (EXIM Thailand) introduced export credit insurance, coupled with buyer risk assessment (Thailand, 2019^[220]). This instrument was specifically designed for Thai entrepreneurs and SMEs in order to mitigate international trade risks and support trade amidst mounting trade tensions. In the first five months of 2019, THB 87.5 million worth of compensation was requested by Thai export credit insurance clients. EXIM Thailand and other commercial banks accept the insurance facility as collateral for loans. The *Instant SMEs Export Insurance* introduced in 2016 by EXIM Thailand includes a one-day application process. *EXIM Happy Credit*, launched in 2018, offers SME exporters credit lines up to THB 500 000 with a 4.5% interest rate on the first year (ADB, 2019^[221]).

These initiatives appear to be bearing fruit. Outstanding export credit and export insurance increased from USD 13 774 million in 2016 to USD 20 493 million in 2018 (+48.78%). In 2018, volumes represented approximately 4.06% of GDP, close to the median for ASEAN member states (BIS-IMF-OECD-WB, 2019^[214]).

In 2019, Thailand presented its plans for a National Digital Trade Platform (NDTP), in the wider framework of ASEAN's Single window framework. The platform is a B2B information-exchange platform for importers, exporters and other relevant business stakeholders, which aims to increase transparency and speed and lower costs. The country is also reportedly making plans to join the e-Invoicing PEPPOL standard, following Singapore (Deutsche Bank Corporate Bank, 2019^[219]) (Dejvitak, 2019^[222]).

In 2018, 14 commercial Thai banks founded the Thailand Blockchain Community Initiative, which aims to apply distributed ledger technologies (DLT) to trade finance instruments in Thailand (Schellhase and Warden, 2018^[223]). Several other banks have since joined the initiative, whose first objective is to advance the digitisation of letters of guarantee, with an aim to reduce costs and increase reliability.

Viet Nam

Outstanding export credit and export insurance in Viet Nam stood at USD 26 108 million in 2018, equivalent to 10.66% of GDP. Following strong growth of the market in 2005-14, volumes have remained comparatively stable since 2014 (BIS-IMF-OECD-WB, 2019^[214]).

Since 2007, when Viet Nam's Techcombank joined the International Finance Corporation's Global Trade Finance Program, Viet Nameese banks have been a strong partner of the programme in the ASEAN region.

A recent, joint initiative led by the IFC and the Swiss State Secretariat SECO aims to develop supply chain finance (SCF) in Viet Nam, with a specific focus on the regulatory framework, increasing awareness of the instruments among SMEs, and strengthening the capacities of SCF suppliers.

Policy implications for ASEAN member states

Trade finance plays an important role in allowing SMEs to participate in GVCs and trade internationally. These instruments provide payment facilitation, financial support to one or more parties in trade transactions, risk mitigation through insurance and guarantees and information on individual international transactions (ITC, 2009). As such, trade finance instruments should be high on the agenda of policy makers in ASEAN member states in the context of trade uncertainty and trade tensions. The fact that ASEAN SMEs are increasingly integrated in global value chains (GVCs) makes access to finance for these SMEs a particularly pressing issue.

Firms in the Asia-Pacific region (and, in particular, in ASEAN member states) have traditionally relied on short-term letters of credit and documentary collection to support their international transactions. Since the global financial crisis, however, it has been increasingly clear that these instruments are not enough to satisfy SME demand. Diversification of instruments can also increase the resilience of the trade finance market (BIS, 2014^[206]). This is where technology can play a role in closing trade finance gaps. However, ASEAN SMEs will be unable to harness these opportunities without government efforts to put in place robust legal frameworks for digital trade, as well as set industry standards (ADB, 2019^[195]).

Bridging the trade finance gap in ASEAN may require strengthening public export credit agencies in countries where activities are currently limited and building on regional initiatives, including with multilateral development banks. Supporting collaboration and risk-sharing between local and global financial institutions is also important.

Diverse trade finance instruments are offered in many ASEAN countries, but application processes, especially paper-based, are sometimes discouraging for SMEs and entrepreneurs, and many applications are rejected. New digital trade finance instruments are offering more cost-effective and user-friendly processes for SMEs. In order for these to be implemented effectively, industry-wide agreements may be necessary (BNY Mellon, 2019^[197]). The regulation of data represents a crucial area in this respect. The free flows of data across borders is a requirement for increased digital trade. At the same time, this must be balanced with objectives related to cyber-security and privacy (Casalini and López González, 2019^[224]).

Regulation has a strong role to play in enabling the development of trade finance instruments for SMEs. ASEAN policy makers should take into account the impact of financial regulation on the trade finance market and how it impacts SMEs' potential to be active in foreign markets. Areas of particular concern relate to authorising foreign banks to deliver credit instruments to SMEs or making sure that regulation of financial innovation does not stifle new digital trade finance options. In this regard, KYC (Know-your-customer) regulations against money laundering merit close attention.

The emergence of e-Invoicing in ASEAN member countries, as well as digital platforms for exporters and their business partners, are promising developments in this area. Australia and New Zealand recently committed to a joint approach to encourage the use of e-Invoicing, which could serve as a model for

Southeast Asian countries. Australia and New Zealand have established a joint market for e-invoicing, adhering to the PEPPOL Business Interoperability Specifications (BIS) for e-invoicing, a global and interoperable standard in use by 34 countries, mostly from Europe. Singapore adopted this standard in 2018 as well, and other ASEAN member states could follow, thereby boosting (regional) trade. In addition, public bodies in Australia and New Zealand will pay their suppliers through e-invoices, thereby familiarising them with the system. Government agencies in both countries also provide support to businesses to develop adoption timelines and pathways so that they can become enabled for e-invoicing for their B2B-transactions (OECD, forthcoming^[225]).

Another good practice is the “Networked Trade Platform (NTP)” which brings together four government certification services required for trading in and out of Singapore, as well as another 25 value-added services by third-party firms geared towards trade with more government bodies to follow. This platform aims to reduce the red tape for Singaporean companies that are internationally active. As a concrete example, agricultural business can provide the necessary certificate and documents through a digital information exchange project, rather than in hard copy (The Business Times, 2018^[226]). Such initiatives could be adopted in other jurisdictions more widely. Ideally, such platforms should be linked or harmonised across different countries to further reduce the regulatory burden for regional trade.

Furthermore, credit information remains key to the use of trade finance instruments, especially for smaller firms. Setting up or increasing the coverage of credit registries and bureaus has the potential to stimulate the market. According to many banks, compliance constraints linked to KYC regulations in particular could be alleviated by the establishment of centralised databases that enable relevant actors to assess credit risks in a cost-effective and standardised manner (BNY Mellon, 2019^[197]).

Finally, data collection efforts on trade finance remain at an early stage, especially given the wider adoption of relatively new instruments in this area, such as supply chain finance. The take-up of these instruments are often not captured by traditional reporting exercises (BIS, 2014^[206]). Policy makers in ASEAN member states can support standardisation efforts to monitor the trade finance market more accurately. While harmonised statistical reporting seems unlikely in light of divergences in definitions, even between banks, policy makers should support standardisation efforts and financial institutions can be encouraged disclose more data about trade finance flows (BIS, 2014^[206]). This would enable a better understanding of trends and support evidence-based policy making in this area.

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